ENVIRONMENTAL PROTECTION AND ECOLOGICAL DEVELOPMENT-CONSTITUTIONAL IMPERATIVES AND LEGISLATIVE FRAME WORK

“We have to live on the earth. We cannot go and live on the planets. Let us keep the earth clean. Let us keep the atmosphere peaceful”.

-V.D. KULSHRESHTHA

6.1 INTRODUCTION

British Empire during both world wars contributed significantly to large scale denudation of forests. At the same time due to rapid development of science and technology in western countries. New products and items of human comforts came into existence and consequently its effects also reached India, in the beginning, science and technology has been used to achieve affluence, which is regarded as the sigh of development. This was accelerated after the advent of the Industrial Revolution. This brought a radical change in the relationship of man with nature. The threat of pollution of environment was obviously realized first in western countries which were the father of modern industrialization and civilization. However, at that time India was also almost on threshold of pollution era. The Indian society-a believer of renunciation, meditation and Dharma Moksha started converting into society-a believer of culture of consumption. Artha Karna. This resulted in change of general outlook of nation and public towards environment and nature. Now misconcepted terms-progress, development and quantitative forms of results
got emphasis over coordination, harmony and quality of things. In this race of misconcepted development the mankind has literally become blind and unconscious of consequences of his activities. Better living conditions raised the average life span. Population kept on increasing civilization, urbanization and industrialization put on great stress on natural resources like soil, water, forests, mineral wealth, sea etc. and a chain of action and reaction started. One challenge met and in turn it gave rise to host of problems. The most important and related to very existence of life on the planet is the problem of pollution in environment.

Consequently laws passed for India by the British had a reflection of lurking danger in their contents. The laws related to environment or laws which had a bearing upon the environment directly or indirectly had provisions on certain aspects of environment and its protection.

6.1.1 ENVIRONMENTAL PROTECTION - CONSTITUTIONAL PROVISIONS

After Independence in 1947 the activities related to economic development got momentum and greater emphasis was given on increase of agriculture produce and industrialization. Use of fertilizers, insecticides, pesticides was on increase and heavy industries in field of steels, fertilizers petroleum refining, ferrous and non-ferrous metals, mining heavy chemicals etc. were established. Numerous ancillary units followed. Industrialization and economic upliftment give rise to problems of urbanization, public health and others. Today the environmental problems of a technocratic industrial society
are so serious and complicated that it threatening the very survival of life on this planet. Everybody is compelled to think about an immediate solution to these problems. We need a technology to re-establish the harmonious relationship between man and nature by assuring the fulfillment of the basic needs of all the living beings from the surroundings.

Due to all these factors the importance of Environment Preservation and Pollution Control had also started getting cognizance in government, intellectuals and voluntary agencies.

Prior to 1976: The Constitution of India as promulgated in 1950 did not make any specific provision to deal with Environmental Pollution. Indirectly one could locate it in Article 47 which reads as follows:

“The state shall regard the rising level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties”.

This article provides for the improvement of the public health and this is one of the primary duties of the state and it could very well include the implication, the protection and improvement of the environment.

From 1976: By the Constitution (42nd Amendment) Act 1976 which received the assent of the President on December 16th 1976 and was published in Gazette of India on the same date in Part-II. Section-I included certain provisions relating to Environment Protection rules.
**Preamble:** Initially in the preamble of the Constitution for the clause sovereign democratic republic, the clause sovereign socialist secular democratic republic was substituted. The importance of this amendment can easily be visualized. This amendment imposes a number of new obligations on the State. The State is saddled with heavy responsibility of eradication of social hazards and social evils and of providing insurance of social justice to every citizen of the country. The problem of environmental pollution is social problem affecting the society at large. Environmental pollution is one of the most important contemporary social problems that a nation is called upon to face. The problem of environmental pollution like the population problem is ever increasing. It is problem of the developed, developing and under developed countries.

**Fundamental Rights:** The Honorable Supreme Court expanded the Fundamental Right i.e. right to life and personal liberty guaranteed in Article 21 to include Environmental Protection. Article 21: No person shall be deprived of his life of personal liberty except according to procedure established by law. Article 3 of the Universal Declaration of Human Rights proclaims: Every one has the right to life, liberty and security of person⁴. Article 6 of the Second Covenant proclaims the right to life thus:

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Every human being has inherent right to life. This right shall be protected by law. The Fifth Amendment of the American Constitution also provided that 'no person shall be deprived of his life or personal liberty, except according to procedure established by law' The Fourteenth Amendment imposes a similar limitation on the State authorities.

Right to life means to have intact all limbs and faculties through which life is enjoyed and life has meaning. In Kharak Singh Vs State of UP the Supreme Court observed that the right to life does not mean the right to the continuance of a person’s animal existence, but a right to the possession of all organs-his arms, legs, etc., .The right to life, means right to live with full human dignity, without humiliation and deprivation, or denial of any sort.

A.K.Gopalan Vs State of Madras

In this case the Supreme court of India profounded the thesis that “Personal liberty in Article 21 was used as a Compendious term to include within itself all the varieties of rights which went to make up personal liberty” of a man minus the right guaranteed under Article 19(1).

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2 Ibid p.134
3 Ibid.p.135
4 Constitutional Law by JN Pandey
5 AIR 1963 SC 1295
6 AIR 1950 SC 27 Ibid P135
In that case the petitioner, A. K. Gopalan, a communist leader was detained under the Preventive Detention Act, 1950. The petitioner challenged the validity of his detention under the Act on the ground, that it was violative of his right to freedom of movement under Art. 19 (1) (d) which is the very essence of personal liberty guaranteed by Art. 21 of the Constitution. He argued that the words "personal liberty" include the freedom of movement also and therefore the Preventive Detection Act, 1950 must also satisfy the requirement of Art. 19 (5). In other words, the restrictions imposed by the detention law on the freedom of movement must be reasonable under Art. 19 (5) of the Constitution. It was argued that Art. 19(1) and Art. 21 should be read together because Art. 19(1) dealt with substantive rights and Art. 21 dealt with procedural rights. It was also said that reference in Art. 21 to "procedure established by law" meant "due process of law" of the American Constitution which includes the principles of natural justice and since the impugned law does not satisfy the requirement of due process it is invalid. Rejecting both the contentions, the Supreme Court by the majority held that the 'personal liberty' in Art. 21 means nothing more than the liberty of the physical body, that is, freedom from arrest and detention without the authority of law. This was the definition of the phrase 'personal liberty' given by Prof. Dicey, according to whom personal liberty means freedom from physical restraint and coercion which is not authorized by law. The word 'liberty' is a very comprehensive word and if interpreted it is capable of including the rights mentioned in Art. 19. But by qualifying the word 'liberty' the Court said, the import of the word 'personal liberty' is narrowed down to the meaning given in English law to the expression 'liberty of the person'. The majority took the view that Arts. 19 and
21 deal with different aspects of 'liberty'. Art. 21 is guarantee against deprivation (total loss) of personal liberty while Art. 19 affords protection against unreasonable restrictions (which is only partial control) on the right of movement. Freedom guaranteed by Art. 19 can be enjoyed by a citizen only when he is a freeman and not if his ‘personal liberty’ is deprived under a valid law.

**Specific rights emanating from right to personal liberty**

1. Freedom to go abroad.

**In Satwant Sigh Vs A.P.O**

AIR 1967 SC 1886 The Supreme Court by majority held that the right to travel abroad was part of part of personal liberty therefore no person could be deprived of his right to travel abroad except under a valid law.⁷

In Maneka Gandhi Vs. Union of India⁸ the meaning and content of the words 'personal liberty' again came up for the consideration of the Supreme Court. In that case the Court has given the widest possible interpretation to the words is personal liberty'. In that case the petitioner's passport was impounded by the Central Government under Section 10(3)(c) of the Passport Act, 1967. The Act authorised the Government to do so if it was necessary 'in the interest of the general public'. The Government of India

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⁸ AIR 1976 SC137.
declined 'in the interest of the general public' to furnish the reasons for its decision. The petitioner challenged the validity of the said order on the following grounds that 1. Section 10(3)(c) was violative of Article 14 as conferring an arbitrary power since it did not provide for a hearing of the holder of the passport before the passport was impounded. 2. Section 10(3)(c) was violative of Article 21, since it did not prescribe 'procedure' within the meaning of that Article 21. 3. Section 10(3)(c) was violative of Article 19(l)(a) and (g) since it permitted imposition of restrictions not provided in clauses (2) or (6) of Article 19. The reasons for the order were, however, disclosed in the affidavit filed on behalf of the Government which stated that the petitioner's presence was likely to be required in connection with the proceedings before a Commission of inquiry. Regarding the opportunity to be heard the Attorney-General filed a statement that the petitioner could make a representation in respect of impounding passport that the representation would be dealt with expeditiously in accordance with law.

The Supreme Court held that the Government was not justified in withholding the reasons for impounding the passport from the petitioner. Delivering the majority judgment, Bhagwati, J. (as he then was) asked-Is the prescription of some sort of procedure enough or must the procedure comply with any particular requirement? He then held that the procedure contemplated in Article 21 could not be unfair or unreasonable. And this principle of reasonableness which was an essential element of equality or non-arbitrariness, pervaded Article 14 like a brooding omnipresence and the
procedure contemplated in Article 21 must answer the test of reasonableness in order to be in conformity with Article 14. Hence, any procedure which permitted impairment of individual's right to go abroad without giving him a reasonable opportunity to be heard could not but be condemned as unfair and unjust. The order withholding reasons for impounding the passport was therefore not only in breach of statutory provisions (Passport Act) but also in violation of the rule of natural justice embodied in the maxim "audi alteram partem". Although there are no positive words in the statute (Passport Act) requiring that the party shall be heard, yet the justice of the Common Law will supply this omission of Legislature. The power conferred under Section 10(3)(c) of the Act on the passport authority to impound a passport is a quasi-judicial power. The rules of natural justice would therefore be applicable in the exercise of this power. Natural justice is a great humanising principle intended to invest law with fairness and to secure justice. Fairness in action, therefore, demands that an opportunity to be heard should be given to the person affected. A provision requiring of such opportunity to the affected person can and should be read by implication in the Passport Act, 1967. If such provisions were held to be incorporated in the Act by necessary implication, the procedure prescribed for impounding passport would be right, fair and just and would not suffer from the vice of arbitrariness or unreasonableness. It must, therefore, be held that the procedure 'established' by the Act for impounding a passport is in conformity with the requirement of Article 21 and is not violative of that Article."
Thus Art. 21 requires the following conditions to be fulfilled before a person is deprived after property

1. There must be a valid law.
2. The law must provide a procedure.
3. The procedure must be just, fair and reasonable.
4. The law must satisfy the requirements of Arts. 14 and 17 i.e., it must be reasonable.

2. Right to reputation

Since in a prosecution for adultery, the reputation of married woman is also involved, since she is a not a party to prosecution and since right to personal liberty includes right to reputation. Section 497 of IPC was violative of Article 21 were the arguments presented to the Supreme Court in Sowmithri Vishnu Vs Union of India (AIR 1985 SC 1618) Rejecting the arguments, the Supreme Court held that section 497 was not violative of Article 21, since she could be heard if she moves an application before the prosecuting court.

Besides these principles, Right to Privacy, Right to Health and Medical Assistance, Right to Free Legal Aid, Right to Bail, Right to Speedy Trial etc., were also evolved by the Supreme Court of India.

Apart from the above principles, Right to get pollution free water and air principle evolved by the Supreme Court of India in the case Subhash Kumar Vs State of Bihar . It has been held that public interest litigation is
maintainable for ensuring enjoyment of pollution free water and air which is included in the “Right to Live under Article 21 of the Indian constitution.

The Supreme Court entertained various Environmental problems under Article 32 of the Constitution as involving violation Article 21 as “right to life. In the Case of Ganga Pollution (Tanneries) Case, M.C.Mehta vs. Union of India, Justice Singh concluded that we are conscious that closer of Tanneries may bring Unemployment, loss of Revenue but life, health and ecology have greater importance to the people”. The right to livelihood can potential check government actions which and environmental impact that threatens to dislocate poor people and disrupt their life styles.

**Article 19(1) (g)**: All citizens of State have the right to practice any profession or to carry on any occupation trade or business.

This fundamental right can be exercised by the citizens subject to the reasonable restriction i.e. efficient discharge standards prescribed by the pollution control boards. For example Supreme Court in a related Case said that right to carry on business against the danger to public health from the discharge of dirty water into public roads and drains will be balanced.

**Article 32**: The Traditional rule of *locus standi* under Article 32 of the Constitution that a petition can only be filed by a person whose fundamental right is infringed has now been considerably relaxed by the Supreme Court in its recent judgments. The Court now permitted PILs or SILs at the instance of
public-spirited citizens for the enforcement of constitutional and legal rights of any person or group of persons. The efforts of the highest court in environment pollution control through PIL is indeed laudable, particularly when the Legislature is lagging behind in bringing the lacuna in the existing legal system and administration is not well equipped to meet the challenge.

**Directive Principles of State Policy:** Although the control and prevention of Environmental pollution is comes with in the purview of the concept of the improvements of the public health but the Parliament in its wisdom decided to add Article 48-A by the Constitution (Forty-second Amendment) Act. 1976. Section 10 of this provides: “After Article 48 of the Constitution the following article shall be inserted, namely:

48-A. Protection and improvement of environment and safeguarding of forests and wildlife. The state shall endeavor to protect and improve the environment and to safeguard the forests and the wildlife of the country”.

**Fundamental Duties:** The Constitution (Forty-second Amendment) Act. 1976 also added in Part IV A-after Part IV in the Constitution enumerating the fundamental duties of every citizen of India. Article 51 -A (g) of Part IV-A lays down that it will be the duty of the every citizen of India - ‘to protect and improve the natural environment including forests, rivers and wildlife and to have compassion for living creature.
Thus the Constitution makes two-fold provision. Firstly, it gives
directive to the state for the protection and improvement of the environment,
and secondly, it casts a duty on every citizen to help in the preservation of
natural environment. If the state and the citizens perform their respective
constitutional duties then this problem can’t be solved, but can definitely be
controlled.

**Federal Principles:** Under Federal system the government powers shared
between Union and State governments. Article 246 of the Constitution of India
deals with subject-matter of law made by Parliament and by the Legislature of
States. Parliament and State Legislature of any state have exclusive power to
make laws with respect of any of the matters enumerated in List (Union List)
and List II (State List) in the seventh schedule. Parliament and State
Legislature of any State have power to make laws with respect to and of the
matters enumerated in List III (Concurrent List). Environmental Legislative
Powers are available under all the three lists as detailed below:

**List I-Union List**

Entry 52 : Industries: The control of which by the union is
declared by the Parliament by law to be expedient
in the public interest.

Entry 53 : Regulation and Development of Oil Fields and
Mineral Resources.

Entry 54 : Regulation of Mines and Mineral Development.
Entry 55 : Regulation and Development of Inter-State Rivers and River Valleys.

Entry 57 : Fishing & Fisheries beyond territorial waters.

**List II - State List**

Entry 6 : Public Health and Sanitation.

Entry 14 : Agriculture, Protection against pests and prevention of plant diseases.

Entry 18 : Land, that is to say, right in and over land.

Entry 21 : Fisheries.

Entry 23 : Mines and Minerals, subject to provision of List I.

Entry 29 : Industries, subject to provisions of List I.

Entry 25 : Gas and Gas works.

**List III - Concurrent List**

Entry 17A : Forests.

Entry 17B : Protection of Wildlife Animals and Birds.

Entry 20 : Economical and Social Planning.

According to Article 249 the Parliament has residual power to legislate on subjects not covered by the three lists. Under Article 254-A State Law passed subsequent to the Central Law will prevail however, if it has received presidential assent but the basic principle is that, in case of conflict between Central Law and State Law the former will prevail. Article 253 of the
Constitution empowers Parliament to make laws implementing India’s international obligations as well as any decision made at an international conference, association or other body.

ENVIRONMENT PROTECTION-LEGISLATIVE APPROACH

Need for environmental protection is *sine qua non* at this juncture of development. What is the need today is sufficient law and adequate machinery to enforce the legal standards. Without law environmental standards cannot be enforced. Whatever the laws in force will become meaningful only when they properly enforced. Life of law is in its enforcement. Environmental laws may comprise common law, miscellaneous provisions in some statutes including specific statutes exclusively dealing with pollution control.

Before studying major environmental laws, which are passed by Legislatures, it is necessary to mention the concept of pollution, types of pollution and sources of pollution.

**Definition of Pollution**

Advances in science and technology have, no doubt conferred many benefits on society in the form of better and improved quality of goods at comparatively reasonable advent of technology has also brought in its trail the problem of pollution.

The Royal Commission on Environmental Pollution in U.K. in its third report gave the following definition to the term “Pollution”, namely-
“The introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structure or amenity or interference with legitimate uses of the environment”\(^9\).

According to Section 1 (3) of the U.K. Environment Protection Act 1990, the term “Pollution” means

“The release (into any environmental medium) from any process which is capable of causing harm to man or any other living organisms supported by the environment...”

Pollution occurs when there is a potential harm. Harm for man is not confined to physical injury but encompasses offence caused to any of his senses or harm to his property, therefore smells and noise which may not cause injury can constitute pollution. Harm to living organisms can include harm to their health or interference with the ecological systems of which they form a part\(^{10}\).

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9 Dr. N. Maheswara Swamy, Textbook on Environmental Law, Asia Law House, Hyderabad, 2\(^{nd}\) Ed. 20078. p.4.

10 Dr.N.Maheswara Swamy, Textbook on Environmental Law, Asia Law House, Hyderabad, 2\(^{nd}\) ed. 2007-8, pp.4-6.
The pollution can be classified into the following categories:

1. Environmental Pollution
2. Water Pollution
3. Air Pollution or Atmospheric Pollution
4. Land / Soil Pollution
5. Marine Pollution
6. Thermal Pollution
7. Radioactive Pollution
8. Noise Pollution

The above categories of pollution may be studied briefly:

1. Environmental Pollution: According to Mc. Laughtin, "Environmental pollution" means the introduction by man into any part of the environment, of wastes, water energy or energy surplus energy which so changes the environment directly or indirectly adversely to affect the opportunity of men to use or enjoy it. The term "pollution" is derived from the Latin word "pollutionem" which means defilement. Thus, defilement of environment is called environmental pollution.

According to Section 2(c) of the Environment (Protection) Act, 1986, “Environmental Pollution” means the presence in the environment of any environmental pollutant.”

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11 Dr.N. Maheswara Swamy, Textbook on Environmental Law, Asia Law House, Hyderabad, p.5
12 Dr.SC.Tripathi, Environmental Law, Central Law Publications 2008, 3rd Ed., p.3.
13 Dr.N.Maheswara Swamy, Textbook on Environmental Law, Asia Law House, Hyderabad, p.6.
The above definition further requires to know the meaning of the phrase “Environmental Pollutant”.

According to Section 2(b) of the said Act of 1986, “Environmental pollutant” means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment”\(^\text{14}\).

Kinds of Pollution

1. **Environmental pollution** may be broadly classified into:
   1. Natural Pollution  2. Man made pollution.

1. **Natural Pollution**: Environment is polluted often by natural phenomenon, such as earthquakes, floods, drought, cyclones, etc.

2. **Man-made Pollution**: Human activities.

The main causes of Environmental Pollution.

The following are said to be some of the important causes which lead to environmental pollution and degrade the environment from its natural existence, namely, increase in population; unmindful use of technology, lack of check over the increasing number of pollutants; industrial development, through exploitation of natural and other sources; unplanned discharge of pollutants into air; land and water; unplanned disposal of excreted and waste water and other dust materials; inappropriate management of solid wastes, failure to control vectors; failure in food protection; failure to prevent emission of ionizing radiation, inappropriate management of electro-magnetic energy; heat and sound, etc.

\(^{14}\) ibid p.6
For the prevention of pollution in environment and for the protection of environment, the Parliament of India passed Environment (Protection) Act 1986.

2. Water Pollution

Water is an important factor in the life of organisms. It is universal solvent in which practically all the minerals, present in soil, may be dissolved. It supports life system and its shortage has been the main concern of human beings. It covers about one-third of earth’s surface. Water is an essential element of human living but it is useful only when it is unpolluted. The higher the standard of living, the greater the danger of pollution. To make it fit for use, removal of pollutants is essential. Greater material wealth means an increase of substances which lead to pollution. The more we advance, the more wastes we produce. In the age of industrialisation as we live today industrial wastes are the most important pollutants of water. Polluted water means water which contains foreign substances in it which alters physical, chemical, or biological properties of water. Water is formed by mixing two molecules of Hydrogen with one molecule of Oxygen in the presence of heat and energy. Water is colourless, odourless and transparent substance. When it is polluted or contaminated, it loses its qualities and becomes unfit for use. Polluted or contaminated water have been found to be injurious to public health for the purposes of domestic, commercial, industrial, agriculture or other legitimate uses or to health of animals and aquatic life.
About 80 percent of the Earth’s surface, spread over to a total of 50000 million.

Million hectares in area, is covered with water. It is reported that “out of the estimated 1,011 million km3 of the total water present on earth, only 33,400 m3 of water is available for the purposes of drinking, agriculture, domestic and industrial consumption. The rest of the water is locked up in oceans as salt water, polar ice-caps and glaciers and underground. Owing to increasing industrialisation on the one hand and exploding populations on the other, the demands of water supply have been increasing tremendously.\(^{15}\)

**Definitions of Water Pollution**

(a) General Definitions: The term “Pollution” in the context of water is derived from the Latin word “pollutes”. “Pol” means before and “Latus” means washed (i.e. before washing means, unclean). The term “water pollution” is used to indicate an act of contamination or making foul the natural water bodies. Contamination makes water totally unfit for use.

According to a report of the U.S. President’s Science Advisory Committee. (Washington U.S.A.(1965)–Restoring the quality of our Environment) “Water Pollution means alteration of physical, chemical and biological characteristics of water which may cause harmful effects on human and other biota.

\(^{15}\) A text book of Environmental Chemistry and pollution Control”S.S.Dara 1988 ed., p.64

Dr.N.Maheswara Swamy, Textbook on Environmental Law, Asia Law House, Hyderabad, 2007-8, 2\(^{nd}\) edd, p.21
According to World Health Orgnaisation (WHO), “Water Pollution” means addition of chlorine adverse materials which interfere with water’s chemical characters and its use for legitimate purposes\textsuperscript{16}.

According to C.S.South Wick\textsuperscript{17} -“Water pollution” is the deterioration in physical, chemical and biological properties of water brought about mainly by human activities and natural resources.

According to National Water Commission(1976), water is said to polluted if it is not of sufficiently high quality to be useful for man for present or future.

(b) Statutory definition: “Pollution” as defined under Section 2(e) of the Water(Prevention and Control of Pollution) Act. 1974 means ,such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge or any sewage or trade effluent or of any other liquid, gaseous or solid substances into water(whether directly or indirectly) 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 animals and plants or of aquatic organisms.

\textsuperscript{16} Ib\textit{i}d, p.20
\textsuperscript{17} 1976-Ecology and the Quality of Environment, Newyork)

Physical pollution of water brings changes in the colour, odour, electricity, and thermal characteristics of water. Chemical pollution of water takes place by bringing changes in the acidity, alkalinity or pH, dissolved oxygen and such other changes in the water. These pollutants can be organic or inorganic and pollution may be caused by either or both of these pollutants. Biological pollution of water will be caused by the excreted products of warm-blooded mammals such as man, wild and domestic animals, birds, and fiscal streptococci-miscellaneous organisms, etc.

Scientific literature reveals that, among human beings, bacteria, viruses, protozoa, plant toxins etc., may also cause infection of the intestinal tract leading to dysentery, cholera, gastroenteritis, polio etc. Physiological pollution of water is caused due to chemical agents like chlorine, sulphur-di-oxide, hydrogen sulphite, amines, phenoils, ketones etc. Where dust and odour in water are caused due to certain toxic chemical gases, the use of such water seriously affects public health. Turbidity due to bacterial contamination of CH is very serious.

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18 Ibid p.21
The most common form of water pollution is the presence of carbohydrates, proteins, fats. The important industries that contribute for such pollution are chemical, pesticide, detergent making, drugs and insecticide manufacturing, and dye etc.

Encyclopaedia of Environmental Pollution and Control has enumerated the following sources of contamination of water pollution\textsuperscript{19}.

1. Domestic water pollution
2. Industrial water pollution
3. Agricultural water pollution
4. Solid waste pollution
5. Thermal pollution
6. Shipping water pollution
7. Radioactive water pollution

**1. Domestic Water Pollution**

It includes waste water from homes and commercial establishments. These materials have been largely organic and get oxidized by bacterial decomposition to nitrate, phosphate, carbon dioxide and water. As this type of decomposition needs the use of dissolved oxygen demand on the system.

**Effects**

The discharge of untreated and partially treated sewage into the rivers and other water can produce\textsuperscript{20}.

\textsuperscript{19} Dr. I.A.Khan, Environmental Law, Central Law Agency, Allahabad, 2002, 2\textsuperscript{nd} ed., p.73

\textsuperscript{20} Ibid p.74.
1. Depletion in oxygen content caused by biological oxidation of organic matter.

2. Stimulation of algal growth and shift in algal diversity towards blue green algae leading towards the production of obnoxious blooms. Decomposition of such algal biomass in turn leads to oxygen depletion.

3. The public sewage containing various micro-organisms, bacteria, yeast and other moulds, algae, eggs of helmithesn, viruses etc., are dangerous with respect to epidemic diseases man and animals.

2. Industrial Water Pollution

There are water-using industries which are discharging wastes with a total BOD load about three to four times as large as the load from severed population. Only 7 or 8 % of m Industrial waste waters have been disposed of in municipal sewer system, but they constitute about half of total municipal load. Unfortunately, only a small percentage of the approximately 3,00,000 factories using and contaminating water in their manufacturing processes adequately treat water prior to its release.

The industrial waste water contains raw materials, processed chemicals, final products, processed intermediates, processed by-products and impurities of the industry.

The industrial pollutants may be classified as
a. Organic substances that deplete oxygen content and increase biological oxygen demand (BOD);
b. Inorganic substances like carbonate, chloride, nitrogen that render the water unfit for use and encourages growth of microplants;
c. Acids and alkalis which affects the growth of fish and other aquatic life.
d. Toxic substances like cyanide, acetylene, phenol, heavy metals like mercury, lead, arsenic which cause damage to the flora and fauna.
e. Oil and other floating substances.
f. Colour producing materials like dyes which are aesthetically objectionable.
g. Oil and other floating substances of water bodies.

3. Agricultural Water Pollution

Agricultural water pollution includes\textsuperscript{21} sediments, fertilizers and farm animal wastes. Pesticides and fertilizers are the main pollutants which reach water bodies through run off and leaching. The large amount of fertilizers used, when washed, off the lands through irrigation, rainfall and drainage, into the rivers can seriously disturb the aquatic ecosystem.

\textsuperscript{21} Environmental Law by Dr.I.A.Khan.
3. Solid waste water pollution

Solid waste varies in composition with the socio-economic status of generating community the following materials could be classified as solid wastes

a. Garbage, which includes all decomposable wastes from households, as well as from food-canning, freezing and meat-processing operations that are not disposed in waste water.

b. Rubbish includes all non-decomposable wastes. These materials may be either combustible or non-combustible. Combustible materials would include garden wastes, cloth and paper. Non-combustible material include masonry, some chemicals, metals and glass.

c. Sewage sludge is generated from the settling process in primary, secondary and tertiary treatment methods, as well as the solids from cesspools, which must be removed periodically.

d. Miscellaneous material include wastes, such as chemicals, paints and explosives as well as mining wastes, such as slag heaps and mine tailings.

5. Thermal Pollution

Thermal pollution takes place because many electric generating companies use water in the process of cooling their generators. This heated water is then released into the system from which it was drawn, causing a warning trend of surface waters. Thermal Pollution results when the heated effluent is released into poorly flushed systems.
6. Shipping Water Pollution

It includes both human sewage and other wastes, the most important of which has been oil. There are about 15 million water crafts on navigable waters and their combined waste discharges are equivalent to a city with a population of 2000000. Oil pollution, an oxygen demanding waste, is of concern not only from sensational major spills from ships and offshore drilling rigs but also from small spills and charming operations.

Oil pollution results from accidents involving oil tankers and from spills at offshore oil drilling sites. A more persistent source of oil pollution results from practice of oil tankers, after they delivered the oil, to fill empty tank with sea water to act as aballast for the return trip, prior to docking, the sea water ballast, contaminated with the oil that remains in the tank, is discharged.

7. Radioactive Waste Pollution

The radioactive substances are the most toxic substances whose injurious effect is tremendously high. The major source of radioactive wastes have been nuclear explosives, accidents at nuclear explosives, accidents at nuclear power plants, fuel reprocessing plants and research laboratories; and hospitals that release these wastes into the atmosphere or into waste water. Presently, most interest concern radioactive iodine and strontium, since man is at the end of the food chains that concentrate these elements.
3. AIR POLLUTION

The Air (Prevention and Control of Pollution) Act, 1981: The Air (Prevention and Control of Pollution) Act passed in the year 1981. This Act provides provisions for the prevention, control and abatement of air pollution. For this purpose it was felt that there should be an integrated approach for tackling the environmental problems relating to pollution. It was therefore, proposed that the Central Board for the Prevention and Control of Water Pollution constituted under the Water (Prevention and Control of Pollution) Act 1974 will also perform the functions of the Central Board for the Prevention and Control of Air Pollution in the Union Territories.

4. LAND/SOIL POLLUTION

Like water and air\textsuperscript{22}, soil is also equally important for living organisms. It supports plants on which, all other living organisms depend. The process of soil formation is so slow that the soil may be regarded as a non-renewable source. Therefore, the study and control of soil pollution is important. Any substance that reduces soil productivity is called soil pollutant.

Sources of Soil Pollution

There are several materials, which adversely physical, chemical and biological properties of the soil and thus reduce its productivity. These are:

1. Chemicals present in industrial waste.
2. Pesticides and insecticides that are sprayed on crops
3. Fertilizers and manures that are added to the soil to increase the crop yield.

\textsuperscript{22} Environmental Science by Dr.Y.K.Singh.
EFFECT OF SOIL POLLUTION

Chemicals and pesticides affect the structure and fertility of soil by killing the soil micro organisms. Pesticides are absorbed by the plants and then transferred to other organism. Hence, they affected food chains and food webs. Excretory products of livestock and human being used as manure pollute the soil besides giving high yield. Pathogens present in the wastes and excreta contaminate the soil and vegetable crops causing diseases in man and domestic animals.

LAND DEGRADATION

Besides pollution, land and soil face several other problems. Removal of topsoil is called soil erosion. Soil erosion factors are water, wind, ocean, waves, glaciers, felling of trees, over grazing of cattle, over cropping etc.

5. MARINE POLLUTION

All river drainages end up in the seas. On the way to sea, rivers carry large amounts of sewage, garbage, and agricultural discharge, biocides, including heavy metals. Besides, this discharge of oils and petroleum products and dumping of radio nuclides waste into sea also cause marine pollution. Huge quantity of plastic is being added to sea and ocean. Over 50 million lb plastic packing material is being dumped in sea of commercial fleet. Many marine birds ingest plastic that causes gastro intestinal disorders. The chemical principle in PCBs causes more damage as thinning of egg shell tissue damage of egg. Radionuclide waste in sea includes Sr- 90,Cs-137, pu-239 and Pu-240.
The pollutants in sea may become dispersed by turbulence and ocean currents and finally becomes a part of food chain. Bio accumulation in food chain may result into loss of species diversity. The pollution in Baltic sea along the Coast of Finland, took place largely from sewage and effluents from wood industries. This pollution effect brought changes in species diversity in the bottom fauna. In less polluted water there was rich species diversity, which tended to decrease with increasing pollution load. In marine water the most serious pollutant is oil. About 50000 to 250000 birds are killed every year by oil. The oil is soaked in feathers, displacing the air and thus interferes with buoyancy and maintenance of body temperature. Hydro carbons and benzpyrene accumulates in food chain and consumption of fish by man may cause cancer.

6. THERMAL POLLUTION

The increase in water temperature by industrial units such as steel and iron factories, electric powerhouses and atomic power plants may be called as thermal pollution. Some of the industries generate their own power supply where water is used to cool the generators. This hot water is release into the main stream, causing a warming trend of surface waters. If the drainage is poorly flushed, a permanent increase in the temperature may result.

Many organisms are killed instantly by the hot water resulting into a high mortality. It may bring other disturbances in the ecosystem. The eggs of fish may hatch early or fail to at all. It may change the diurnal and seasonal behavior and metabolic responses of organisms.
7. RADIO ACTIVE POLLUTION

The radiation from the atomic blasts cause several health hazards. The radiations carry high energy and remove electrons from atoms and attach them to other atoms producing positive and negative ion pairs. Hence, they are known as ionizing radiations. The ionization property of these radiations proves to be highly injurious to the protoplasm. The ionizing radiations of ecological concern are classified as follows:

CORPUSCULAR RADIATIONS

These consist of streams of atomic or subatomic particles, which transfer their energy to the matter they strike.

1) Alpha particles: These particles are large and travel few centimeters in the air. These cause large amount of local ionization.

2) Beta particles: These are small particles characterized by having high velocities. They can travel few centimeters. These are capable of entering into the tissues of few centimeters.

3) Electromagnetic radiations: Electromagnetic radiations include waves of shorter wave lengths. These are capable of travelling long distances and can readily penetrate the living tissue. These include gamma rays. These can penetrate and produce effect even without being taken inside.

OTHER TYPES OF RADIATIONS

Beside radioactive radiations, some other radiations are also present in the atmosphere
I) Neutrons: These are large uncharged particles, which do not cause radiation by themselves, but they produce radioactivity in non-radioactive materials through which they pass.

II) X Rays: These are electromagnetic waves very similar to gamma rays, but originate from the outer electron shell or radioactive substances,

8. NOISE POLLUTION

Noise can be defined as unwanted /unpleasant sound. So noise pollution is unwanted sound dumped into the atmosphere without regard to the adverse effects it may have. In our country urbanization and industrialization have become twin problems. Cities and towns have sprouted up where industries are concentrated. Lack of town planning had led to residential, commercial and industrial areas being mixed up. Houses, schools and hospitals are situated near industries. All the boons of industrialization and civilization such as motors, horns, heavy and light machinery work and movement bring radios, supersonic aeroplanes have become disturbing and irritant. Our ears can hear ordinary conversation between 30-60 decibels. Modern conversation has a noise value of 60 decibel value greater than 80 decibels causes noise pollution. Noise become troublesome above 140 decibels.

Effect of Noise pollution

1. Constant noise affects a man physically and mentally. Physically effects include blood vessels to contract, skin to become pale, muscles to constrict and rise in blood pressure to tension and nervousness.
2. High intensity sound emitted by industrial plants, bottling machines, supersonic aircrafts, when continued for long periods of time not only disturbs but also permanently damages.

3. Offices, Industries and crowded places where noise prevails can produce temper tantrums, headaches, fatigue and nausea.

4. Loud and sudden noise affect the brain. Intermittent noise leads higher incidence of psychiatric illness and also a danger to health of pregnant mother and small infants.

5. Noise has harmful effects on nonliving materials too., e.g., cracks develop under the stress of explosive sound.

9. FOOD POLLUTION

It deals mainly with adulteration of food materials. It will cause gastrointestinal problems to the human beings.

6.2 MAJOR ENVIRONMENTAL LEGISLATION

The major environmental laws passed by Parliament of India are as follows:

6.2.1 WATER
Rajasthan, Tripura and West Bengal as well as to the Union Territories and the other States which adopts this Act under Article 252(1) of the Constitution.

Section 2 of the Act defines the word pollution and which 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 (whether directly or indirectly) 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 animals or plants or of aquatic organism\textsuperscript{23}. The Water (Prevention and Control of Pollution) Amendment Act 1978 introduced a new term outlet to this Act which means any conduct pipe or channel open or closed carrying sewage or trade effluent. Similarly the word Sewage means any pipe or channel open or closed carrying sewage\textsuperscript{24}.

The Central and State Boards for Prevention and Control of Water Pollution:

There are various provisions in the second chapter of the Act (Sec. 3-12) which provides for the constitution of Central and State Boards terms and conditions of Service of members disqualifications, vacation of seats by members, meeting of the Board, constitution of committees, temporary association of persons with Board for particular purposes, vacancy in Board not to invalidate acts or proceedings, delegation of powers to Chairman, member-secretary and officers and other employees of Board.

\textsuperscript{23} Sec. 2(e) Ibid
\textsuperscript{24} Sec. 2(dd) Ibid
Joint Boards: Chapter III of the Act deals with the Constitution of Joint Board, composition of joint Boards and special provision relating to giving directions. Joint Boards is to be constituted by an agreement between the Central and the State Governments or between two States. Joint Board consists of a full-time Chairman, being a person having special knowledge of environmental protection two government officials, one person from each of the participating State, one non-official member nominated by each of the participating States and two persons from Companies and Corporation nominated by the Central Government. One full-time Secretary is also appointed when the Joint Board is constituted in pursuance of section 13(l) (a) of the Act. When Joint Board is constituted between Central Government and one or more States or Union Territories then it shall consist of following members:

- A full-time Chairman. being a person having special knowledge of the subject of environmental protection:

- Two officials nominated by the Central Government from the participating Union Territories or State or States. as the case may be:

- One person to be nominated by the Central Government from amongst the members of the local authorities functioning within the participating Union territory, or State or States. as the case may be:
• One non-official member nominated by the Central Government and one person to be nominated by the participating Union Territory or State or States, as the case may be:

• Two persons to be nominated by the Central Government from Companies or Corporations:

• A full-time Secretary qualified in public health engineering.

State Government or Central Government is entitled to give requisite directions to Joint Board\textsuperscript{25}.

Powers and Functions of Boards: The Fourth chapter of the Act deals with the powers and functions of the State and the Central Boards. Such Boards may perform various functions namely to advice the government co-ordinate the activities relating to environmental protection provide technical assistance and guidance organize training programme, collect, compile and publish technical and statistical data relating to water pollution etc. Central Board as well as State Board is bound by the directions of the Government\textsuperscript{26}.

Prevention and Control of Water Pollution: Chapter Fifth of the Act deals with the prevention and control of water pollution. Under this chapter the State Government is competent to restrict the application of this Act to certain areas. Each such water pollution, prevention and control area may be declared either by reference to a map or by reference to the line of any watershed or the boundary of any district. Here the State Government may alter such area whether by way of extension or reduction.

\textsuperscript{25} Sec. 13-15 Ibid
\textsuperscript{26} Sec. 16-18 Ibid
Under the Act State Board or any officer empowered by it is competent to obtain information and to take samples of effluents which are passing from any plant, vessel, from or over any place into stream or well. Such sample sent to analyst and after analysis result of such analysis submitted to Central or State Board as the case may be.

Any person who is empowered by a State Board in this behalf shall have a right at a time to enter with such assistance as he considers necessary, any place for the purpose of examining any plant, records etc. when he has a belief that an offence was committed under this Act. The State Board is also competent to put restrictions upon the use of any stream or well for disposal of polluting matters etc. as also upon the use of new outlets and new discharge point of sewage or trade effluent. The provisions of section 25 (which is related to the restriction on new outlets and new discharge) may be applied in relation to any person discharging any sewage or trade effluent into a stream or well or sewage or on land, immediately before the commencement of the Act, subject to the modification that the application for consent to be made under section 25(2). This sub-section contains particulars regarding the proposed construction, installation or operation of the industrial or commercial establishment or of any treatment and disposal system or of any extension or addition thereto and such other particulars as ma prescribed. Under the Act the State Board shall not accord its consent to the bringing into use of a new or
altered outlet unless the outlet is so constructed as to comply with the provisions of the Act.

Any person aggrieved by an order made by the State Board under section 25, 26 or 27 may within a period of thirty days from the date on which the order was communicated to him prefer an appeal to such authority as the State Government may think fit to constitute. The Appellate authority may entertain the appeal after the expiry of 30 days if such authority is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time. Where an order has been made by the State Board under section 25, 26 or 27, the State Government may at any time either of its own motion or on an application made to it in this behalf call for the records of any case for the purpose of satisfying itself as to the legality or otherwise of such order and may pass such order in relation thereto as it may think fit after the revision of a case.

There are various other works which are to be carried out by the State Board. Such works include service of a notice to a person, who violates the provisions of the Act to receive information which is given by any industry or trade to take emergency measure in case of pollution to make application to courts for restraining pollution\textsuperscript{27}.

\textsuperscript{27}Sec. 19-33 Ibid
Penalties and Procedure: Chapter Seventh of the Act deals with the various penalties and related procedure. The important provisions of this chapter are as follows:

For failure to comply with directions under section 20(2) and (3) section 32(1)(c) the guilty person shall be punishable with imprisonment which may extend to there months or with fine, which may extend to Rs.5,000 or with both. In case of violation continuous nature additional fine extending to Rs. 1000 for every day for the first failure may be imposed.

A person who destroys matter put up by the Board or obstructs any person acting under the directions of Board or damages any property belonging to Board etc. shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to 1000 rupees or with both.

For contravention of the provisions of section 24 of the Act, the guilty person shall be punished with imprisonment for a term which may extend to six years and with fine. The minimum sentence of imprisonment for this offence is six months.

A person guilty of contravention of the provisions of section 25 or 26 of the Act shall be punished with imprisonment which shall not be less than six months but which may extend to 6 years and with fine. Any person convicted for contravention of the provisions of section 24, 25 or 26 of the Act shall be
punished with imprisonment for a term which shall not be less than 1 year but which may extend to 7 years and with fine if he is found guilty for such same contravention again.

Offenders name and place of residence the offence and penalty imposed shall be published at the offenders expense in newspapers or in such manner as the court may direct. Where an offence under this Act has been committed by a company then every person who at that time was in-charge of that company shall be deemed to be guilty of the offence. However, such person shall not be liable to any punishment. If the offence was committed without his knowledge or the exercised all due diligence to prevent the commission of such offence.

Where an offence is committed by Government department, the Head of Department concerned shall he deemed to be guilty of the offence. But the Head of the Department shall not be liable to any punishment of he establishes that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

No court shall take cognizance of any offence under the Act except on a complaint made to it. No court inferior to that of the Magistrate first class shall try an offence punishable under the Act.

2. The water (Prevention and Control of Pollution) Rules, 1975

The Water prevention and Control of Pollution) Rules (hereinafter to be referred to as the Rules) were passed in 1975 by the Central Government in
exercise of the powers conferred by section 63 of the Water (Prevention and Control of Pollution) Act 1974 (6 of 1974) after consultation with the Central board for the Prevention and Control of Water Pollution. Under these rules unless the context otherwise requires. Act means the Water (Prevention and Control of Pollution) Act. 1974. There are two unique features in these rules. They are: I) Water Laboratory and 2) Consulting Engineer. The Fifth Chapter of the Rules contains provisions relating to the appointment, termination, emoluments, tours, rights regarding information, duties and functions of the consulting engineer. In the Tenth Chapter of the Rules provisions have been included as regards the function of the Central Water Laboratory and fees for report which is payable to Central Board.

3. The Water (Prevention and Control of Pollution) Cess Act, 1977: This Act deals with the various provisions relating to levy and collection of a cess on water consumed by person carrying on certain industries and by local authorities with a view to augment the resources of the Central and the State Boards constituted under the Water (Prevention and Control of Pollution) Act 1974 for the Prevention and Control of Water Pollution. In this Act unless the context otherwise requires local authority means a Municipal Corporation or a Municipal Council or a Cantonment Board or any other body entrusted with the duty of supplying water under the law by or under which it is constituted\(^\text{28}\).

\[^{28}\text{Sec. 2(a). The water (Prevention and Control of Pollution) Cess Act. 1977}\]
Leavy and collection of Cess: Under this Act. State Governments empowers to levy and collect a cess payable by local authorities (Which are entrusted with the duty of supplying water under the law) and certain specified industries. Cess is to be calculated on the basis of the water consumed by specified industry or local authority. For the purpose of measuring and recording the quantity of water consumed meter is affixed. Under these rules every person carrying on any specified industry and every local authority is liable to furnish returns in the prescribed forms\(^{29}\).

Assessment of Cess: The Officer or authority to which the return has been furnished shall assess the amount of cess payable by the concerned person carrying on any specified industry or local authority as the case may be. After assessment the cess is to be paid to the State Government within the specified period. A provision of seventy per cent rebate in the cess payable has been made in favour of that person or local authority who installs any plant for the treatment of sewage or trade effluent.

Under this Act cess levied may be credited to the consolidated fund of India. From this fund the Central Government provides such sum of money to the Central Board and State Boards as it thinks fit such money has to be utilized for the prevention and control of water pollution. Any officer or authority of the State government specially empowered in this behalf by that Government may enter into any place if any of the provisions of this Act is

\(^{29}\) Sec. 3-5 Ibid
violated. If any person fails to pay cess within the stipulated time then he shall be liable to pay 12% interest on the total amount per annum. If any amount of cess remains unpaid by any person after the expiry of the specified time then competent authority may impose a penalty not exceeding the amount of Cess. Central Government may recover any amount outstanding under this Act from the person concerned carrying on specified industry or from local authority in the same manner as laid down for realization of an arrear of land revenue. Any person furnishing a false return shall be liable to punishment of imprisonment which may extend to six-months or with fine which may extend to Rs.1000. or with both.

If a person liable to pay cess under this Act willfully or intentionally evades the payment of such cess, he shall be punished with imprisonment which may extend to six months or with fine which may extend to Rs. 1000 or with.

6.2.2 AIR

1. The Air (Prevention and Control of Pollution) Act, 1981: The Air (Prevention and Control of Pollution) Act passed in the year 1981. This Act provides provisions for the prevention, control and abatement of air pollution. For this purpose it was felt that there should be an integrated approach for tackling the environmental problems relating to pollution. It was therefore, proposed that the Central Board for the Prevention and Control of Water

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30 Sec. 6-14 Ibid
Pollution constituted under the Water (Prevention and Control of Pollution) Act 1974 will also perform the functions of the Central Board for the Prevention and Control of Air Pollution in the Union Territories. It was also proposed that the State Boards constituted under the said Act will also perform the functions of State Boards in respect of prevention, control and abatement of air pollution. But in those states in which such State Boards have not been constituted separate State Boards for the Prevention and Control of Air Pollution will be constituted.

In the UN Conference on Human Environment held in Stockholm in June. 1972 (in which India is participated) decisions were taken appropriate steps for the preservation of the natural resources of the earth which among other things include the preservation of the air and control of air pollution. The Government has decided to implement these decisions of the conference and for this purpose the Air (Prevention and Control of Pollution) Act. 1981 was passed. The scheme of the AIR (Prevention and Control of Pollution) Act.1981 is as follows:

Preliminary: In the Air (Pollution and Prevention) Act. 1981 unless the context otherwise requires.

- Air Pollution means any solid, liquid or gaseous substance present in the atmosphere in such concentration as may be or other living creature or plants property or environment.
• Air Pollution’ means the presence in the atmosphere of any pollutant\textsuperscript{31}.

**Central and State Boards for Preventions and Control of Pollution:**
Chapter Second of the Act deals with the provisions related to Central and Prevention and Control of Pollution. The Central Board for the Prevention of Water Pollution constituted under the Water (Prevention and Control of Pollution) Act. 1974 will also perform the functions of the Central Board for the Prevention and Control of Air Pollution (sec. 3). Similarly, the State Boards constituted under the said Act will also perform the functions of State Boards in respect of prevention, control and abatement of air pollution.(sec4).The State Board consist of the following members namely:

• A Chairman, having special knowledge in environmental protection. nominated by State Government:

• Official members, nominated by the State Government: but not exceeding five:

• Members of the local authorities not exceeding five, nominated by State Government:

• Non-official members, nominate by the State Government to represent the interest of agriculture, fishery or industry or trade or labour or any other interests. but not exceeding three

\textsuperscript{31} Sec. 2(a) & (b) The Air (Prevention and control of Pollution) Act, 1981.
- Two persons from the Companies or Corporation. nominated by the State Government:
- A full-time Member Secretary having practical experience in environmental matters to be appointed by the State Government.

However, in those States in which State Boards for the prevention and control of water pollution have not been constituted under the Water (Prevention and Control of Pollution) Act 1947, separate State Boards for the prevention and Control of Air Pollution are proposed to be constituted. No State Board shall be constituted for Union Territory. The Central Board will exercise the power and perform the functions of a State Board under the Act for the Union Territories.\(^{32}\)

**Powers and Functions of Board**

The third Chapter of Act deals with the powers and functions of Boards, which includes-giving of advice to the Government co-ordination of activities technical assistance, organization of a comprehensive programme regarding the abatement of air pollution, collection, compilation and publication of technical and statistical data relating to air pollution etc (Sec. 16-18).

**Prevention and Control of Air Pollution**

The Fourth Chapter of the Act deals with the Prevention and Control of Air Pollution.

\(^{32}\) Sec. 3-6 Ibid
Air pollution may be prevented and controlled by the State Government by declaring any area or areas within the States as air pollution control area or areas for the purpose of this Act. The State Government is also empowered to give instructions to the concerned authority for ensuring standards for emission of air pollutants from automobiles and put restrictions upon the use of certain industrial plants in an air pollution control area then such industrial unit must not discharge, air pollutant in excess of the standards, which are laid down by the State Board, here it is the duty of the person concerned to furnish information to the State Board and other agencies, if excess air pollutant is discharged in the atmosphere from the units situated in pollution control area.

Subject to the provisions of this Act, the State Board is empowered to confer upon any person a right to enter into any place for the purpose of performing any of the functions of the State Board entrusted to him. Further the State Board is also empowered to obtain information to take samples of air or emission etc. Such sample is then sent to the State Air Laboratory for analysis and report by the Analyst. The reports of the Analyst may be used as evidence. Any person aggrieved by an order made by the State Board under period of 30 days from the date of such order.

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33 Sec. 19-31 Ibid
Penalties and Procedure

The Sixth Chapter of the Act deals with the provision of penalties and procedures. Section 37 to 41 of the Act, deals with the provisions of penalties and provisions relating to procedural aspects.

If a person fails to comply with the provisions of section 2 1(5) or section 22 or with orders or directions issued under this Act then such person is liable to punishment of an additional fine may be imposed which may extend to Rs. 500 per day during the period such failure continues after conviction for the first such failure. if such failure continues beyond a period of one year after the date of conviction then the offender is to be punished with imprisonment for a term which may extend to 7 years and with fine. On the other hand, if a person destroys any notice or obstructs any person acting in accordance with the orders with the orders of the Board or damages any property belonging to Board, he is to be punished with imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both. Here it is interesting to note if a person contravenes any of the provisions of this Act for which no penalty has been provided in this Act then such person is to be punished with imprisonment for a term which may extend to 3 months or with a fine which may extend to Rs.10,000 rupees or with both in the case of continuing contravention with an additional fine which may extend to Rs.5000 per day during the period such contravention continues after conviction for the first such contravention.
Under this Act if offence is committed by a company at the relevant time and the company itself is deemed to be guilty of the offence and liable to be proceeded against and punished accordingly.

If an act is done or intended to be done in good faith under this Act then no suit, prosecution or other legal proceeding shall lie against authorities. The court is not competent to take cognizance of any offence under the Act except on a complaint made by or with the previous sanction in writing of the State Board.

If any act is done or intended to be done in good faith under this Act then no suit, prosecution or other legal proceeding shall lie against authorities. The court is not competent to take cognizance of any offence under the Act, except on a complaint made by or with the previous sanction in writing of the State Board.

Under the Act members, officers and employees of the Board are treated public servants within the meaning of section 21 of the Indian Penal Code 1860. It is the duty of Central and State Boards to furnish reports and returns to the Central and the State Governments respectively. This Act bars the Jurisdiction of the civil courts in respect of any matter for which the appellate authority empowered to determine an dispute is constituted under the Act.\

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\[34\] Sec. 37-46 Ibid
6.2.3 WILD LIFE

The Wild Life (Protection) Act, 1972 (No. 53 of 1972)

The Wild Life (Protection) Act 1972 was passed in 1972 with the object of granting protection to wild animals and birds and for regulating matters connected therewith or ancillary or incidental thereto.

In the statement of objects and reasons of this Act it is said that the rapid decline of Indian animals and birds one of the richest and most varied in the world has been a cause of grave concern. Some wild animals and birds have already become extinct in this country and others are into danger of being so. Areas which were once teeming with wild life have become devoid of it and even into the Sanctuaries and National Parks the protection afforded to wild life needs to be improved. The wild Birds and Animals Protection Act.1912 has become completely out-dated. The existing state laws are not commensurate with the offence and the financial benefits which accrue from the trade in wild life produce. Further, such laws mainly relate to control of hunting and do not emphasize the other factors which are also prime reasons for the decline of Indian wild life, namely taxidermy and trade in wild life and products derived there from.

After considering the existing relevant laws the Government came to the conclusion that these laws are neither adequate nor satisfactory. In this view of the matter it was felt that there is an urgent necessary for introduction of a comprehensive legislation providing protection to wild animals and birds.
and to deal with all matters connected therewith or ancillary and incidental thereto. Consequently the Wild Life (Protection) Act 1972 was passed.

Salient provisions of this Act are as follows:

- The Act provides provisions for the constitution of a wild life advisory board for each state.
- Further, the Act lays down the procedure for declaring areas as Sanctuaries, National Parks etc.
- That apart the Act regulates possession, acquisition or transfer of or trade in, wild animals, articles and trophies and taxidermy thereof.
- Besides this the Act makes provisions for penalties for contravention of the different provisions of the Act as also provisions relating to various offences by public servants, protection of action in good faith power of government to make rules etc.

6.2.4 FOREST

1. The Indian Forest Act, 1927 (No. 16 of 1927): The Indian Forest Act was enacted in the year 1927 in order to consolidate the law relating to forest the transit of forest produce and the duty available to timber and other forest produce. Prior to the Indian Forest Act. 1927 the law relating to forest in India was contained in the Indian Forest Act 1865 and the Indian Forest Act 1927 ambiguous language of Indian Forest Act. 1878 has been altered and laws relating to forests have been brought in conformity with real intention of the legislature.
The Indian Forest Act 1927 extends protection to every sizable forest in India irrespective of its composition, location or category for the simple reason that every forest serves both protective and productive purposes and its utility may have local, regional or national significance.

2. **The Forest (Conservation) Act, 1980**: The Forest (Conservation) Act was promulgated in the year 1980 for the purpose of conservation of forests and to deal with other connected ancillary or incidental matters. The Act extends to the whole of India except the state of Jammu and Kashmir. Under this Act it is the duty of the state Government to protect reserved forests and to see that forestland or any portion thereof is not used for non-forest purposes. The term ‘non-forest purposes’ means, breaking up or clearing of any forest or a portion thereto for any purpose other than reforestation. This Act authorized the Central Government to constitute a committee consisting of such number of persons assess it may deem fit to advise the Central Government. According to the Act the Central Government is empowered to make rules for carrying out the provisions of this Act publishing notification for that purpose into official Gazette. Even after promulgation of the Forest (Conservation) Act 1980 any thing done under the provisions of the repealed Forest (Conservation) Ordinance. 1980 has been deemed to have been done under the corresponding provisions of this Act.
The Environment (Protection) Act, 1986 (Act No. 29 of 1986)

There is no entry on environmental protection in the legislative lists in the Constitution of India. At present by way of the 74th Amendment, a state legislature can enact a legislation on urban forestry protection of the environment and promotion of ecological aspects (Article 243 W and 12th Schedule entry 8). This is only in relation to the powers and function of municipalities. No provision of this nature has been provided to the panchayats. Subjects having relationship with environmental protection fall under the three categories of law-making power as well as under the power of states in relation to panchayats and municipalities (Art 243 G).

The Environment (Protection) Act 1986 (EPA) was enacted under the provisions of Art 253 of the Constitution with a view to implementing the decisions of the UN Conference on the Human Environment which was held in Stockholm in June 1972.

The EPA was formulated out of the felt need for a general legislation for environmental protection and to fill in uncovered gaps in areas of major environmental hazards. Co-ordination of the activities of the various regulatory agencies creation of authorities with adequate powers for environmental protection, regulation of discharge of environmental pollutants and handling of hazardous substances, speedy response in the event of accidents threatening the environment and provision for deterrent punishments were the objects of the legislation.
Concentration of power in the hands of the Central Government is the main feature of the law. The relevant provision says, subject to the provisions of this Act the Central Government shall have power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing controlling and abating environmental pollution.

This is a sweeping power, perhaps found only in wartime regulation. Obviously, this legislative move meant business. The power to protect and improve the quality of environment a constitutional commitment is stated to be one coupled with duty. This makes it necessary to take up environmental protection measures on a war footing. The measures include a wide range of activities such as co-ordination of actions by State Governments, officers and other authorities, planning and execution of nation wide programmes, standard fixing, restriction of areas for industries and operations laying down of procedures and safeguards, inspection of any premises and dissemination of environmental information. The Central Government can create authorities appoint officers issue binding directions and delegate its power to State Governments, authorities or officers.

Significantly the power to issue directions includes the power to direct closure, prohibition or regulation of any industry, operation or process or stoppage or regulation of the supply of electricity or water or any service. Even in a case where there is a fear of an accident as a result of discharge of
environmental pollutants, the person in charge of the place has a statutory duty to take preventive measures as well as to inform the authorities of the likelihood of an accident. Any equipment industrial plants or other objects can be seized for the purpose of taking measures to prevent or mitigate environmental ‘pollution. This power lying hidden as a tag to the entry and inspection clause is wider in operation than such clauses in the Water Act and Air Act. Failure to comply with or contravention of the provisions of the EPA or the rules made or orders or directions issued are punishable with imprisonment which may extend to five years or with fine upto one lakh rupees or with both. Any person can go in for a prosecution after issuing a 60-day notice.

Rules framed under the EPA could take care of things such as the spreading of environmental awareness and literacy delegation of executive powers rendering of sufficient information comprehensive testing. Periodical renewal of standards and duty of the producer to identify antidotes to injury caused in accidents to human health. Rules can also cover location and relocation of industries operations and process prohibition of the location of atomic power plants in seismic areas prohibition of industries in densely populated areas or in proximity with environmentally-sensitive areas details of objections and public hearing the need for buffer zones appointment of environmentally conscious directors and public participation. The mandate for a nation-wide programme for environmental protection and for collection and
dissemination of information not only gives power to but also casts a duty on the Central Government to frame rules for the purpose. The power to stop or regulate supply of electricity or water or any other service can provide useful shock and preventive therapies without the need for recourse to prosecution. However, the power of closure may counter-potential of economic blackmail by an intransigent industry operation or process. Rules could also lay down the parameters of directing power.

THE METHODOLOGY OF EPA:

The rule-making powers envisaged under the EPA are quite exhaustive and they reach wide and varied dimensions. The Central Government may make rules in respect all or any of the matters referred to in Sec. 3. This may include specific matters such as maximum allowable limits of concentration of various environmental pollutants, safeguards for prohibitions and restriction on the handling of hazardous substances, prohibition or restriction on location of industries and safeguards for the prevention of accidents. Standards for discharge or emission of environmental pollutants and procedures and safeguards for handling hazardous substances are to be prescribed by Rules. Where the discharge of any environmental pollutant in excess of prescribed standards occurs or is apprehended to occur, then one should intimate the fact of such occurrence to such authorities or agencies as may be prescribed by the rules.
The testing taking samples of air, water, soil and other substances the establishment and recognition of environmental laboratories and their functions and the appointment and recognition of Government analysts are all governed by rules framed by the Central Government. Rules have also to prescribe the authority or officer to whom any reports, Returns, statistics, accounts and other information shall be furnished. The general rule-making power is conferred on the Central Government for carrying out the provision of the EPA.

1. The Environment Rules 1986: The Environment (Protection) Rules 1986 came into force on 19 November 1986. The rules seek to carry out the provisions of the EPA and to meet various specific problems in relation to the protection and improvement of the environment. (Section 25 EPA).

The rules specify the standards for emission or discharge of environmental pollutants from industries operations or processes (Rule 3). However, the central board or state board can stipulate more specific standards for any specific industry operation or process. When the Central Government is of the opinion that in view of the likelihood of a grave injury to the environment, it is not expedient to provide an opportunity to file objections against a proposed direction, it may issue directions without giving such an opportunity in writing with reasons. (Rule 4). This provision takes into account emergency situations when quick action is needed. The Rules laid down the factors which the Central Government should consider while it prohibits or
restricts the location of any industry or carrying on of processes and operations in different areas. The topographic and climatic features of the area the biological diversity, which needs to be preserved environmentally compatible land use and proximity to human settlement are some of the significant factors to be considered (Rule 5). A notice with full details of the proposed prohibition or restriction could be published and objections filed within sixty days.

The safeguards provided for taking samples and sending them for analysis are in recognition of the right to a fair process of law. The rules also lay down the functions of environmental laboratories, qualifications of government analysts and the manner of giving notices. The rules specify the authorities to whom the protection of environment process has to be given - the officer in charge of the disaster relief operation in a district the central board or a state board or its authorized regional officer or any authorities or agencies specified in the schedule to the rules.

2. Environmental Audit: Although a separate and independent concept, the environmental audit finds its way into the Environment Protection Rules. This was added by the amendment notification in 1992 a plethora of industrial ventures at the take off stage of development, environmental auditing recognizes self-regulation among the industry with a view to tailoring environmental safeguards into industrial activities.
The rules made the submission of an environmental audit report compulsory. Though originally stipulated to be filed on or before 15th May of every year the audit report is to be filed on or before September every year to the state pollution control board. Every Person carrying on an industry operation or process requiring consent under the Water or Air Act or authorization under the Hazardous Waste (Management and Handling) Rules 1989 has to submit this report for the financial year to the board. Greater industry compliance with environmental laws, disclosure of data on waste generation, adoption of clean technology for pollution prevention, waste minimization, recycling and utilization, arrangements for off-side disposal and revealing of data on consumption of water and raw materials etc. are the remarkable gains of audit.

3. **Hazardous substances and industries:** A hazardous substance is defined not only as a substance but also as a preparation which by reason of its chemical or physio-chemical properties or handling is liable to cause harm to the human beings other living creatures, plants micro-organisms, property or the environment (Section 2(e) EPA). Specific provision is made in the Environment Protection Rules for handling hazardous substances. Before permitting the handling of hazardous substances in an area the Central Government has to take into consideration the hazardous nature of the substance and its potential to damage the environment human beings, other living creatures, plants and property (Rule 13). That the government has to
apply its mind to the availability of a substitute or of the state of technology for developing a safe substitute and the gestation period necessary for gradual introduction of a new substitute is a very significant provision in the rules. This guarantees consideration of all relevant matters before taking decisions on prohibition and restriction on the handling of hazardous substances. The rules also provide the procedural safeguards of effective and meaningful notice and consideration of objections to the proposal.

6.2.5. Noise

Ecologically speaking, when unwanted sound is released into the atmosphere it is called as “Noise Pollution”\(^ {35}\). It is one of the serious threats to the quality of our environment. This is a very grave and sobering problem but unfortunately there is no or very little awareness in this regard particularly in our country.

Noise is not only nuisance but it is a health hazard, in addition to factories. Automobiles, trains and aeroplanes religious and social ceremonies are also noise nuisance.

The work titled “The Law Lexicon” defines term ‘noise’ stating that Loud, confused or senseless sound. A municipal ordinance imposing a penalty for making any noise will be construed to mean such unreasonable noise as is of a nature disturbing to the community.

\(^ {35}\) Environmental Law by Dr.I.A.Khan.
Dr. A. Laxmaiah stated that Noise simpliciter means any unwanted sound. Sound is a type of energy that is propagated as a series of pressure waves in air or other elastic medium. Much of the waste energy is dissipated in the form of heat but a small problem of it takes very little energy to produce a loud noise. A mechanical disturbance in gases, fluids, or solids is sound. Noise may scientifically be defined as a sound without agreeable musical quality, or as unwanted or undesired sound.

The Calcutta High Court in Burrabazar Fire Works Dealers Association Vs commissioner of Police\textsuperscript{36} has defined noise in a broad manner when it held: Sound may be defined as pressure variation that human ear can detect.

The Honourable Supreme Court of India made certain directions for the prevention of Air and Noise pollution in mining operations in MC Mehta Vs Union Of India\textsuperscript{37} the court held- The two expert opinions-by the Board and by the NEERI leave the doubt in our mind that the mining activity in the vicinity of the resorts are bound to cause severe impact on local ecology. We are of the view therefore, that in order to preserve environment and control pollution with in the vicinity of the two tourist resort it is necessary to stop mining activity within two kms radius of the tourist resorts of Badkal Lake and Surajkund. 200 meters green belts be developed at 1 km radius all around the boundaries of two lakes. Further, it was directed that no further construction of any type shall be permitted now onwards within 5 kms, radius of the Badkal lake and Surajkund. All open areas shall be converted into green belts.

\textsuperscript{36} AIR 1971CAL 121
\textsuperscript{37} AIR 1996SC 1977
6.2.6 Hazardous Wastes

The Central Government has made the Hazardous Wastes (Management and Handling) Rules 1989 in exercise of the power conferred upon it by Section 6 of the EPA. Those rules relate to the regulation on collection, treatment, transport, storage and disposal of hazardous wastes specified in the Schedule to the rules. The occupier or operator of a facility for disposal of wastes can manage and handle the wastes only on authorization from the state pollution control board. The State Government makes an environmental impact assessment while it identifies a place as a waste disposal site (Rule 8(2)). Import of these wastes to the country, though prohibited for dumping and disposal is allowed with the permission of the Central Government for processing or reused as raw material (Rule11).

The rules for the Manufacture, Use, Import, Export and Storage of Hazardous Macro-organisms/Genetically Engineered Organisms of Cells 1989 framed with a view to protecting the environment nature and health in connection with the application of gene technology and micro-organism. The Genetic Engineering Approval committee is the important body whose approval is essential to import, export, transport, manufacture, process, use or sale of any hazardous micro-organisms or genetically engineered organisms/substances or cells.
The Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, aims at regulating industrial activity involving hazardous chemicals isolated storage of such chemicals and import of hazardous chemicals. The method of control over the site where industrial activity is or is about to be carried out is by way of requiring periodical up-to-date safety reports from the occupier on-site emergency plans by the occupier and off-site plans by the occupier and off-site plans by the authority. Major accidents are to be notified to the concerned authorities who are required to make a full analysis of the accidents. Industrial activity can commence only three months after it is reported to the concerned authority. Control on import of hazardous chemicals is maintained by imposing conditions of disclosing the details of chemicals and of taking suitable steps for safe handling while they are off-loaded (Rule 18).

4. Ecomark: The EPA empowers the Central Government to take all such measures for the protection and improvement of the quality of environment which include measures of ‘planning and execution of nation wide programme for the prevention and control of pollution and ‘laying down standards for the quality of environment in its various aspects’. In line with these provisions the Ministry of Environment and Forest (MOEF) decided to institute a scheme on labeling environment friendly products (Rule 3). Household and other consumer products can be accredited and labelled as satisfying environmental criteria in addition to quality requirements laid down by the Bureau of Indian
Standards for the product. The label is known as ECOMARK. The logo has subsequently been notified.

The scheme was meant to provide incentive to the manufacturers. to assist consumers to become environmentally responsible and to improve the quality of environment leading to sustainable management of resources. The scheme is to operate through three committees—a steering committee to determine the product categories, a technical committee to identify the specific product on individual criteria and the Bureau of Indian Standards to assess and certify the product. After hearing objections the Central Government will fix and notify the criteria for the product. In certain categories such as toilet soaps and detergents, paints, paper and laundry soaps, the MOEF has already finalized and notified the criteria. In general they include possibility for recycling, bio-degradability, saving of non-renewable energy and natural resources and reduction of adverse environmental impact. The manufacturers will apply to the Bureau of Indian Standards for testing and certification of products. The scheme has to gain momentum having fixed the criteria the initiative has now to come from manufacturers.

DELEGATION OF POWERS

An authority appointed by the Central Government is empowered take up such measures exercise such powers and perform such functions as are necessary for protecting or improving the quality of the environment and even to issue directions for closure, prohibition or regulation of an industry (EPA
Section 3, 4 and 5). The right of entry and inspection is given to any person empowered by the Central Government (Rule 10 EPA). Thus the general power of delegation is of a very extensive nature. Except in case of appointment of authorities and making rules for carrying out the purposes of the Act, the Central Government can delegate any of its powers as it deems necessary or expedient to any officer. State Government or other authority (Section 23). The authorities appointed under the EPA have to act subject to the control of the Central Government. They can act only for the protection and improvement of the environment. This policy of the EPA is emphasized in all provisions of the law. There is an as if empowered by the Act clause that guides the powers and functions of the authorities.

Besides constituting the authorities, the Central Government can appoint officers and entrust them with such of the powers and functions under the EPA as it deems fit (Section 4). It is not possible for an officer to go astray and usurp the rule-making powers because they are subject to the general control and direction of the Central Government. The authorities constituted under the EPA any other authority or officer can exercise control over these officers if it is so directed by the Central Government, this power of the Central Government to delegate any of its powers and functions to any officer. State Government or other authority is so wide and excessive that questions have been raised as to its constitutional validity.
However, the power that can be delegated does not include the power to constitute an authority. Only the Central Government can constitute authorities. A delegate cannot do so. But the power to appoint an officer and to entrust him with certain responsibility stands on a different plane (Sec. 4). This power can be delegated under the general power of delegation to a subordinate authority-State Government any officer or any other authority. One may rightly say that the Central Government can delegate its powers and functions to any authority or officer who was constituted or appointed either prior to the date of enforcement of the EPA or constituted otherwise than under the EPA.

The power to issue directions is unique and is of a revolutionary character. There are several notifications delegating this power to different State Governments. Surprisingly, every such notification specifically mentions that the central Government retains the power to revoke the delegation whenever it is of opinion that such a course is necessary in the public interest. Even in the absence of such a provision the Central Government is not prevented from revoking delegation and taking back the directing power.

The entry and inspection clause can be invoked by persons authorized by the Central Government. Many officers under the Central Government add under the State Governments were empowered to enter and inspect any place for the purposes of performing any function of the Central Government, overseeing whether or not the law is complied with or examining and seizing equipments or materials not only as evidence for prosecution but also for the
prevention or mitigation of environmental pollution. Inspectors of factories, conservators of ports, officers authorized by the pollution control board, food inspectors and drug inspectors are some among those so empowered. All those to whom the power of entry and inspection has been delegated have the power to take samples of air, water, soil or other substance from any factory. Laboratories existing in different parts of the country were recognized as environmental laboratories and notified along with the names of recognized analysts.

To take cognizance of any offence under the EPA, the Central government by notification has authorized certain authorities and officers such as the Director, Joint Secretary and Advisor to Government of India in the Department of Environment, Chairman or Member Secretary of the Central and State Pollution Control Boards and the district collectors. The rules regulations and schemes framed by the Central Government delegate responsibilities and functions specified not only under the EPA but also under the rules, regulations and schemes. The authorities so delegated include State Governments, agencies, committees and officers appointed designated or recognized by the Central Government and State Governments.

Some of the important environmental laws passed in the different countries of world are as follows:

1. **Australia:** Some of the environmental laws passed in Australia are Environment Protection Act 1970, Ozone Protection Act 1989, Water Act,

2. America

1. National Environment Policy Act (NEPA) of 1969. NEPA is the world's first environmental impact statute and was enacted January 1, 1970.

2. Clean Air Act: The clean air Act (CAA) was enacted December 31, 1970

3. Clean Air act of 1990: The amendments were designed to curb three major threats to the environment and human health viz., acid rain, urban air pollution, and toxic air emissions.

4. Federal Water Pollution Control Act (Clean Water act)

5. Safe Drinking Water Act (SDWA), Public Law. The SDWA passed in 1974 and was aimed at improving drinking water quality.


9. Superfund Amendments and Reauthorization Act (SARA) And Emergency Planning And Community Right to Know Act title III.


11. Endangered species Act

12. Energy policy Act

13. Marin Protection, Research, and Sanctuaries Act (MPRSA, also known as the Ocean Dumping Act)


15. Nuclear Waste Policy Act (NWPA)

16. Oil Pollution Act (OPA)

17. Occupational Safety and Health (OSHA)

18. Pollution Prevention Act (PPA)
PENAL LAWS APPLICABLE TO ENVIRONMENTAL VIOLATIONS IN INDIA

There exists general penal law in the country which can be invoked in order to punish environmental violations although the punishments prescribed have no relation to the injustice done. The Penal Law applicable to environmental violations under the following heads:

- Indian Penal Code, 1860 (45 of 1860)
- The Police Act, 1861 (5 of 1861).

INDIAN PENAL CODE, 1860 (45 OF 1860)

The Indian Penal Code 1860 was enacted because it was expedient to provide a general penal law for India. It includes Chapter 14 consisting of 28 Sections (268 to 294 A) dealing with public nuisance. The sole object of including chapter 14 in the code was to safeguard the public health, safety and convenience by causing those acts which make environmental polluted and threatened the life of people, punishable. The polluter of the environment can be punished, under the Code for certain types of pollutions. These types of pollution may be broadly classified under the following heads:

1. Water Pollution: According to Section 277 of IPC whoever voluntarily corrupts or fouls the water of any public spring or reservoir so as to render it less fit the purpose for which it is ordinarily used shall be liable to punishment.” The words corrupt or foul means some act which physically
defiles or fouls the water. It is to be noted that the offence under this section only related to voluntarily fouling of a water of a public spring or reservoir. Therefore, this section does not apply to a public river or to a continuous stream.

For invoking the provisions of section 277 of the Code the party has to satisfy the court on the following points: that the water in question was of a public spring or reservoir:

- That the accused corrupted or fouled such water voluntarily and
- That his action rendered the water less fit for the purpose for which it was ordinarily used.

The offence under section 277 of the Code is cognizable boilable and not-compoundable. It may be tried by a Magistrate. The punishment is an imprisonment for a term which may extend to 3 months or with a fine which may extend to 500 rupees or with both.

2. Air Pollution: According to Section 278 of IPC whoever voluntarily vitiates the atmosphere in any place so as to make to noxious to the health of persons in general dwelling or carrying on business in the neighborhood or passing along a public way shall be guilty of the offence of public nuisance. For the applicability of this section the aggrieved party has to prove that

- The accused vitiates the atmosphere:
- He did so voluntarily and
• He made the atmosphere noxious to the health of persons residing and carrying on business in the neighborhood or of those passing through the highway.

Therefore, this section deals with contamination of the atmosphere rendering it injurious to public health. Normally, this section applies to trades producing noxious and offensive smell. The offence under this section is non-cognizable and bailable but is non-compoundable. It may be tried by a Magistrate. Whoever voluntarily vitiates the atmosphere shall be punished with fine which may extend to 500 rupees.39

3. General Pollution: If a person does any act or omits to do an act which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity or which must cause injury, obstruction, danger or annoyance to persons who may have occasion to use an public right then such act or omission comes within the purview of public nuisance. It will be proper to discuss the concept of general pollution under the following heads.

Public Nuisance: Section 268 of IPC tells that Public nuisance may be committed either by doing a thing which tends to the annoyance of the whole community in general or by neglecting to do anything which the common good requires. It is an act affecting the public at large or some considerable portion of them. This act must interfere with rights which members of the community might otherwise enjoy.

39 Sec. 268 IPC
Public nuisance requires the following essentials:

Doing of any act or illegal omission to do an act.

The act or omission must cause any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity or must necessarily cause injury, obstruction, danger or annoyance to persons who may have occasion to use any public right.

Punishment for Public Nuisance: It is provided in Section 290. IPC 1860 that any person who commits a public nuisance in any case not otherwise punishable by the code shall be punished with fine which may extend to rupees 200. For the purpose of application of this section the prosecution or the complainant has to substantiate that –

- The accused did an illegal act or was guilty of an illegal omission: and
- Such act or omission caused annoyance or injury or danger to - (a) general public or (b) to the people occupying property in the neighborhood or (c) to persons who may have occasion to exercise any public right.

The offence under Section 290, IPC 1860 is non-cognizable one. It is bailable non-compoundable and is triable by any Magistrate.

Continuance of nuisance after injunction to discontinue: According to Section 291, IPC 1860, if a Magistrate has forbidden an act causing nuisance
or where a civil court has issued an injunction against a person restraining him to commit public nuisance, then the person violating the order shall be punished with simple imprisonment for a term which may extend to six months or with fine or with both. For the applicability of Section 291, prosecution has to satisfy the court as to the existence of the following facts:

- That the accused committed a particular public nuisance:
- That he was personally restrained by injunction not to repeat or continue such public nuisance:
- That such an injunction was issued by the public servant having lawful authority: and
- That after the issue of such an injunction the accused repeated or continued the offence.

The offence under section 291 is cognizable, bailable and non-compoundable. It may be tried by any Magistrate. For the application of section 291, injunction must be issued against a person individually. A general proclamation issued under Section 144. Code of Criminal Procedure will not attract this provision.

**Virus Pollution**

Negligent act likely to spread infection of disease dangerous to life: According to Section 269, IPC 1860. Diseases communicated through environment or atmosphere without actual contact are infectious disease as opposed to contagious diseases communicable by contact or touch. This
section deals with infectious diseases, such as small pox. Plague, cholera. etc. There is a legal obligation on the sick person suffering from infectious disease not to do anything which shall tend to spread the infection. The gist of unlawful acts is that there must be danger of the infection spreading and if care is not taken to avoid such an infection the act can be said to be unlawful or negligent. For invoking the provisions of section 269, IPC 1860, the prosecution has to prove the following facts:

- That the disease in question was infectious and dangerous to life:
- That the accused did an act which was likely to facilitate spreading of that disease:
- That the accused did that act negligently or unlawfully. and
- That he knew or had reason to believe that his act was likely to spread the disease.

A perusal of Section 269, IPC 1860 would show that whoever unlawfully or negligently spreads the infection of any disease shall be punishable with imprisonment for a term which may extend to 6 months or with fine or with both. The offence under Section 269 is cognizable, bailable but non-compoundable. It is triable by any Magistrate.

**Malignant act likely to spread infection of disease dangerous to life:**

According to Section 270 of IPC, if any person malignant or maliciously spreads infection of disease which is dangerous to life then such person shall be punished with imprisonment for a term which may extend to 2-
years or with fine or with both. For application of this section the prosecution has to prove the following facts:

- That the accused did some act malignantly:
- That his act was likely to spread the disease:
- That the said disease was both infection and dangerous to life: and
- That the accused then knew or had reason to believe that his act was likely to spread the infection.

The offence under this section is cognizable, bailable and non-compoundable. It is triable by any Magistrate.

**Disobedience to quarantine rule:** Section 271, IPC 1860, prescribes punishment for breach of quarantine rule. It provides that whoever knowingly disobeys any such rule made and promulgated by the Government shall be punishable with imprisonment which may extend to 6-months or with fine or with both. Here for the purpose of attracting the provisions of Section 271 the prosecution has to prove the following facts:

- That the quarantine rule (relating to the prohibition imposed on persons infected with diseases) was in existence:
- That the said rule was duly made and promulgated by the government:
- That the accused had knowledge about that rule: and
- That he knowingly disobeyed the rule.

The offence under this section is non-cognizable, bailable, non-compoundable and is triable by a Magistrate.
Adulteration of Food, Drink and Drugs

Adulteration of food or drink intended for sale: The mixing of noxious ingredients in food or drink or otherwise rendering any food or drink unwholesome is known as adulteration of food or drink. According to Section 272 of IPC, whoever adulterates any article of food or drink so as to make such article noxious as food or drink and intending to sell such article shall be punished with imprisonment for a term which may extend to six months or with fine which may extend to one thousand rupees or with both. For invoking the provisions of this section the prosecution must prove:

- That the article of food or drink was adulterated:
- That by such adulteration it became noxious: and
- That the accused at the time he adulterated intended to sell it as an article of food or drink or knew that it was likely to be sold as an article of food or drink.

The offence under this section is non-cognizable and bailable but not compoundable. It is triable by any Magistrate. Here it is essential to prove that an article of food or drink has been adulterated with the intention to sell the same as an article of food or drink. For instance an act of a person who mixes pig’s fat with ghee, intending to sell the mixture as food which is unwholesome for human shall come within the ambit of this section.
Sale of noxious food or drink: According to Section 273 of IPC, whoever sells or offers or exposes for sale any noxious article of food or drink with a knowledge or reasonable belief that the article is noxious shall be punished with imprisonment which may extend to 6-months or with fine which may extend to Rs. 1000 or with both. Section 272 punishes adulteration of food or drink while this section penalizes the sale of adulterated articles e.g. selling paddy in which germs are germinated etc. For the application of this section the prosecution has to prove the following facts:

- That the accused sold or offered or exposed for sale an article of food or drink:
- That the said article had been rendered or had become noxious as an article of food or drink: and
- That the accused, at the time of the sale, knew or had reason to believe that the same was noxious.

The offence under this section is non-cognizable and bailable but not compoundable. Any Magistrate may try this offence.

Adulteration of Drugs: According to Section 274 of IPC, whoever adulterates any drug or medical preparation in such a manner which lessens its efficacy or changes the operation of the drug or medical preparation or makes it noxious and then he intends or knows that it was likely to be sold or used then such person shall be punished with imprisonment for a term which may
extended to 6-months or with fine which max’ extend upto Rs. 1000 or with both. In order to bring its case within the purview of this offence, the prosecution has to establish:

- That the article in question is a drug or a medical preparation:
- That the accused adulterated it:
- That he then intended or knew that it was likely to be sold or used for any medical purpose:
- Be so used as if it is not adulterated:
- That the adulteration resulted in –
- Lessening the efficacy of that drug of medical preparation: or
- Changing the operation of that drug or medical preparation: or
- Making that drug or medical preparation noxious.

The offence under this section is non-cognizable bailable and non-compoundable. It can be tried by any Magistrate.

Sale of adulterated drugs: According to Section 275 of IPC whoever sells or offers or exposes an adulterated drug for sale shall be punished with imprisonment for a term which may extend to 6-months or with fine which may extend to one thousand rupees or with both. The object of the section is to prevent the issue and sale of adulterated or noxious drugs and to protect the public. Here the word whoever includes master, servant and a person to whom the sale is delegated. A canvasser is not a seller. For the application of this section the prosecution has to prove the following facts:
• That the article in question was a drug or a medical preparation:

• That was adulterated in such a manner as to lessen its efficacy or to change its operation or to render it noxious:

• That the accused sold or offered or exposed for sale or issued from any dispensary such drug or medical preparation:

• That such drugs or medical preparation was sold or offered or exposed for sale as a non-adulterated drug or medical preparation: and

• That the accused knew that the drug or medical preparation was adulterated.

The offence under this section is non-cognizable. Bailable, non-compoundable and is triable by any Magistrate.

**Negligent Handling of Poisons, Combustible and Explosives**

Negligent conduct with respect to poisonous substance: According to Section 284 of IPC, whoever does with a poisonous substance any act in a manner so rash and negligent as to endanger human life or to be likely to cause hurt or injury to any person is guilty of the offence of public nuisance. Similarly, if a person knowingly or negligently omits to take such order with any poisonous substance in his possession as is sufficient to guard against any possible danger to human life from such poisonous substance shall also be liable to punishment. Here guilty person shall be punished with imprisonment which may extend to 6-months or with a fine, which may extend to Rs. 1000
or with both. For the purpose of proving this offence the prosecution has to establish the following facts:

- That the substance in question was poisonous:
- That the accused did an act with it rashly or negligently resulting in danger to human life or hurt or injury to an other person:
- That the accused who was in possession of the poisonous substance, knowingly or negligently omitted to take such order with it as to guard against danger to human life:
- That it was likely to result in danger to human life or to hurt or injury to any person: and
- That his omission was tainted with negligence or that it was with knowledge of the probable danger resulting from his omission.

The offence under this section is cognizable. It is bailable and non-compoundable. Any Magistrate can try this offence.

Negligent conduct with respect to fire or combustible matter: According to Section 285 of IPC, whoever does with fire or any combustible matter any act so rashly or negligently as to endanger human life or to be likely to cause hurt or injury to any other persons guilty of public nuisance. Similarly, if a person knowingly or negligently omits to take such order with any fire or any combustible matter in his possession as is sufficient to guard against any probable danger to human life from such fire or combustible mater shall also
be liable for punishment. The guilty person shall be punishable with imprisonment which may extend to 6-months or with fine which max’ extend to Rs. 1000 or with both. In order to establish this offence the prosecution has to substantiate the following facts:

- That the accused did an act with fire or other combustible matter:
- That the said act was done rashly and negligently so as to endanger human life or that the act was likely to cause hurt or injury to any other person:
- That the accused being in possession of such fire or combustible matter knowingly and negligently omitted to take such order as was sufficient to guard against the probable danger to human life from any such fire or combustible material.

The offence under this section is triable by any Magistrate. It is cognizable, non-compoundable and bailable.

Negligent conduct with respect to explosive substance: According to Section 286 of IPC whoever does with an explosive substance any act so rashly or negligently as to endanger human life or to be likely to cause hurt or injury to any other person is guilty of public nuisance. Similarly, if a person knowingly or negligently omits to take such order with any explosive substance in his possession as is sufficient to guard against any probable danger to human life from that substance shall also be liable to punishment.
Here guilty person shall be punished with imprisonment which may extend to 6-months or with fine which may extend to one thousand rupees or with both.

For attracting the provisions of this section the prosecution has to establish the following facts:

- That the accused did an act with the explosive substance:
- That the said act was rashly or negligently done in such a way as to endanger human life or that it was likely to cause hurt or injury to any other person: and
- That the accused being in possession of such explosive substance knowingly and negligently omitted to take such order as is sufficient to guard against any probable danger to human life from such explosive substance.

The offence under this section is cognizable, bailable, and non-compoundable and is triable by any Magistrate in a summary manner.

Act Endangering Human Life or Personal Safety of others: According to Sections 336.337 and 338 of IPC deal with cases where death or bodily hurt or injury is caused (as happened in Bhopal accident) by pollution involving criminal negligence. Doing of a rash and negligent act endangering human life or the personal safety of others is in itself an offence. When such an act results in hurt whether simple or grievous, the offender becomes liable for
punishment. Where such rash and negligent act results in death, the offender becomes liable to punishment as provided in section 304A of the IPC.

The offence under this section is cognizable bailable and non-compoundable. It can be tried by any Magistrate.

**Mischief**

Loss of property caused by pollution may be dealt with as an offence of mischief and is punishable under the IPC 1860. The ecosystem around the human being is maintained by the apparently looking useless animals and birds. The birds and animals through their excreta enrich the fertility of land on which the human being thrives upon. The avian particularly clear the environmental pollution and clean the dust of leaves. The photosynthesis processes of leaves improve by the clearing of dust. The plants produce more oxygen to enrich the environment. Therefore, commission of killing of various animals and birds disturbs our ecosystem. Hence, it is made specifically punishable under the IPC 1860.

According to Section 425 of IPC whoever with intent to cause or knowing that he is likely to cause, wrongful loss or damage to the public or to any person is guilty of mischief Similarly if any person causes the destruction of any property or makes any such change in any property or in the situation thereof so as to destroys or diminish its value or utility or affect it injuriously
commits the offence of mischief. There are three essential ingredients of the offence of mischief:

- Intention or knowledge of likelihood of wrongful loss or damage to any person or the public:
- Causing destruction of some property or some change in such property or in the situation thereof: and
- Such change must destroy or diminish value or utility of the impugned property.

**Punishment for mischief:** According to section 426 IPC, whoever commits mischief shall be punished with imprisonment of a term which may be extend to three months or with tine with both. The offence under this section is non-cognizable, bailable and compoundable with the permission of the court. It is triable by any Magistrate.

**Mischief by causing inundation or obstructing to public drainage attended with damage:** According to Section 432 of IPC, whoever commits mischief by doing any act which causes or is likely to cause an inundation or an obstruction to any public drainage attended with injury or damage shall be punished with imprisonment which may extend to 5 years or with fine or with both. Inundation or obstruction to public drainage is bound to cause pollution. For application of this section the prosecution has to satisfy the court as to the existence of the following facts:
• That the accused committed an act falling within the definition of mischief: that the said mischief was the result of an act amounting to inundation or obstruction to any drainage:

• That the drainage was a public one:

• That such inundation or obstruction was likely to be attended with injury or damage: and

• That the accused knew that his act caused or was likely to result in an inundation or obstruction.

The offence under this section is cognizable, bailable and non-compoundable. It is triable by a Magistrate of the first class.

THE CODE OF CRIMINAL PROCEDURE, 1973 (II OF 1974)

The Criminal Procedure Code 1973 has prescribed the procedure for the abatement of public nuisance. Almost all types of pollution resulting from nuisance can be controlled or removed by the District Magistrate and Sub- Divisional Magistrate by exercising powers under sections 133, 143 and 144 of CrPC 1974. Under section 133 a conditional injunction may be issued against a particular person. Under section 143 an absolute order may be passed against the general public. In urgent cases of nuisance or apprehended danger, orders passed under section 144 of the Code of Criminal Procedure may be fully effective.
1. **Conditional Order for Removal of Nuisance**: Chapter X: Part B and Part C of the Code of Criminal Procedure. 1973 provides most effective speedy and summary procedural remedy for preventing and controlling public nuisance polluting air, water and noise. Under section 133 of the Code of Criminal Procedure, the District Magistrate or the Sub-Divisional Magistrate or the Executive Magistrate if he is so empowered by the State Government on receipt of a report from the police officer concerned or other information may make conditional order. Such duly made orders cannot be questioned by civil courts unless made without jurisdiction.

2. The order made under section 133, Code of Criminal Procedure 1973 can be served as if it were a summons. On the service being effected the person concerned may carry out the order in which case the proceedings will come to an end. If he does not he has to show cause against the order or apply to the Magistrate to try whether the order is reasonable and proper. The conditional order may be made absolute under section 36 or section 138 of the Code. If so then the concerned person may be called upon to carry it out within a specified time. If he fails to do so he can be prosecuted under section 188 of IPC. Here if the person does not comply with the order and fails to appear before the Magistrate or the cause shown against public nuisance is not found satisfactory by the Magistrate the order issued under section 133 of the Code is made absolute. If the person disputes the existence of any public right in any
way, river, channel or place. The Magistrate will hold a preliminary inquiry and if he finds substance in the contention, the question will be left to be determined by a civil court. The Magistrate may when the person against whom an order is made under section 133 CrPC. appears before him or contests the existence of any public right before him direct a local investigation or summon and examine any expert. It is also open for the Magistrate to carry out the order and recover costs from the defaulter\(^{40}\). In the case of imminent danger or injury of a serious kind to the public, the Magistrate may forthwith issue an injunction to the person\(^{41}\). The Magistrate has also the power to order any person not to repeat or continue a public nuisance\(^{42}\). The aggrieved party should move the civil court where obstruction or nuisance has been in existence for a long time. An order under section 133 CrPC can be issued by the Magistrate in the following six kinds of nuisance viz.

- The unlawful obstruction or nuisance to - (a) any water, river or channel which is or may be lawfully used by the public and (b) any public place.
- The conduct of and trade or occupation or the keeping of any goods or merchandise which is injurious to the health or physical comfort of the community.
- The construction of any building or the disposal of any substance as is likely to occasion conflagration or explosion.

\(^{40}\) Sec.141(2) Ibid
\(^{41}\) Sec.142 Ibid
\(^{42}\) Sec.143 Ibid
• Any building tent or structure being in such condition that it is likely to fall and thereby cause injury to persons living or carrying on business in the neighborhood or passing by.

• Any tank well or excavation adjacent to any public way or public place remaining unfenced.

• Any dangerous animal requiring destruction confinement or disposal.

THE POLICE ACT, 1861 (5 OF 1861)

The Police Act makes provisions for the prevention and control of public nuisance including the noise pollution, visual pollution and other pollution etc.

1. Prevention and Control of Noise: Section 30 of this act provides for the regulation of music in streets. Under this section the Superintendent or the Assistant Superintendent of Police may regulate the extent to which music may be played in the streets on the occasion of festivals and ceremonies. According to Section 32 any person opposing or not obeying the orders issued under Section 30 or violating the conditions of any license granted by the Superintendent or Assistant Superintendent.

Cruelty to Animals: Any person who cruelly beats, abuses, or tortures an animal.
Obstructing Passengers: Any person who keeps cattle or conveyance of any kind standing longer than is required for loading or unloading or for taking up or setting down passengers or who leaves any conveyance in such a manner as to cause inconvenience or danger to the public.

Exposing Goods for Sale: Any person who exposes any goods for sale.

Throwing Dirt into Street: Any person who throws or lays down any dirt filth rubbish or an stones or building materials or who constructs any cow-shed, stable or the link or who causes any offensive matter to run from any house, factory, dung-heap or the like.

Being Found Drunk or Riotous: Any person who is found drunk or riotous or who is incapable of taking care of him.

Indecent Exposure of Person: Any person who willfully and indecently exposes his person or any offensive deformity or disease or commits nuisance by erring himself or by bathing or washing in any tank or reservoir not being a place set apart for that purpose.

SPECIAL LAW APPLICABLE TO ENVIRONMENTAL VIOLATIONS
1. The Code of Civil Procedure: The Code of Civil Procedure is enacted to consolidate and amend laws relating to procedure of courts of the civil judicature. Generally, the Code of Civil Procedure contains procedural law but it also contains some specific provisions in the nature of substantive law. Resources like land. Air, water and vegetation are the property of the public or
state. The State or members of public in their representative capacity may approach a civil court under this code to seek relief against a polluter of these resources. The court may grant temporary or permanent injunction against the polluters.

Section 9 of CPC empowers the civil court to try all suits of civil nature unless barred whether specifically or by implication. The courts shall have jurisdiction to try all suits of a civil nature excepting suits of which their cognizance is either expressly or impliedly barred. A suit in which the right to property or to an office is contested is a suit of civil nature, notwithstanding the fact that such right may depend entirely on the decision of questions as to religious rites or ceremonies. For the purpose of this section, it is immaterial whether or not any fees are attached to the office referred to in Explanation I or whether or not such office is attached to a particular place. The court may grant temporary injunction against a polluter.

THE SPECIFIC RELIEF ACT, 1963 (ACT XVII OF 1963)

The Specific Relief Act 1963 is enacted to define the law relating to certain kinds of specific relief. Specific relief can be granted only for the purpose of enforcing individual civil right and not for the mere purpose of enforcing a penal law. In the Specific Relief Act 1963 the word Obligation’ includes every duty enforceable by law\textsuperscript{43}.

\textsuperscript{43} Sec. 2(a) The Specific Relief Act.
Every person has a fundamental right to enjoy his life and personal liberty. Say for example a person can drink pure water, breath fresh air and enjoy the beautiful landscape of nature. These are his natural rights which are important than the rights to his personal property. These rights may be called as individual civil rights because they are related to every person. He can seek specific relief to pray for declaratory decrees under the provisions of the Specific Relief Act to ensure the protection of his natural or fundamental right mentioned above.

There are some relevant provisions of the Specific Relief Act, 1963 by which environmental pollution can be controlled and prevented:

Discretion of Court as to Declaration of Status or Right: According to Section 34 any person entitled to any legal character, or to any right as to any property may institute a suit against any person denying or interested to deny his title to such character or right and court may in its discretion make therein a declaration that he is so entitled and the plaintiff need not in such suit ask for any further relief: Provided that no court shall make any such declaration where the plaintiff being able to seek further relief than a mere declaration of title omits to do so.

Effect of Declaration: According to Section 35, a declaration made under section 34 is binding only on the parties to the suit persons claiming through them respectively, and where any of the parties are trustees on the
persons for whom if in existence at the date of the declaration such parties would be trustees. Therefore every person can seek specific relief to pray for declaratory decrees under the provisions of the Specific Relief Act to ensure the protection of his natural or fundamental right.

**THE INSECTICIDE ACT, 1968 (ACT NO. 46 OF 1968)**

The Insecticide Act 1968 has been enacted in order to regulate the import, Manufacture, sale transport, distribution and use of insecticides with a view to prevent risk to human beings or animals and for matter connected therewith. There are mans’ hazards from the use of insecticides which can be regulated under different provisions of this Act. There are some relevant provisions of the Insecticide Act by which we can regulate the import, manufacture, sale, transport, distribution and use of insecticides which is injurious to health and public safety.

1. **Prohibition of Sale etc. of Insecticide for the Reasons of Public Safety:** On the receipt of a report under section 26 of the Insecticide Act. I 968 or otherwise the Central Government or the State Government is of opinion for reasons to be recorded in writing, that the use of any insecticide specified in sub-clause (iii) of clause (e) of section 3 or any specific batch thereof is likely to involve such risk to human beings or animals as to render it expedient or necessary to take immediate action then that Government may, by notification in the official Gazette prohibit the sale, distributing or use of the insecticide or batch in such area to such extent and for such period (not exceeding sixty
days) as may be specified in the notification pending investigation into the matter\textsuperscript{44}.

If as a result of its own investigation or on the receipt of the report from the State Government and after consultation with the Registration Committee the Central Government is satisfied that the use of the said insecticide or batch is or is not likely to cause any such risk, it may pass such order (including an order refusing to register the insecticide or canceling the certificate of registration if any granted in respect thereof) as it deems fit depending on the circumstances of the case\textsuperscript{45}.

2. Offences and Punishment: Any person who.

- Imports, manufactures, sells, stocks or exhibits for sale or distributes any insecticide deemed to be misbrand under sub-clause (1) or sub-clause (iii) or sub-clause (viii) of clause (k) of section 3: or
- Imports or manufactures an insecticide without a certificate of registration: or
- Manufactures, sells, stocks or exhibits for sale or distributes an insecticide without a license: or
- Sells or distributes an insecticide, in contravention of section 27: or

\textsuperscript{44} Sec. 27(1). The insecticide Act. 1968
\textsuperscript{45} Sec. 27(2) Ibid
• Causes an insecticide, the use of which has been prohibited under section 27, to be used by any worker: or

• Obstructs an Insecticide Inspector in the exercise of his powers or discharge of his duties under this Act or the rules made there under:

• Shall be punishable.

• For the first offence with imprisonment for a term which may extend to two years or with fine which may extend to two thousand rupees, or with both:

• For the second and subsequent offence with imprisonment for a term which may extend to three years or with fine or with both:

• Any person who uses an insecticide in contravention of any provision of this Act or any rule made hereunder shall be punishable with fine which may extend to five hundred rupees (section 29(20)). Any person who contravenes any of the other provisions of this Act or any rule made hereunder or any conditions of ac certificate of registration or license granted there under shall be punishable:

• For the first offence with imprisonment for a term which may extend to six months, or with fine or with both:

• For the second and a subsequent offence with imprisonment for a term which may extend to one year or with fine or with both (sec. 29(3)).
If any person convicted of an offence under this Act commits a like offence afterwards it shall be lawful for the court before which second or subsequent conviction takes place to cause the offender's name and place of residence the offence and the penalty imposed to be published in such newspapers or in such other manner as the court may direct (sec. 29(4)).

Therefore, with the help of the Insecticide Act 1968 we can regulate the import. Manufacture, sale, transport, distribution and use of insecticides which is injurious to health and public safety.

THE MOTOR VEHICLES ACT, 1939 (NO.4 OF 1939)

The Motor Vehicles Act 1939 contains various provisions relating to licensing of drivers of motor vehicles licensing of conductors of State Garages registration of motor vehicles etc. which also includes the procedure specially noise, air and visual pollutions can be controlled and regulated under this Act.

Section 70 of the MV Act 1939 empower the State Government to make rules concerning the following matters:

- For regulating the construction equipment and maintenance of motor vehicles and trailers.
- For controlling the emission of smoke, visible vapour, sparks, ashes, grit or oil.
- For reduction of noise emitted b or caused by vehicles.
- For prohibiting or restricting the use of audible signals at certain times or in certain places.
In this view of the matter, section 70 of this Act may be taken use of by the State Government for the purpose of making rules for regulating the emission of smoke, visible vapour, sparks, ashes, grit or oil and for the reduction of noise emitted or caused by vehicles, as well as for prohibiting or restricting the use of audible signals at certain times or in certain places.

**THE INCOME TAX ACT, 1961 (43 OF 1961)**

The Income Tax Act 1961 has been promulgated to consolidate and amend the law relating to income tax and super-tax in the twelfth year of the Republic of India. This Act provides that 30% depreciation allowance on the written down value of certain Air and Water Pollution Control equipments can be claimed. These provisions have been incorporated in the Income Tax Rules, 1962 vide Income Tax (Second Amendment) Rules. 983. The’ have come into force with effect from February 23, 1983.

Under the Income Tax Act 1961 a deduction towards depreciation in equipments meant for control of pollution from income from business or profession is allowed at the rates mentioned in the Income Tax Rules 1962.

**THE FACTORIES ACT, 1948**

The Factories Act 1948 was enacted primarily to regulate working conditions of labour in factories. However, section 12 of the Factories Act, 1948 provides for the regulation of disposal of wastes and effluents from the factories. It also authorizes the State Government to make rules for this purpose Section 12 of the Factories Act 1948 is as follows:
Disposal of waste and Effluent:

1. Effective arrangement shall be made in every factory for the treatment of wastes and effluents due to manufacturing process carried on therein so as to render them innocuous and for their disposal.

2. The State Government may make rules prescribing the arrangement to be made under sub-section (1) or requiring that the arrangements made in accordance with sub-section (1) shall be approved by such authority as may be prescribed.

In the statement of objects and reasons for introducing the amendment to the Factories Act in 1987, it was stated that there has been substantial modernization and innovation in the industrial field. Several chemical industries have come up which deal with hazardous and toxic substance. This has brought in its train problems of industrial safety and occupational health hazards. It is therefore considered necessary that the Act may be appropriately amended among other things to provide specifically for the safeguards to be adopted against use and handling of hazardous substance by the occupier of factories and the laying down of emergency standards and measures. The amendments would also include procedure for setting of hazardous industries to ensure that hazardous and polluting industries are not set up in areas where they can cause adverse effects on the general public. Provisions have also been made for the workers participation in safety management.
Chapter IV-A : Provisions relating to hazardous processes
relation to hazardous process.

(a) Section 41-A : Constitution of Site Appraisal Committees.

(b) Section 41-B : Compulsory disclosure of information by the occupier.

(c) Section 41-C : Specific responsibility of the occupier in

(d) Section 41-D : Permissible limits of exposure of chemical and toxic substance.

(e) Section 41-G : Workers participation in safety management.

(f) Section 41-F : Rights of workers to warn about imminent danger

Chapter X of the Factories Act relates to the Penalties and Procedure for offences committed under the Factories Act. Section 92 of the Factories Act makes both the Occupier and the Manager of the factory each liable to be guilty and penalty extends to imprisonment upto 2-years or fine up to Rs. 1 lakh or with both where the contravention continues after the first conviction there will be further penalty of Rs. 1000 per day for each day on which the contravention so continues.

For non-compliance/contravention of the provisions of newly introduced Chapter IV-A relating to hazardous processes the penalty can be imprisonment upto 7 years and with fine which may extend to Rs.2 lakh and where the contravention/failure continues after first conviction additional fine of Rs.5000 per day during which the default/contravention continues.
THE INDUSTRIES (DEVELOPMENT AND REGULATION) ACT, 1951

Under the Industries (Development and Regulation) Act 1951 an industrial license is required to be obtained inter alia:

- For setting up a new industrial undertaking:
- For manufacture of a new article:
- For effecting substantial expansion:
- For effecting change of location:
- For carrying on business at any time after the provisions of the Act become applicable to an industrial undertaking for any reason whatsoever.

The basic procedure for obtaining an industrial license is the submission of Form IL duly filled in along with 17 spare copies to the Secretariat for Industrial Approvals (S.I.A) Department of Industrial Development, Udyog Bhawan, New Delhi-110001. The application form is considered by the appropriate committee to which the S.I.A. functions as the Secretariat, viewed from the consistency with the current industrial licensing policy if the Government is inclined to favorably consider the applicants case, a Letter of Intent is usually issued the conditions of which are required to be complied with before an industrial license is granted. One of the requirements under the Letter of Intent is that the applicant should ensure that steps have been taken to prevent pollution of water or air.
The Government has decided that in respect of certain industries of highly polluting nature it would not only be necessary to install suitable pollution control equipments but also to identify site and location of the project where a particular industrial unit would be set up. In order to give a concrete shape to this policy the Government of India announced, a list of 18 Industries which are highly polluting in nature. This list was revised in 1984. The text of this press release is given below:

Environmental Clearance of Industrial Licenses - Conditions of Letter of Intent Industrial License:

With a view to check and prevent air, water and soil pollution: arising out of industrial projects certain conditions to be fulfilled are already being incorporated in the letters of intent. Subsequently it was decided that in respect of certain industries of a highly polluting nature, it would not only be necessary to install suitable pollution control equipments but also to identify the site and location of the project where a particular industrial unit would be set up. In order to provide concrete shape to this requirement Government had announced vide Press Note No. 9(1984 Series) dated 21st June 1984 of list of 8 industries causing high pollution and it was stated that in respect of these industries, the letter of intent would be converted into an industrial license only after the following conditions were fulfilled:
(1) The State Director of Industries confirms that the site of the project has been approved from the environmental angle by the competent state authority:

- The entrepreneur commits with both (the State Government and Central Government) that he will install the appropriate equipment and implement the prescribed measure for the prevention and control of pollution.
- The concerned State Pollution Control Board has certified that the proposal meets with the environmental requirements and that the equipments installed or proposed to be installed are adequate and appropriate to the requirement.

(2) On further consideration of the matter the list of industries has been slightly revised and the same is indicated below:

Primary metallurgical producing industries viz. zinc, lead, copper, aluminum and steel: Paper. Pulp and Newsprint: Pesticides/Insecticide:


(3) It is therefore; notified for information of all concerned that in respect of the above mentioned 20 industries the conversion of letter of intent on into industrial license will take place only if apart from other prescribed conditions the environmental conditions as set out above have been fully satisfied.
THE CONSUMER PROTECTION ACT, 1986

Every thing under the sun is the consumer including the sun itself.

Under the Consumer Protection Act 1986 the term Consumer means:

Any person-

- Who buys any goods for a consideration: or
- Who hires any services for consideration.

We are the consumer of air, water, electricity, etc. If polluted water is supplied to us or the transport service hired by us creates noise pollution or the electricity creates tradition pollution or thermal pollution etc. then services hired by us for consideration become questionable and the Consumer Protection Act. 1986 will protect consumers like us and guilty person may be punished under section 27 of this Act.

Section 27 of the Consumer Protection Act. 1986 runs as follows:

“Where a trader or a person against whom a complaint made fails or omits to comply with any order made by the District Forum the State Commission or the National commission as the case may be such trader or person shall be punishable with imprisonment for a term which shall not be less than 1 month but which may extend to three years or with fine which shall not be less than 2000 rupees but which ma extend to I 0000 rupees or with both: Provided that the District Forum, the State Commission or the National Commission as the case may be may if it is satisfied that the circumstances of any case so require impose a sentence of imprisonment or fine or both for a
term lesser than the minimum term and the amount lesser than the minimum amount specified in this section.”

Therefore, if polluted air, water, etc. supplied to a person (consumer) then he will be adequately protected under the Consumer Protection Act. 1986.

6.3 COMMON LAW ASPECTS RELATING TO ENVIRONMENT – REMEDIES UNDER THE LAWS

Even before specific laws came into force, there were certain common law remedies against pollution. In common law pollution cases generally fall under four categories: Nuisance, Trespass, Negligence and Strict Liability.

_Nuisance_: In Modern parlance, nuisance is that branch of law which is most loosely connected with protection of the environment. The deepest doctrinal roots of modern environmental law are found in the common law principles of nuisance. R.N.D.Hamilton rightly says that the substantive law for the protection of the citizen’s environment is basically that of common law relating to nuisance.\(^46\) There is much difficulty in employing tortuous action based on nuisance as an effective remedy against environmental pollution because of the exhaustive and diverse definitions of the term nuisance. Nuisance has been defined to be anything done to the hurt or annoyance of the lands, tenements or hereditament of another and not amounting to a trespass.

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\(^{46}\) RND Hamilton. Private Recourse for Environmental Harm.
Blackstone describes a nuisance (nocurrenturn) as something that worketh hurt, inconvenience, or damage\textsuperscript{47}.

**Kinds of Nuisance:** Nuisance is of two Kinds: Public and Private.

**Public Nuisance:** Public nuisance is an act or omissions which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in vicinity or which must necessarily cause injury, obstruction, danger or annoyance to persons who may occasion to use any public right\textsuperscript{48}.

Public nuisance is an act which seriously interferes with the health, safety, comfort or convenience of the public generally or which tends to degrade public morals. Originally, a private individual cannot sue for a public nuisance. To enable a private individual to bring an action for damages in respect of public nuisance he must prove that he has suffered a particular injury to himself beyond that suffered by the rest of the public. Secondly, he must prove that such injury is direct and not merely consequential. Thirdly, he must prove that such injury is of a substantial character i.e. not fleeting or evanescent. Therefore, in order to entitle a person to maintain an action for damages caused by a public nuisance, the damage must be special, direct and substantial.

\textsuperscript{47} NH Jhabala, The Law of Torts. 1978 Ed.
\textsuperscript{48} Sec. 268 IPC
The appropriate remedies for a public nuisance are both civil and criminal.

Civil: Under Section 91 of CPC the Advocate General or two or more persons having obtained the consent in writing of the Advocate General may institute a suit though no special damage has been caused for a declaration and injunction or for such other relief as may be appropriate in the circumstances of the case.

Criminal: Chapter XIV of the IPC. 1860 while Chapter X-B of the CrPC 1973 prescribes the appropriate remedies in this respect.

Private Nuisance: A private nuisance is some unauthorized use of a man’s own property causing damage to the property or proprietary right of another but not amounting to trespass. Private nuisance includes obstruction to light and air, wrongful escape of foul gas or noise, water, filth, germs etc. Winfield defines private nuisance as unlawful interference with a persons use or enjoyment of land or some right over or in connection with it. Therefore, private nuisance is the using or authorizing the use of one’s property or of anything under ones control so as to injuriously affect an owner or occupier of property by physically injuring his property’ or by interfering materially with his health, comfort or convenience. The forms of private nuisance are innumerable but whatever be the type, it does not follow that any harm constitutes a nuisance.

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Private nuisance is an act affecting some particular individual or individuals but not public at large. It may be the ground of a civil action for damages or an injunction or both but cannot be made the subject of an indictment. In a suit for nuisance, it is no defense that plaintiff himself come to the site of nuisance. In case of continuing nuisance, it is no defense that all possible care and skill are being used to prevent the operation complained of from amounting to a nuisance. Therefore, in an action for nuisance the plea that the defendant has done everything in his power to prevent its existence is not tenable. It is also no defense that the defendants operations would not alone amount to nuisance. Say for instance that other factories too contribute to the smoke complained of\(^{50}\).

It is valid defense in an action for nuisance that the said nuisance is under the terms of a grant. A special defense available in the case of nuisance is prescription. If a private nuisance has been peacefully and openly enjoyed as an easement and as a right without interruption for a period of not less than 20 years, then it becomes a special defense in the case of nuisance\(^{51}\).

There are three remedies available in case of private nuisance. They are as follows:

\(^{50}\) Ibid.
\(^{51}\) Ibid.
**Abatement:** Removal of nuisance by the aggrieved parts- is known as abatement. Such removal must be peaceable, without danger and if it necessary to enter another’s land or property, then prior notice should be given. But there are certain cases where such type of notice is not necessary. For instance, nuisance is a positive act of commission but not a nuisance due to omission. A private individual cannot abate a public nuisance. In order to be entitled to abate a public nuisance and maintain an action for damages. a private person must prove that he has suffered a particular damage and that such damage is direct and substantial.

**Damages:** Damages is the second remedy which is available to a person against private nuisance. What is important in cases of nuisance is not whether the defendant is using his own property reasonable, but whether injury is caused to his neighbor or not. The measure of damage will be the diminution in the value of the plaintiff’s property as a direct result of the nuisance. In cases of continuing nuisance, every day a fresh cause of action arises for which further damages ma’ be recovered. But if substantial damages are once given and fresh action is brought for the continuance of nuisance, exemplary damages may be given to compel abatement.

**Injunction:** If it is shown that the injury complained of as present or impending in such as by reason of its gravity or its permanent character or both cannot be adequately compensated in damages then injunction will be
granted. If the injury is continuous the court will not refuse an injunction because the actual damage arising from it is slight.

**Trespass:** Trespass is in theory closely reacted to nuisance and is occasionally invoked in environmental cases. Trespass in its widest sense signifies any transgression or offence against the law of nature of society or of the country, whether relating to a person or to his property. Here we are concerned with the trespass to land. In the case of trespass to land, the only requirement is that there must be an intentional unprivileged physical entry by a person or object on land which is possessed by another. Trespass requires an intentional invasion of the plaintiff’s interest in the property, whereas substantial and unreasonable interference is enough in the case of nuisance. Upon the proof of technical trespass the plaintiff is always entitled to nominal damages and he can also get injunctive relief. To constitute the wrong of trespass, neither force nor unlawful intention nor actual damage nor even breaking of any enclosure is necessary. Every invasion of private property is it so minute is a trespass.

Trespass to land is a continuing wrong which lasts so long as the injury to the land continues and gives rise to actions from day to day so long as it lasts. Thus, if a man throws a heap of stones or discharges a filthy water on plaintiffs land from a spot in defendant’s house is a trespass and it will continue as trespass till the thing is removed or stopped.
In an action for trespass the plaintiff must prove two things:

- That he was in actual possession of the land at the time of trespass. It is immaterial whether his possession is rightful or wrongful.
- That there was direct interference with the possession of his land.

Trespass may be committed by doing an act which affects the sole possession of the plaintiff. A person whose land is trespassed has one of the following remedies:

- He may bring an action against the wrong-doers i.e. the polluter.
- He may forcibly remove the pollutant or
- He may obtain an injunction to restrain a continuing or a threatened trespass.

**NEGLIGENCE:** Negligence is another specific tort on which a common law action for preventing environmental pollution can be based. Negligence is the breach of a duty caused by the omission to do something which a reasonable man would do or doing something which a prudent and reasonable man would not do. An action for negligence proceeds upon the idea of an obligation or duty on the part of the defendant to use or take care, a breach of it resulting in the plaintiff's injury. Where there is a duty to take care, reasonable care must be taken to avoid acts or omissions which are likely to cause physical injury to persons or property. According to Winfield, negligence as a tort is the breach of a legal duty to take care which results in damage, undesired by the
defendant to the plaintiff\textsuperscript{52}. The definition involves three constituents of negligence viz. A legal duty to exercise due care: Breach of the said duty; and consequential damage.

**The Concept of Duty of Care**: The existence of a duty or duty to take care is thus essential before a person can be held liable for negligence. Normally, existing precedents covering similar situations play an important role in deciding the question of existence of a duty situation in a given case. In solving cases presenting the existence or otherwise of a new duty situation the general principle of proximity and foresee ability is applicable.

**Breach of Duty**: If plaintiff wants to claim damages for negligence then he has to prove that the defendant owed a duty to him and next to show that the defendant was in breach of this duty. The standard by which one can determine, whether a person has been guilt of negligence or not is based upon the conduct of a prudent man in a particular situation. The amount of care, skill, diligence, etc. is also important factor in deciding such type of cases.

In MC Mehta Vs. Union of India\textsuperscript{53} it is pointed out that when a deadly pollutant like carbon monoxide is discharged in the air admittedly under the defendant’s exclusive control then it is not very difficult to establish causal relation between negligent act and the injury suffered by the plaintiff. But it is not very easy to establish such type of relation, where one brings an action for lung damage caused by tine dust particles against a local cement plant or glass factory.

\textsuperscript{52} Winfield. Tort. 12\textsuperscript{th} Ed., p. 69.

\textsuperscript{53} AIR 1987 SC 1086
Standard or Degree of Care: The dangers caused by environmental pollution are difficult to evaluate. Moreover, the standard of care will be seriously affected by state of scientific knowledge, State of technology, pollution control devices, etc. The standard of care varies according to the degree of danger. Very high degree of danger requires a very high degree of care while low degree of danger calls for a low degree of care. In the words of Cord Reid: Reasonable men do in fact take into account the degree of risk and do not act upon a bare possibility as the- would if the risk were more substantial”.

On the same line our Supreme Court in the context of hazardous industries observed that: ‘we cannot possibly adopt a policy of not having any chemical or hazardous industries merely because they pose hazard or risk to the community. If such a policy were adopted, it would mean the end of all progress and development. Such industries even if hazardous have to be set up since they are essential for economic development and advancement of well-being of the people. We can only hope to reduce the element of hazard or risk to the community by taking all necessary steps for locating such industries in a manner which would post least risk of damage to the community and maximizing safety requirements in such industries54.

54 MC Mehta Vs. UOI 1986 (2) SCC 176.
**Strict Liability:** Wrongs of strict liability impose a kind of liability which is somewhat peculiar in that a person becomes liable without there being any fault on his part. That is why it is called strict or absolute liability. Although it is a separate tort but it can be considered as an extension of the law of nuisance. The principle of strict liability resembles with negligence which is also based on foreseeable risk. According to Fleming the rational behind strict liability is that the activities coming within its fold are those entailing extraordinary risk to others, either in the seriousness or the frequency of the harm threatened.

The doctrine of strict liability, liability without fault is worth considering in relation to cases arising from or connected with environmental pollution. The most important case on the point is that of Reylands V. Fletcher\(^{55}\). It was held in this case that although the defendant is not guilty of negligence, he would be liable. Blackburn, Justice, We think that the rule of law is. that the person who for his own purposes brings on his lands and collects and keeps there anything likely to do mischief if it escapes must keep it in at his peril and if he does not do so is prima facie answerable for all the damage which is the natural consequence of its escape\(^{56}\).

The question of law that arose in Rylands Vs. Fletcher was as to what was the obligation which the law casts upon a person who like the defendants

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\(^{55}\) 1868, LR 3 HL. 330  
\(^{56}\) Ibid
lawfully brings on his land something which, though harmless whilst it remains there would naturally do mischief if it escapes out of his land. It was observed that, if a person brings or accumulates of his land anything which, if it should escape, may cause damage to his neighbors, he does so at his own peril. If it escapes and causes damage, then he is responsible, however careful he may have been and whatever precaution he may have taken to prevent the damage. This is known as the rule in Reylands vs. Fletcher and also known as the wild beast theory. The strict liability under the rule in Reylands vs. Fletcher is conditioned by two elements: Firstly, there should be an escape from the land of something likely to do mischief if it escapes. The escape for the purpose of applying the proposition in Reylands Vs. Fletcher means escape from a place of which the defendant has occupation of or control over land to place which is outside his occupation or control.

Secondly, there should be non-natural use of land. This means that land should be brought under some special use bringing with it increased danger to others and must no merely by the ordinary use of the land or such a use as is proper for the general benefit of the community.

The rule has been extended to a variety of cases, which includes environmental pollution cases also. In India this rule was used in a variety of cases by the Supreme Court and various High Courts. In Mehta Cases the rule of strict liability has been given a new shape. The Judgment given by the Supreme Court in Mehta Cases is single decision of far-reaching implications
for trade and industry. The judgment manifests the judicial reflex to pollution problems in general and potential dangerous escape of pollutants into atmosphere due to accidental emission.

Exceptions to the Rule of Strict Liability with special reference to Environmental Pollution

1. Vis Major (Acts of God): The rule of strict liability does not apply when the environmental pollution is caused due to vis major or by the operation of some superior force beyond reasonable expectation or human control. Vis major is occasioned by the elementary forces of nature unconnected with the agency of man or other cause. Therefore, if environmental pollution is caused by storm, tempest, lightning, extraordinary fall of rain, extraordinary high tide, extraordinary severe frost, etc. then no one is responsible under the head strict liability.

2. Malicious or Wrongful Act of Stranger: The rule of strict liability is not nor applicable where the pollution-disaster is caused by the wrongful or malicious act of a stranger. However, if the act of the stranger is such that it ought to have been anticipated and guarded against then the defendant will be liable for failure to take reasonable care.

3. Plaintiff's own Fault: The rule also cannot be involved where pollution is caused due to the plaintiffs own fault.
4. **Common Benefit:** The rule does not apply where the pollution is caused due to artificial works maintained with plaintiffs consent and for the common benefit of plaintiff and defendant.

5. **Statutory Authority:** If the person is empowered or authorized or required under the law or a statute or accumulate, keep or collect the dangerous thing which if escaped will result in environmental pollution and injury to the other persons then in the absence of negligence or an express provisions in the statute to the contrary for damage caused by escape person is not liable.

6.4 **CONCLUSION**

Population kept on increasing and civilization, urbanization and industrialization put on great stress on natural resources like soil, water, forests, mineral wealth, sea etc. and a chain of action and reaction started. One challenge met and in turn it leads to host of problems. The most important and related to very existence of life on the planet is the problem of pollution in environment. Consequently enactments passed for India by the Britishers had a reflection of lurking danger in their contents. Further, the Constitution of India or the laws related to environment or the laws which had a bearing upon the environment directly or indirectly had provisions on certain aspects of environment and its protection.