INTRODUCTION

Every individual is expected to know the law. A fundamental principle in jurisprudence is that "ignorance of law is not excusable." However, the fact remains that most people are unaware of the law and of their legal rights. Often, people play the role of mute spectators to many serious problems that threaten their peaceful lives primarily because they are ignorant of their rights under the law. One such problem is the various types of environmental degradation which every citizen faces, such as the exhaust from automobiles, the obnoxious smells from open drains, loud music and other noise, polluted drinking water, and so on. These problems can be solved with the aid of specific laws that have been formulated for the purpose.

The C.P.R. Environmental Education Centre has several years of experience in the field in environmental education. The need to incorporate environmental legislation into the training programmes resulted in the organisation of awareness - raising seminars on "Environmental Protection, People and the Law" for NGOs, lawyers and law students.

According to the Ministry of Environment and Forests, Govt. of India, 6624 cases have been filed by the Central Pollution Control Board (CPCB), State Pollution Control Boards (SPCBs) and the Pollution Control Committees (PCCs) of the Union Territories as on 31.10.1997 under the Water and Air Acts. Of these, 2947 cases have been decided and 3677 cases are pending in various courts. The problems in filing the cases are many: a lack of awareness on the part of the public, their fear of the delays in the judicial system and the lack of interest shown by the legal community in taking up environmental cases which earn minimal fees. Obtaining evidence is difficult and no lawyer would risk losing cases on the grounds of lack of evidence, however committed he is to society. The loopholes in environmental laws make it easier for the lawyer to support the cause of the polluter than that of the affected, besides being more remunerative.

All these factors have strengthened the Centre's belief that experience-sharing in this field would be of immense help and inspiration to young lawyers and to various sections of society, particularly NGOs and environmental activists. This publication is a ready guide to the availability and utilisation of existing laws by affected persons who may not be able to undertake a detailed study of the original. It covers the various heads - Constitutional provisions, the various Acts and some important lists. These information is dealt with in the form of questions and answers to facilitate easy reference.

Over the years, there has been a considerable growth in the field of environmental law. Environmental Tribunals, Green Benches and a National Environmental Appellate Authority have been constituted, while the mandatory Public Hearing is a new and welcome development. Environmental Impact Assessment and Environmental Audit are important developments to control pollution.

India has excellent laws to protect the environment, what is needed is implementation, which is the equal responsibility of the industry and the public. The following pages outline some of the laws and rules which are mandatory before the establishment of an industry.

What are the key policies relating to the environment in India ?

There are three key policies relating to environmental protection in India. They are:

- The National Forest Policy, 1988
- Policy statement for Abatement of Pollution, 1992
- National Conservation Strategy and Policy Statement on Environment and Development, 1992

How is 'Environment' defined under Indian Law ?

According to Section 2(a) of the Environmental Protection Act, 1986, 'Environment' includes

- Water, air and land
- The inter-relationship which exists among and between,
  - water, air and land, and
  - human beings, other living creatures, plants, micro-organisms and property

What are the different statutes/legislations enacted in India exclusively for environmental protection?

The different statutes / legislations enacted in India exclusively for environment protection are

- The Water (Prevention and Control of Pollution) Act, 1974
- The Water (Prevention and Control of Pollution) Rules, 1975
- The Water (Prevention and Control of Pollution) Cess Act, 1977
- The Water (Prevention and Control of Pollution) Cess Rules, 1978
- The Air (Prevention and Control of Pollution) Act, 1981
- The Air (Prevention and Control of Pollution) Rules, 1982
- The Environment Protection Act, 1986
- The Environment (Protection) Rules, 1986
- Hazardous Wastes (Management and Handling) Rules, 1989
- Manufacture, Storage and Import of Hazardous Chemical Rules, 1989
- The Forest Conservation Act, 1980
- The Forest (Conservation) Rules, 1981
- The Wildlife Protection Act, 1972
- The Wild Life (Transactions and Taxidermy) Rules, 1973
- The Wild Life (Stock Declaration) Central Rules, 1973
- The Wild life (Protection) Licensing (Additional Matters for Consideration) Rules, 1983
- The Wild Life (Protection) Rules, 1995
- The Wild Life (Specified Plants - Conditions for Possession by Licensee) Rules, 1995
- The Public Liability Insurance Act, 1991 etc.
- The Public Liability Insurance Rules, 1981
- The National Environment Tribunal Act, 1995
- The National Environment Appellate Authority Act, 1997

What is the difference between the laws enacted before and after Independence with respect to environmental protection in India ?

There are about two hundred laws dealing with environmental protection both before and after independence in India. However, the pre-independence laws have not dealt with environmental protection exclusively. For example, the Indian Penal Code (IPC), 1860, had a chapter (chapter XIV) which dealt with offences affecting public health, safety and convenience, which covered aspects like water, air and noise pollution, whereas the post-independence laws mentioned above deal exclusively with environmental protection.

What are the provisions in the Indian Penal Code for environmental protection?

The Indian Penal Code has a chapter on offences affecting Public Health, Safety, Convenience (Chapter XIV). Sec. 268 provides that "a person is guilty of a public nuisance who does any act or is guilty of an illegal ommission 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 necessarily cause injury, obstruction, danger, or annoyance to persons who may have occasion to use any public right." The section further explains that a common nuisance is not excusable on the ground that it causes some convenience or advantage. Other concerned provisions are: a "negligent act likely to spread infection or disease dangerous to life" (Sec. 269 I.P.C.), a "malignant act likely to spread infection or disease dangerous to life" (Sec. 270 I.P.C.), "making atmosphere noxious to health" (Sec. 278 I.P.C.).

But the essential requirement of the provision to punish a man is the guilty intention of the accused, i.e. either the act of the accused should be negligent, malignant or voluntary, which vitiates the atmosphere. In case of public nuisance, the Penal Code provides for fines up to Rs.200/- by way of punishment (Sec.290I.P.C.) and for making the atmosphere noxious to health Rs.500/- only (Sec.78 I.P.C.). The punishments are too meagre to meet the objectives. With these penal provisions, it is not possible to check environmental pollution.

CONSTITUTION OF INDIA

What responsibility does the State / government have towards environmental protection under the Indian Constitution ?

The State's responsibility with regard to environmental protection has been laid down under Article 48-A of our Constitution, which reads as follows:

"The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country".

What responsibility does the citizen have towards environmental protection under our Constitution ?

Environmental protection is a fundamental duty of every citizen of this country under Article 51-A(g) of our Constitution which reads as follows:

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

What is the importance of Article-21 of the Indian Constitution with respect to environmental protection and we have the right to clean environment ?

Article 21 of the Constitution is a fundamental right which reads as follows:

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

Though this Article does not explicitly mention the environment, the Supreme Court and the various High Courts of the country have given a wider interpretation to the word "life" in this Article. According to the courts, the right to life includes the right to a living environment congenial to human existence.

Why is it that action cannot be taken either against the State or the citizen for violating Articles 48 A and 51 A(g) of the Constitution ?

Article 48-A of the Constitution comes under Directive Principles of State Policy and Article 51 A(g) of the Constitution comes under Fundamental Duties.

Unlike Fundamental Rights, violation of Directive Principles of State policy or Fundamental Duties cannot be questioned in a Court of Law.

What responsibility does the State / government have towards raising the level of nutrition and standard of living and improving of public health?

The State's responsibility with regard to raising the level of nutrition and the standard of living and to improve public health has been laid down under Article 47 of the Constitution which reads as follows:

"The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibiton of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health."

What is the importance of the 42nd Amendment to the Constitution ?

The 42nd amendment to the Constitution was brought about in the year 1974. Two new Articles were inserted: Art.48-A and Art.51-A(g). The former, under Directive Principles of State Policy, makes it the responsibility of the State Government to protect and improve the environment and to safeguard the forests and wildlife of the country. The latter, under Fundamental Duties, makes it the fundamental duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

What are the subjects related to environment in the seventh schedule of the Constitution?

Union List
Entries
52. - Industries
53. - Regulation and development of oil fields and mineral oil resources
54. - Regulation of mines and mineral development
56. - Regulation and development of inter-State rivers and river valleys
57. - Fishing and fisheries beyond territorial waters.

State List
Entries
6. - Public health and sanitation
14. - Agriculture, protection against pest and prevention of plant diseases.
18. - Land, colonisation, etc.
21. - Fisheries
23. - Regulation of mines and mineral development subject to the provisions of List-I
24. - Industries subject to the provisions of List-I.

Common or Concurrent List
Entries
17A. - Forests
17B. - Protection of wild animals and birds
20. - Economic and social planning
20A. - Population control and family planning

As conferred by Article 246(1), while the Union is supreme to make any law over the subjects enumerated in List I, the States, under Article 246 (3), enjoy competence to legislate on the entries contained in List II, and both the Union and the States under Article 246(2) have concurrent jurisdiction on entries contained in List III. In the event of a clash, the Union enjoys a primacy over States in that its legislation in the Union and the Concurrent List prevails over State legislations. Also, the Parliament has residuary powers to legislate on any matter not covered in the three Lists (Art. 248).

ENVIRONMENTAL PROTECTION ACT, 1986 (E.P.A.)

How are the terms "environment", "environmental pollutant", "environmental pollution" and "hazardous substance" defined under the E.P.A. 1986?

According to Section 2 of *E.P.A.*

a) *"Environment"* includes water, air and land and the inter- relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

b) *"Environmental pollutant"* means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment.

c) *"Environmental pollution"* means the presence in the environment of any environmental pollutant.

d) *"Hazardous substance"* means any substance or preparation which, by reason of its chemical or physics-chemical properties or handling, is liable to cause harm to human beings, other living creatures, plants, micro-organisms, property or the environment.

What are the general powers of the Central government under E.P.A. for the protection and improvement of environment?

Section 3. *Power of Central Government to take measures to protect and improve the environment -*

1. Subject to the provisions of this Act, the Central Government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment pollution.

2. In particular, and without prejudice to the generality of the provisions of sub-section(1), such measures may include measures with respect to all or any of the following matters, namely:

i) Co-ordination of actions by the State Governments, officers and other authorities

a) Under this Act, or the rules made thereunder

or

b) Under any other law for the time being in force which is relatable to the objects of this Act

ii) Planning and execution of a nation-wide programme for the prevention, control and abatement of environmental pollution

iii) Laying down standards for the quality of environment in its various aspects

iv) Laying down standards for emission or discharge of environmental pollutants from various sources whatsoever

Provided that different standards for emission or discharge may be laid down under this clause from different sources having regard to the quality or composition of the emission lr discharge of environmental pollutants from such sources

v) Restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards

vi) Laying down procedures and safeguards for the prevention of accidents which may cause environmental pollution and remedial measures for such accidents

vii) Laying down procedures and safeguards for the handling of hazardous substances

viii) Examination of such manufacturing processes, materials and substances as are likely to cause environmental pollution

ix) Carrying out and sponsoring investigations and research relating to problems of environmental pollution

x) Inspection of any premises, plant, equipment, machinery, manufacturing or other processes, materials or substances and giving, by order, of such directions to such authorities, officers or persons as it may consider necessary to take steps for the prevention, control and abatement of environmental pollution

xi) Establishment or recognition of environmental laboratories and institutes to carry out the functions entrusted to such environmental laboratories and institutes under this Act

xii) Collection and dissemination of information in respect of matters relating to environmental pollution

xiii) Preparation of manuals, codes or guides relating to the prevention, control and abatement of environmental pollution

xiv) Such other matters as the Central Government deems necessary or expedient for the purpose of securing the effective implementation of the provisions of this Act.

3. The Central Government may, if it considers it necessary or expedient so to do for the purposes of this Act, by order published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under Section 5) of the Central Government under this Act and for taking measures with respect to such of the matters referred to in sub-section(2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise the powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures.

Section 4. *Appointment of officers and their powers and functions:*

1. Without prejudice to the provisions of sub-section(3) of Section 3, the Central Government may appoint officers with such designations as it thinks fit for the purpose of this Act and may entrust to them such of the powers and functions under this Act as it may deem fit.

2. The officers appointed under sub-section(1) shall be subject to the general control and direction of the Central Government or, if so directed by that Government, also of the authority or authorities, if any, constituted under sub-section(3) of Section 3 or of any other authority or officer.

Section 5. *Power to give directions:*

Not withstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions.

Explanation - For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct

a) The closure, prohibition or regulation or any industry, operation or process

or

b) Stoppage or regulation of the supply of electricity or water or any other service.

Section 6. *Rules to regulate environmental pollution:*

1. The Central Government may, by notification in the Official Gazette, make rules in respect of all or any of the matters referred to in Section 3.

2. In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:

a) The standards of quality of air, water or soil for various areas and purposes

b)The maximum allowable limits of concentration of various environmental pollutants (including noise) for different areas

c) The procedures and safeguards for the handling of hazardous substances

d) The prohibition and restrictions on the handling of hazardous substances in different areas

e) The prohibition and restrictions on the location of industries and the carrying on of processes and operations in different areas

f) The procedures and safeguards for the prevention of accidents which may cause environmental pollution and for providing for remedial measures for such accidents.

Is pollution of land/soil covered under E.P.A.?

Yes. Because under the E.P.A. environment includes water, air and land.

The sources of land pollution are:

i) The unintended or incidental pollution of soil with man made chemicals

ii) The spent material from mining, or processing, etc.

iii) The discharge of sewage or waste water from urban areas on the land used for agricultural purposes, particularly that adjoining urban areas

The indiscriminate disposal of solid waste (refuse)

What are the requirements that are to be fulfilled under the E.P.A. by persons carrying on any industry, operation etc.?

According to Section 7, no person carrying on any industry, operation or process shall discharge or emit or permit to be discharged or emitted any environmental pollutant in excess of such standards as may be prescribed.

According to Section 8, no person shall handle or cause to be handled any hazardous substance except in accordance with such procedure and after complying with such safeguards as may be prescribed.

What are the penalties for violations under the E.P.A.?

1. Whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued thereunder, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years or with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention.

2. If the failure or contravention referred to in sub-section(1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to seven years.

Can companies and government departments be also prosecuted under E.P.A.?

Yes

What restriction does the E.P.A. impose on private citizens with respect to courts taking cognizance of offences under the E.P.A. 1986?

Under this Act no court shall take cognizance of any offence except on a complaint made by any person who has given notice of not less than sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint, to the Central Government or the authority or officer authorised as aforesaid.

What is the effect of Section 24 of the E.P.A. with respect to other laws that also deal with environmental protection?

According to Section 24, where any act or omission constitutes an offence punishable under this Act and also under any other Act then the offender found guilty of such offence shall be liable to be punished under the other Act and not under this Act.

AIR ACT

How is air pollution defined under the Air Act of 1981?

Air pollution means the presence in the atmosphere of any air pollutant.

Air pollutant means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

What are objectives of the Air (Prevention and Control of Pollution) Act 1981?

The objective of this Act is to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

Decisions were taken at the United Nations Conference on the Human Environment held in Stockholm in June 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, includes the preservation of the quality of air and control of air pollution.

Therefore it is considered necessary to implement the decisions aforesaid insofar as they relate to the preservation of the quality of air and control of air pollution.

What are the functions of Central Board under the Air Act?

The main functions of the Central Board, as specified in Section 16 of the Act, shall be:

To improve the quality of air and to prevent, control or abate air pollution in the country; and in particular, and without prejudice to the generality of the foregoing functions, the Central Board, may

i) Advise the Central Government on any matter concerning the improvement of the quality of air and the prevention, control or abatement of air pollution

ii) Plan and cause to be executed a nation-wide programme for the prevention, control or abatement of air pollution

iii) Coordinate the activities of the State Boards and resolve disputes among them

iv) Provide technical assistance and guidance to the State Boards, carry out and sponsor investigations and research relating to problems of air pollution and prevention, control or abatement of air pollution

v) Plan and organise the training of persons engaged or to be engaged in programmes for the prevention, control or abatement of air pollution on such terms and conditions as the Central Board may specify

vi) Organise through mass media a comprehensive programme regarding the prevention, control or abatement of air pollution

vii) Collect, compile and publish technical and statistical data relating to air pollution and the measures devised for its effective prevention, control or abatement and prepare manuals, codes, or guides relating to prevention, control or abatement of air pollution

viii) Lay down standards for the quality of air

ix) Collect and disseminate information in respect of matters relating to air pollution

x) Perform such other functions as may be prescribed, under Rules or under an Order.

In addition to the above functions, the Central Board may establish or recognise a laboratory or laboratories to enable the Central Board to perform its functions under this Section efficiently, and it may

a) delegate any of its functions under the Act generally or specially to any of the Committees appointed by it; and

b) do such other things and perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes of the Act.

What are the functions of the State Boards under the Air Act 1981?

The functions of the State Board, as specified in Section 17, shall be:

a) To plan a comprehensive programme for the prevention, control or abatement of air pollution and to secure the execution thereof

b) To advise the State Government on any matter concerning the prevention, control or abatement of air pollution

c) To collect and disseminate information relating to air pollution

d) To collaborate with the Central Board in organising the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of air pollution and to organise mass-education programme relating thereto

e) To inspect, at all reasonable times, any control equipment, industrial plant or manufacturing process and to give by order, such directions to such persons as it may consider necessary to take steps for the prevention, control or abatement of air pollution

f) To inspect air pollution control areas at such intervals as it may think necessary, assess the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas

g) To lay down, in consultation with the Central Board and having regard to the standards for the quality of air laid down by the Central Board, standards for emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollutant into the atmosphere from any other source whatsoever not being a ship or an aircraft

Provided that different standards for emission may be laid down under this clause for different industrial plants having regard to the quantity and composition of emission of air pollutants into the atmosphere from such industrial plants

h) To advise the State Government with respect to the suitability of any premises or location for carrying on any industry which is likely to cause air pollution

i) To perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government

j) To do such other things and to perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes of the Act.

In addition to the above functions, the State Board may establish or recognise a laboratory or laboratories to enable the State Board to perform its above functions efficiently.

What is the importance of Sections 19, 20, 21 and 22 of the Air Act?

Section 19. Declaration of air pollution control area:

The Act has provided for measures which are

a) Preventive in nature, in the case of industries to be established

b) In the case of industries already established they are remedial

The primary responsibility of controlling air pollution is on the Board. The very first measure to be adopted in this respect is the declaration of any area or areas within the State as air pollution control area. The sub-section thus provides that the State Government may, after consultation with the State Board, by notification in the Official Gazette, declare in such manner as may be prescribed, any area or areas within the State as air pollution control area or areas for the purposes of the Act.

As regards power to give instructions for ensuring standards for emission from automobiles, Section 20 of the Act lays down that with a view to ensuring that the standards for emission of air pollutants from automobiles laid down by the State Board under clause(g) of sub-section(1) of Section 17 are complied with the State Government shall, in consultation with the State Board, give such instructions as may be deemed necessary to the concerned authority in charge of registration of motor vehicles under the Motor Vehicles Act, 1988, and such authority shall notwithstanding anything contained in that Act or the rules made thereunder be bound to comply with such instructions.

What are the penalities for violation of various provisions of the Air Act 1981?

Section 37. *Failure to comply with the provisions of section 21 or section 22 or with the directions issued under section 31-A:*

1) Whoever fails to comply with the provisions of section 21 or section 22 or directions issued under section 31-A, shall, in respect of each such failure, be punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine, and in case the failure continues, with an additional fine which may extend to five thousand rupees for every day during which such failure continues after the conviction for the first such failure.

2) If the failure referred to in sub-section(1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment with a term which shall not be less than two years but which may extend to seven years and with fine.

Section 38. *Penalties for certain acts:*

Whoever

Destroys, pulls down, removes, injures or defaces any pillar, post or stake fixed in the ground or any notice or other matter put up, inscribed or placed, by or under the authority of the Board, or

Obstructs any person acting under the orders or directions of the Board from exercising his powers and performing his functions under this Act, or

Damages any works or property belonging to the Board, or

Fails to furnish to the Board or any officer or other employee of the Board any information required by the Board or such officer or other employee for the purpose of this Act, or

Fails to intimate the occurrence of the emission of air pollutants into the atmosphere in excess of the standards laid down by the State Board or the apprehension of such occurrence, to the State Board and other prescribed authorities or agencies as required under sub-section(1) of Section 23, or

In giving any information which he is required to give under this Act, makes a statement which is false in any material particular, or

For the purpose of obtaining any consent under Section 21, makes a statement which is false in any material particular,

shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to [ten thousand rupees] or with both.

Section 39. *Penalty for contravention of certain provisions of the Act -*

Whoever contravenes any of the provisions of this Act or any order or direction issued thereunder, for which no penalty has been elsewhere provided in this Act, shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both, and in the case of continuing contravention, with an additional fine which may extend to five thousand rupees for every day during which such contravention continues after conviction for the first such contravention.

Can companies and government departments be prosecuted under the Air Act?

Yes. This is provided under Section 40 and 41.

Section 40. *Offences by companies*

1) Where an offence under this Act has been committed by a company, every person who, at the time the offence was committed, was directly in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly: Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

2) Notwithstanding anything contained in sub-section(1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation:

a) "Company" means any body corporate, and includes a firm or other association of individuals; and

b) "Director", in relation to a firm, means a partner in the firm.

Section 41. *Offences by Government departments:*

1) Where an offence under this act has been committed by any Department of Government, the Head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this section shall render such Head of the Department liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

2) Notwithstanding anything contained in sub-section(1), where an offence under this Act has been committed by a Department of Government and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the Head of the Department, such officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

What restriction does the Air Act impose on private citizens with respect to courts taking offence under the Air Act?

Under this Act:

No court shall take cognizance of any offence except on a complaint made by any person who has given notice of not less that sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint to the Board or officer authorised by the Board.

1) No Court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act.

2) Where a complaint has been made by any private citizen the Board shall, on demand by such person, make available the relevant reports in its possession to that person.

The Board may refuse to make any such report available to such person if the same is, in its opinion, against the public interest.

What are the legal provisions under Indian Law to control automobile pollution?

"Automobile" means any vehicle powered either by internal combustion engine or by any method of generating power to drive such vehicle by burning fuel.

Power to give instructions for ensuring standards for emission from automobiles.

As regards power to give instructions for ensuring standards for emission from automobiles, Section 20 of the Act lays down that with a view to ensuring that the standards for emission of air pollutants from automobiles laid down by the State Board under clause(g) of sub-section(1) of Section 17 are complied with, the State Government shall, in consultation with the State Board, give such instructions as may be deemed necessary to the concerned authority incharge of registration of motor vehicles under the Motor Vehicles Act, 1988, and such authority shall notwithstanding anything contained in that Act or the rules made thereunder be bound to comply with such instructions.

WATER ACT

How is Water Pollution defined under the Water Act 1974 ?

"Pollution" means

* contamination of water
* alteration of the physical, chemical or biological properties of water
* discharge of any sewage or trade effluent or any other liquid, gaseous or solid substance into water (whether directly or indirectly)

which 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 organisms.

What are the legislations that have been enacted for controlling/preventing water pollution?

The Shore Nuisance (Bombay and Kolaba) Act, 1853

The Orient Gas Company Act, 1857

Indian Penal Code, 1860

The Serais Act, 1867

The North India Canal and Drainage Act, 1873

The Obstruction in Fairways Act, 1881

The Indian Easement Act, 1882

The Indian Fisheries Act, 1897

The Indian Ports Act, 1908

The Indian Steam Vessels Act, 1917

The Poison Act, 1919

The Indian Forest Act, 1927

The Damodar valley corporation (Prevention of Pollution of Water) Regulation Act, 1948

The Factories Act, 1948

The Mines Act, 1952

The Orissa River Pollution Act, 1953

The River Boards Act, 1956

The Merchant Shipping Act, 1958

The Maharashtra Prevention of Water Pollution Act, 1969

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

The Water (Prevention and Control of Pollution) Cess Act, 1977.

What are the objectives of the Water (Prevention and Control of Pollution) Act 1974?

The objectives of the Water (Prevention and Control of Pollution) Act are to provide for the Prevention and Control of Water Pollution and the maintenance or restoration of the wholesomeness of water for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

What are the functions of the Central (Pollution Control) Board under the Water Act 1974?

Functions of Central Board:

1) Subject to the provisions of this Act, the main function of the Central Board shall be to promote cleanliness of streams and wells in different areas of the States.

2) In particular and without prejudice to the generality of the foregoing function, the Central Board may perform all or any of the following functions, namely -

a) Advise the Central Government on any matter concerning the prevention and control of water pollution

b) Co-ordinate the activities of the State Boards and resolve disputes among them

c) Provide technical assistance and guidance to the State Boards, carry out and sponsor investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution

d) Plan and organise the training of persons engaged or to be engaged in programmes for the prevention, control or abatement of water pollution on such terms and conditions as the Central Board may specify

e) Organise through mass media a comprehensive programme regarding the prevention and control of water pollution

[perform such of the functions of any State Board as may be specified in an order made under sub-section (2) of Section 18]

f) Collect, compile and publish technical and statistical data relating to water pollution and the measures devised for its effective prevention and control and prepare manuals, codes or guides relating to treatment and disposal of sewage and trade effluents and disseminate information connected therewith

g) Lay down, modify or annul, in consultation with the State Government concerned, the standards for a stream or well

[Provided that different standards may be laid down for the same stream or well or for different streams or wells, having regard to the quality of waterflow characteristics of the stream or well and the nature of the use of the water in such stream or well or streams or wells]

h) Plan and cause to be executed a nation-wide programme for the prevention, control or abatement of water pollution

i) Perform such other functions as may be prescribed

3) The Board may establish or recognise a laboratory or laboratories to enable the Board to perform its functions under this section efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents.

What are the functions of the State Boards under the Water Act 1974?

Functions of the State Boards:

1) Subject to the provisions of this Act, the functions of a State Board shall be:

> **a)** To plan a comprehensive programme for the prevention, control or abatement of pollution of streams and wells in the State and to secure the execution thereof
>
> **b)** To advise the State Government on any matter concerning the prevention, control or abatement of water pollution
>
> **c)** To collect and disseminate information relating to water pollution and the prevention, control or abatement thereof
>
> **d)** To encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution
>
> **e)** To collaborate with the Central Board in organising the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of water pollution and to organise mass education programmes relating thereto
>
> **f)** To inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water, works for the purification thereof and the system for the disposal of sewage or trade effluents or in connection with the grant of any consent as required by this Act
>
> **g)** To lay down, modify or annul effluent standards for the sewage and trade effluents and for the quality of receiving waters(not being water in an inter-State stream) resulting from the discharge of effluents and to classify waters of the State
>
> **h)** To evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of soils, climate and water resources of different regions and more especially the prevailing flow characteristics of water in streams and wells which render it impossible to attain even the minimum degree of dilution
>
> **i)** To evolve methods of utilisation of sewage and suitable trade effluents in agriculture) To evolve efficient methods of disposal of sewage and trade effluents on land, as are necessary on account of the predominant conditions of scant stream flows that do not provide for major part of the year the minimum degree of dilution
>
> **j)** To lay down standards of treatment of sewage and trade effluents to be discharged into any particular stream taking into account the minimum fair weather dilution available in that stream and the tolerance limits of pollution permissible in the water of the stream, after the discharge of such effluents
>
> **k)** To make, vary or revoke any order
>
> > **i)** for the prevention, control or abatement of discharges of waste into streams or wells
> >
> > **ii)** requiring any person concerned to construct new systems for the disposal of sewage and trade effluents or to modify, alter or extend any such remedial measures as are necessary to prevent, control or abate water pollution
>
> **l)** To lay down effluent standards to be complied with by persons while causing discharge of sewage or sullage or both and to lay down, modify or annul effluent standards for the sewage and trade effluents
>
> **m)** To advise the State Government with respect to the location of any industry the carrying on of which is likely to pollute a stream or well
>
> **n)** To perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government.

2) The Board may establish or recognise a laboratory or laboratories to enable the Board to perform its functions under this section efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents,

What is the importance of Section 24 of the Water Act 1974?

According to Section 24 of the Water Act, 1974

a) No person should knowingly cause or permit any poisonous, noxious or polluting matter determined in accordance with such standards as may be laid down by the State Board to enter (whether directly or indirectly) into any stream or well or sewer or on land; or

b) No person shall knowingly cause or permit to enter into any stream any other matter which may tend, either directly or in combination with similar matters, to impede the proper flow of the water of the stream in a manner leading or likely to lead to a substantial aggravation of pollution due to other causes or of its consequences.

N.B.

However, a person shall not be guilty of an offence under sub-section(1) by reason only of having done or caused to be done any of the following acts, namely

> **a)** Constructing, improving or maintaining in or across or on the bank or bed of any stream, any building, bridge, weir, dam, sluice, dock, pier, drain or sewer or other permanent works which he has a right to construct, improve or maintain
>
> **b)** Depositing any materials on the bank or in the bed of any stream for the purpose of reclaiming land or for supporting, repairing or protecting the bank or bed of such stream provided such materials are not capable of polluting such stream
>
> **c)** Putting into any stream any sand or gravel or other natural deposit which has flowed from or been deposited by the current of such stream
>
> **d)** Causing or permitting, with the consent of the State Board, the deposit accumulated in a well, pond or reservoir to enter into any stream.

Penalty for contravention of provisions of Section 24:

Whoever contravenes the provisions of Section 24 shall be punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine.

Can the Municipal Corporation, Companies, Government departments also be prosecuted under the Water Act?

Yes. This is provided under sections 47 and 48 of the Water Act.

Section 47. *Offences by companies:*

1) Where an offence under this Act has been committed by a company every person who at the time the offence was committed was in charge of, and was responsible to the company for the conduct, of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

2) Notwithstanding anything contained in sub-section(1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation : For the purposes of this section

a) "Company" means any body corporate, and includes a firm or other association of individuals

b) "Director" in relation to a firm means a partner in the firm.

Section 48. *Offences by Government Departments.*

Where an offence under this Act has been committed by any Department of Government, the head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly.

What emergency measures can the Central / State pollution boards take under the Water Act?

Emergency measures in case of pollution of stream or well:

1) Where it appears to the State Board that any poisonous, noxious or polluting matter is present in [any stream or well or on land by reason of the discharge of such matter in such stream or well or on such land] or has entered into that stream or well due to any accident or other unforeseen act or event, and if the Board is of opinion that it is necessary or expedient to take immediate action, it may for reasons to be recorded in writing, carry out such operations as it may consider necessary for all or any of the following purposes, that is to say,

> **a)** Removing that matter from the [stream or well or on land] and disposing it off in such manner as the Board considers appropriate
>
> **b)** Remedying or mitigating any pollution caused by its presence in the stream or well
>
> **c)** Issuing orders immediately restraining or prohibiting the person concerned from discharging any poisonous, noxious or polluting matter [into the stream or well or on land], or from making insanitary use of the stream or well.

2) The power conferred by sub-section(1) does not include the power to construct any works other than works of a temporary character which are removed on or before the completion of the operations.

What are the different powers given to the Central / State Boards under the Water Act?

The powers given to Central/State Boards to make application to courts for restraining apprehended pollution of water in streams or wells:

1) Where it is apprehended by a Board that the water in any stream or well is likely to be polluted by reason of the disposal or likely disposal of any matter in such stream or well or in any sewer or on any land, or otherwise, the Board may make an application to a court, not inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class, for restraining the person who is likely to cause such pollution from so causing.

2) On receipt of an application under sub-section(1) the court may make such order as it deems fit.

3) Where under sub-section(2) the court makes an order restraining any person from polluting the water in any stream or well, it may in that order

> **i)** Direct the person who is likely to cause or has caused the pollution of the water in the stream or well, to desist from taking such action as is likely to cause pollution or, as the case may be, to remove from such stream or well, such matter
>
> **ii)** Authorise the Board, if the direction under Clause(i) (being a direction for the removal of any matter from such stream or well) is not complied with by the person to whom such direction is issued, to undertake the removal and disposal of the matter in such manner as may be specified by the court.

4) All expenses incurred by the Board in removing any matter in pursuance of the authorisation under clause(ii) of sub-section(3) or in the disposal of any such matter may be defrayed out of any money obtained by the Board from such disposal and any balance outstanding shall be recoverable from the person concerned as arrears of land revenue or of public demand.

Section 33-A. *Power to give directions:*

Notwithstanding anything contained in any other law, but subject to the provisions of this Act and to any directions that the Central Government may give in this behalf, a Board may, in the exercise of its powers and performance of its functions under this Act, issue any directions in writing to any person, officer or authority, and such person, officer or authority shall be bound to comply with such directions.

Explanation -

For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct

> **a)** Closure, prohibition or regulation of any industry, operation or process
>
> or
>
> **b)** The stoppage or regulation of supply of electricity, water or any other service.

What restriction does the Water Act impose on private citizens with respect to courts taking cognizance of offences under the Water Act?

Under this act

1) No court shall take cognizance of any offence except on a complaint made by any person who has given notice of not less than sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint to the Board or officer authorised by the Board.

N.B.

> **1.** No court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act
>
> **2.** Where a complaint has been made by any private citizen the Board shall, on demand by such person make available the relevant reports in its possession to that person.

The Board may refuse to make any such report available to such person if the same is, in its opinion, against the public interest.

Are there any provisions to safeguard rivers and (natural) lakes ?

According to (Ministry of Environment and Forests, Government of Tamil Nadu) GO No 1 dated 6-2-84, of the a factory can come up at a distance of one kilometre from a river or natural waterbody. The Ministry of Environment and Forests passed a GO No. 213 dated 30-3-89 amending the distance from one kilometre to five kilometres.

The Ministry of Environment and Forest, Government of Tamil Nadu, in its GO No 127 dated 8-5-98, has amended its earlier reference with respect the river. (GO No 213, Mininstry of Environment and Forest, dated 30-8-89) that no industry coming under red category should be located within 5 km from major river Cauvery and its tributaries.

FOREST ACT

What are the requirements that should be met before declaring an area as a Wildlife Sanctuary or a National Park under the Forest Acts?

Section 29. *Protected forests:*

1) The [State Government] may, by notification in the [Official Gazette] declare the provisions of this chapter applicable to any forest-land or waste-land which is not included in a reserved forest, but which is the property of the Government, or over which the Government has proprietary rights, or to the whole or any part of the forest produce of which the Government is entitled.

2) The forest-land and waste-land comprised in any such notification shall be called a "protected forest".

3) No such notification shall be made unless the nature and extent of the rights of Government and of private persons in or over the forest-land or waste-land comprised therein have been inquired into and recorded at a survey or settlement, or in such other manner as the [State Government] thinks sufficient. Every such record shall be presumed to be correct until the contrary is proved:

Provided that if, in the case of any forest-land or waste-land, the [State Government] thinks that such enquiry and record are necessary but that they will occupy such length of time as in the meantime to endanger the rights of Government, the [State Government] may, pending such inquiry and record, declare such land to be a protected forest, but so as not to abridge or affect rights of individuals or communities.
Of the control over Forests and Lands not being the Property of Government

Section 35. *Protection of forests for special purposes:*

1) The State Government may, by notification in the official Gazette, regulate or prohibit in any forest or waste-land:

> **a)** The breaking up or clearing of land for cultivation
>
> **b)** The pasturing of cattle
>
> **c)** The firing or clearing of the vegetation

When such regulation or prohibition appears necessary for any of the following purposes:

> **i)** For protection against storms, winds, rolling stones; floods and avalanches
>
> **ii)** For the preservation of the soil on the ridges and slopes and in the valleys or hilly tracts, the prevention of landslips or of the formation of ravines and torrents, or the protection of land against erosion or the deposit thereon of sand, stones or gravel
>
> **iii)** For the maintenance of a water supply in springs, rivers and tanks
>
> **iv)** For the protection of roads, bridges, railways and other lines of communication
>
> **v)** For the preservation of public health.

2) The State Government may, for any, such purpose, construct as its own expense, in or upon any forest or waste-land, such work as it thinks fit.

3) No notification shall be made under sub-section(1) nor shall any work be begun under sub-section(2) until after the issue of a notice to the owner of such forest or land calling on him to show cause, within a reasonable period to be specified in such notice, why such notification shall not be made or work constructed, as the case may be and until his objections, if any, and any evidence he may produce in support of the same, have been heard by an officer duly appointed for that purpose and have been considered by the State Government.

What change has the Forest Conservation Act, 1980 brought about in the dereserving of forests as laid down under the Indian Forest Act, 1927?

Breaking up of the soil or the clearing of the forest land seriously affects reafforestation or regeneration of forest. Therefore, such breaking up of the soil can only be permitted after taking into consideration all aspects of the question, such as the overall advantages and disadvantages to the economy of the country, environmental conditions, the ecological imbalances, that are likely to occur, the effects on the flora and the fauna in the area, etc. It was, therefore, thought that the entire control of forest areas should vest in the Central Government. With that end in view, Sec.2 provided that prior approval of the Central Government should be obtained before permitting the use of the forest land for non-forest purposes.

What is the meaning of "non-forest purpose" under the Forest Conservation Act, 1980?

"Non-forest purpose" means the breaking up or clearing of any forest land or portion thereof for

> **a)** The cultivation of tea, coffee, spices, rubber, palms, oil- bearing plants, horticultural crops or medicinal plants;
>
> **b)** Any purpose other than re-afforestation,

but does not include any work relating or ancillary to conservation, development and management of forest and wild life, namely, the establishment of check-posts, firelines, wireless communications and construction of fencing, bridges and culverts, dams, water-holes, trench marks, boundary marks, pipelines or other like purposes.

WILDLIFE PROTECTION ACT

How is "Wildlife" defined under the Wildlife Protection Act, 1972?

According to the Wildlife Protection Act, 1972 "wildlife" includes any animal, bees, butterflies, crustacea, fish and moths; and aquatic or land vegetation which forms part of any habitat.

How and why should wildlife be protected?

The Wildlife Protection Act was passed by the Indian Parliament in the year 1972 to protect India's wildlife. However, in the 20 years that have passed since the Act came into force, the number of wild animals is going down alarmingly, despite of Government efforts to protect them. With the increase in population, there is greater pressure on land. Forests are being destroyed as human habitations expand, thereby shrinking the habitats of our wildlife. There is also the clandestine international trade in wildlife and wildlife products which is a major cause for their wanton destruction. Meanwhile, the growing consumer society and the increasing emphasis on luxury and vanity items has also caused the exploitation of wildlife in the name of industrial progress.

The major task of protecting wildlife cannot be handled by the Government machinery alone through its limited officials, but should be the duty of every individual. This was one of the reasons why a new provision, Article 51 A (g), was inserted into our Constitution, making it the fundamental duty of every citizen to protect and improve the natural environment, including forests, lakes, rivers and wildlife, and to have compassion for living creatures.

Points To Remember While Making A Complaint Under The Wildlife (Protection) Act

* Of foremost importance is the correct and full identification of the "wildlife" species involved in the offence, which decides all further action.

* Provisions of the Act do not apply if the species involved does not occur wild in India (except ivory of the African elephant) or is of farm origin.

* Keep with you always, for ready reference, an up-to-date copy of the Wildlife (Protection) Act and Wildlife (Protection) (Tamil Nadu) Rules.

(The Police effecting the arrest/seizure at your instance, as often also the Magistrate (who takes note of the arrest/seizure as per Section 50(5)), might wish to refer to the Act for guidance).

* If you are a Hon.Wildllife Warden, you would be well advised to always keep with you your identity card (as Hon.Wildlife Warden).

* If possible, you may detain an offender against The Wildlife Act caught in the act, but hand him over to the Police with the least possible delay (Section 43 of the Criminal Procedure Code)

* Specify the nature of the offence in your complaint so that the same is recorded by the police in the First Information Report (FIR).

* As you wait for the police or the Wildlife Officer, please ensure that evidence of the offence is guarded, to be gathered/recorded by the authorised official.

* It would help effective prosecution if the NGO representative becomes a party to the Panchanama/mahazar1 so that in the court trial against the accused, he could be useful as a witness.

**** REMEMBER**

i) Fix priorities in needed action.

ii) Keep in mind the many constraints of the very few wildlife officials to enforce the law. Help them concentrate on priority areas by not diverting their attention to less important offences.

Important points which must be incorporated in a Complaint to the Police / Forest officer as also in a Panchanama / Mahazar:

Whereas the Wildlife or Police Officer dealing with the case would almost always get this statement recorded in a manner acceptable to the courts, it would be good for the NGO to know the salient features of the documents so as to ensure a better recording of the evidence.

a) Name(s),occupation and full postal addresses of the witnesses(should not be less than 2 witnesses in any case)

b) The place, date, time of commencement and completion of the document.

c) The full names and other details of the other persons present at scene/detection of crime including those detained / arrested.

d) The exact species with the Latin name, preferably, identifying the species as the same as that figuring in a particular schedule of the Wildlife Act.

e) A detailed and accurate description of the animal / trophy / animal article together with any identification mark that you may affix on it to help later recognition. (Cases have been lost in the court due to failure on this count)

f) Please ensure that evidence of the offence is gathered and recorded in a manner that will stand judicial scrutiny during the trial.

Panchanama / Mahazar : This is an important document in any prosecution as much as it is a record of the facts as observed by the witnesses.

COASTAL REGULATION ZONE NOTIFICATION

Is there any law / regulation to protect the coast?

Yes. A notification under Section 3(1) and section 3(2)(v) of the Environment (Protection) Act, 1986 and the Rule 5(3) (d) of the Environment (Protection) Rules, 1986 declaring the coastal stretches as Coastal Regulation Zone (CRZ) and imposing restrictions on industries, operations and processes in the CRZ was published vide S.O.No. 944(E), dated 15th December, 1990.

What are the prohibited activities under CRZ Notification?

The following activities are declared as prohibited within the Coastal Regulation Zone:

a) Setting up new industries and expansion of existing industries except those directly related to waterfront or directly needing foreshore facilities

b) Manufacture or handling or storage or disposal of hazardous substances as specified in the Notifications of the Government of India in the Ministry of Environment & Forests. No.S.O.594(E) dated 28th July, 1989, S.O.966(E) dated 27th November, 1989 and GSR 1037(E) dated 5th December 1989,2. except transfer of hazardous substances from ships to ports, terminals and refineries and vice versa in the Port areas
"Provided that the Government of India in the Ministry of Surface Transport, on a case to case basis, may permit storage of the petroleum products as specified in Annexure III. Appended to this notification within the existing port limits of existing port limits of existing ports and harbours and in those areas of ports that have not been classified as CRZ-I subject to implementation of safety regulations including guidelines issued by Oil Safety Directorate in the Government of India, Ministry of Petroleum and Natural Gas after ensuring proper location of site and availability of necessary equipment to meet the safety norms and exigencies arising due to any accident or spillage.

c) Setting up and expansion of fish processing units (including warehousing (excluding hatchery and natural fish drying in permitted area)

d) Setting up and expansion of units/mechanisms for disposal of waste and effluents, except facilities required for discharging treated effluents, into the water course with approval under the Water (Prevention and Control of Pollution) Act, 1974, and except for storm water drains

e) Discharge of untreated wastes and effluents from industries, cities or towns and other human settlements. Schemes shall be implemented by the concerned authorities for phasing out the existing practices, if any, within a reasonable time period not exceeding three years from the date of this Notification

f) Dumping of city or town waste for the purpose of land-filing or otherwise; the existing practice, if any, shall be phased out within a reasonable time not exceeding three years from the date of the Notification

g) Dumping of ash or any wastes from thermal power stations

h) Land reclamation, bundling or disturbing the natural course of sea water, except those required for construction of ports, jetties, wharves, quays, slipways, bridges and sea-links and for other facilities that are essential for activities permissible under the notification or for control of coastal erosion and maintenance or cleaning of waterways, channels and ports and for prevention of sandbars for tidal regulators, storm water drains and structures or for prevention of salinity ingress and for sweet water recharge

i) Mining of sands, rocks and other substrata materials, except those rare minerals not available outside the CRZ areas

j) Harvesting of drawal of ground water and construction of mechanisms therefore within 200m of HTI
[Provided that drawal of ground water where no other source of water is available and when done manually through ordinary wells or hands pumps, for drinking and domestic purposes, in zone between 50 to 200m or the CRZ, whichever is less from High Tide Line in case of rivers, creeks and backwaters subject to such restrictions, as may be deemed necessary, in areas affected by sea water intrusion, that may be imposed by an authority designated by State Government/Union Territory/Administration.]

k) Construction activities in ecologically sensitive areas as specified in Annexure-1 of this Notification

l) Any construction activity between the Low Tide Line and High Tide Line except facilities for carrying treated effluents and waste water discharges into the sea, facilities for carrying sea water for cooling purposes, oil, gas and similar pipelines and facilities essential for activities permitted under the notification

m) Dressing or altering of sand dunes, hills, natural features including landscape changes for beautification, recreational and other such purpose, except as permissible under this Notification

n) Nothing contained in this paragraph shall apply to aquaculture.

What are the permissible activities under the CRZ notification and how are they to be regulated?

All other activities, except those mentioned in the question above, will be regualted as under:

1) Clearance shall be given for any activity within the Coastal Regulation Zone only if it requires waterfront and foreshore facilities;

2) The following activities will require environmental clearance from the Ministry of Environment & Forests, Government of India, namely;

> **i)** Construction activities related to Defence requirements for each which foreshore facilities are essential (e.g. slipways, jetties, etc.); except for classified operational component of defence projects for which a separate procedure shall be followed. (Residential buildings, office buildings, hospital complexes, workshops shall not come within the definition of operational requirements except in very special cases and hence shall not normally be permitted in the CRZ)
>
> **ii)** Operational constructions for ports and harbours and light houses construction for activities such as jetties, wharves, quays, and slipways

Provided that for expansion or modernisation of existing ports and harbours including fishing harbours opertional constructions for ports and harbours and construction of jetties, wharves, quays, slipways. Single Point Mooring and Single Buoy Mooring and for reclamation for facilities essential for operational requirements of ports and harbours in areas with in the existing port limits, except the areas classified as category CRZ-I (1), shall require environmental clearance from Government of India in the Ministry of surface Transport, which shall take decision on these activities on the basis of Environmental impact assessment Report.

Provided further that reclamation for commercial purposes such as shopping and housing complexes, hotels and entertainment activities shall not permissible.

> **iii)** Thermal power plants (only foreshore facilities for transport of raw materials facilities for intake of cooling water); and outfall for discharge of treated waste water cooling water.
>
> **iv)** All other activities with investment exceeding rupees five crores.

NATIONAL ENVIRONMENTAL APPELLATE AUTHORITY, ENVIRONMENTAL TRIBUNALS AND GREEN BENCHES

National Environmental Appellate Authority Act

What is the purpose with which the National Environmental Appellate Authority Act 1997 has been enacted?

The National Environmental Appellate Authority Act has been brought with the purpose of providing for the establishment of a National Environmental Appellate Authority to hear appeals with respect to restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards under the Environment (Protection) Act, 1986 and for matters connected therewith or incidental thereto.

What is the uniqueness of National Environmental Appellate Authority in dealing with appeals before them?

According to Section 12 of the Act the Authority shall not be bound by the procedure laid down in the code of civil procedure, 1908, but shall be guided by the principles of natural justice. Subject to the other provisions of this Act and of any rules made by Central Government, the Authority shall have power to regulate its own procedure, including the fixing of places and times of its enquiry and deciding whether to sit in public or private. Also, with the effect from the date of establishment of the Authority, no civil court or other authority shall have jurisdiction to entertain any appeal in respect of any matter with which the Authority is empowered by or under this Act.

National Environmental Tribunals Act

What are the objectives with which the National Environmental Tribunals Act, 1995 has been enacted?

The National Environmental Tribunal Act has been enacted to provide for strict liability for damages arising out of any accident occurring while handling any hazardous substance and for the establishment of a National Environment Tribunal for effective and expenditious disposal of cases arising from such accidents, with a view to giving relief and compensation for damages to persons, property and the environment and for matters connected therewith or incidental thereto.

Green Benches

What are Green benches?

Green benches are those constituted by the Chief Justice of the respective High Courts either on their own or on directions from the Chief Justice of the Supreme Court to constitute exclusively a bench (quorum consisting of more than one Judge) to deal with matters relating to environment and connected there with. The Green Bench in the respective High Courts deals with matters relating to Environment either on a particular day of the week exclusively or when and where the situation demands immediate action. West Bengal and Tamil Nadu are examples of some states which have constituted Green Benches.

ENVIRONMENTAL IMPACT ASSESSMENT

What is EIA (Environmental Impact Assessment), and what is its legal sanctity?

Environmental Impact Assessment (EIA) is an important management tool for ensuring optimal use of natural resources for sustainable development, and was introduced in India initially for River Valley Projects in 1978-79. The scope of the EIA has been enhanced to cover other developmental sectors such as industries, mining schemes, energy, etc. To facilitate project proponents in collection of environmental data and formulation of environmental management plans, it is now mandatory under the Environment (Protection) Act, 1986, for 29 categories of developmental activities involving investment beyond certain thresholds (see Annexure 3)

The notification was issued on 27th January 1994 and was amended on 4th May 1994. This, it is hoped would provide an opportunity both for the project proponents and Government to assess the impact of the concerned project on the environment before it actually comes into play.

What is the purpose of Environmental Impact Assessment and what projects really need detailed Environmental Impact Assessment to be submitted under the Law?

The purpose of Environmental Impact Assessment (EIA) is to identify and evaluate the potential impacts (beneficial and adverse) of development projects on the environmental system. It is an useful aid for decision making based on understanding of the environmental implications including social, cultural and aesthetic concerns which could be integrated with the analysis of the project costs and benefits. This exercise should be undertaken early enough at the planning stage of projects for selection of environmentally compatible sites, process technologies and such other environmental safeguards.

While all industrial projects may have some environmental impacts all of them may not be significant enough to warrant elaborate assessment procedures. The need for such exercises will have to be decided after initial evaluation of the possible implications of a particular project and its location.The projects which could be the candidates for detailed Environmental Impact Assessment include:

> **i)** Those which can significantly alter the landscape, land use pattern and lead to concentration of working and service population
>
> **ii)** Those which need upstream development activity like assured mineral and forest products supply or downstream industrial process development
>
> **iii)** Those involving manufacture, handling and use of hazardous materials
>
> **iv)** Those which are sited near ecologically sensitive areas, urban centres, hill resorts, places of scientific and religious importance
>
> **v)** Industrial estates with constituent units of various types which could cumulatively cause significant environmental damage.

ENVIRONMENTAL STATEMENT

What is Environmental Statement ?

It is defined by the International Chamber of Commerce as "a management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organisations, management and equipment are performing with the aim of helping to safeguard the environment by

> **a)** Facilitating management control of environmental protection
>
> **b)** Assessing compliance with company policies which, would include muting regulatory requirements.

Industries which require Environment Auditing

A gazette notification on environmental audit had been issued by the Ministry of Environment and Forests on 13th March, 1992 (amended vide notification GSR 386 (E) dated 22 April, 1993). This notification applies to every person carrying on an industry, operation or process requiring consent to operate under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under section 21 of the Air (Prevention and Control of POllution) Act, 1981 (14 of 1981), or both, or authorization under the Hazardous Wastes (Management and Handling) Rules, 1989, issued under the Environment (Protection) Act, 1986 (29 of 1986). The notification requires that an Environmental Statement for the financial year ending on the 31st March be submitted to the concerned State Pollution Control Board on or before the 30th September of the same year.

PUBLIC HEARINGS

What are Public Hearings?

Public hearings are those hearings which are required under the law before a sanction is given by the Government in respect of any project which falls under the 29 categories of activities (Annexure-3) which require environmental clearance from the Ministry of Environment and Forests, Government Of India (MoEF).

Public Hearings are a mandatory requirement under the law, and provide an opportunity for the public to get to know about the coming up of any new project falling under the 29 categories of activities requiring environmental clearance of the MoEF,GOI, and also an opportunity where the concerns, suggestions, views, comments and objections of the public are heard by the public hearing panel.

What is the legal sanctity of a Public Hearing ?

The EIA (Environmental Impact Assessment) Notification of January 27,1994 has been amended on April 10, 1997. By this amendment, a Public Hearing is mandatory for all the 29 categories of activities which require environmental clearance from the MoEF.

What are the various stages involved in conducting a Public Hearing?

Stage-1

The State Pollution Control Board (SPCB) shall cause a notice of Environmental Public Hearing by publishing the same in at least two newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned.

Stage-2

The State Pollution Control Board (SPCB) shall mention the date, time and the venue of the public hearing and also the name and address of the industry/unit proposed to come up for which a clearance is sought.

Stage-3

From the date of publication of the Notification, 30 days time is provided to the public inviting their suggestions, views, comments and objections to the said project.

Stage-4

The public are provided access to the executive summary of the Environmental Impact Assessment project during this one month period at the following places:

1) District Collector's office

2) District Industry Centre

3) Office of the Chief Executive Officers of the Zilla Parishad or Commissioner of the Municipal Corporation / Local body as the case may be

4) Head office of concerned State Pollution Control Board and its concerned Regional Office

5) Department of State Government dealing with the subject of Environment.

Stage-5

The actual public hearing is conducted as per the date, time and venue mentioned in the notification where the concerns of the public are heard by the Public Hearing Panel constituted for the purpose.

Can any member of the public participate in a Public Hearing?

Though the provision mentioned under sub-paragraph [ii] of paragraph 2 of Schedule 4 of EIA Notification says that all persons, including bonafide residents, environmental groups and others located at the project site / sites of displacement / sites likely to be affected can participate in the public hearing, the explanation provided in the same paragraph explains the word "person"as

a) Any person who is likely to be affected by the grant of environmental clearance

b) Any person who owns or has control over the project with respect to which an application has been submitted for environmental clearance

c) Any association of persons whether incorporated or not likely to be affected by the project and/or functioning in the field of environment

d) Any local authority within any part of whose local limits is within the neighbourhood wherein the project is proposed to be located.

Therefore, because of the explanation, only those who fall within the categories (a) to (d) can participate in a public hearing

Who are the members of a public hearing Panel?

The members of a public hearing panel are:

a) Representative of State Pollution Control Board

b) District Collector or his nominee

c) Representative of State Government dealing with the subject of Power

d) Representative of Department of State Government dealing with Environment

e) Not more than three representatives of the local bodies such as Municipalities or Panchayats

f) Not more than three senior citizens of the area nominated by the District Collector.

ECOMARK

What is an ECOMARK ?

The ECOMARK is a label given to an Environment Friendly Product. Household and other consumer products which meet certain environmental criteria along with the quality requirements of the Indian Standards Institute for that product may be accredited and labelled under this scheme.

What is an Environment Friendly Product?

Any product which is made, used or disposed off in a way that significantly reduces the harm it would otherwise cause the environment could be considered an Environment Friendly Product.

Who issues the ECOMARK notifications?

The Ministry of Environment and Forests, Government of India, issues the ECOMARK notifications.

How many notifications have been issued till date?

Till date, 18 notifications have been issued by the Ministry of Environment and Forests on different products criteria.

OTHER ENVIRONMENT - RELATED LAWS

The Shore Nuisance (Bombay and Kolaba) Act, 1853

This is the earliest Act on the statue book concerning control of water pollution in India.

The Serais Act, 1867

The Act enjoined upon a keeper of Serai or an inn to keep a certain quality of water fit for consumption by "persons and animals using it" to the satisfaction of the District magistrate or his nominees. Failure for maintaining the standard entailed a liability of rupees twenty.

The North India Canal and Drainage Act, 1873

Certain offences have been listed under the Act contained in Section 70.

Obstruction in Fairways Act, 1881

Section 8 of the Act empowered the Central Government to make Rules to regulate or prohibit the throwing of rubbish in any fairway leading to a port causing or likely to give rise to a bank or shoal.

Indian Easements Act, 1882

Illustrations (f), (h) and (j) of Section 7 of the Act deal with pollution of waters.

The Indian Fisheries Act, 1897

The Indian Fisheries Act, 1897 contains seven sections. Section 5 of the Act prohibits destruction of fish by poisoning waters.

Indian Ports Act, 1908

Water pollution by oil has been regulated by the Indian Ports Act, 1908.

The Indian Forest Act, 1927

Section 26(I) of the Act makes it punishable if any person, who, in contravention of the rules made by the State Government, poisons water of a forest area. The State Government has been empowered under Section 32(f) to make rules relating to poisoning of water in forests.

The Damodar Valley Corporation Act, 1948

The Act authorises the Corporation to make regulations with the previous sanction of the Central Government for preventing "pollution of water".

The Factories Act, 1948

Factories Act, 1948 is a social welfare legislation intend to secure health, safety and welfare of the workers employed in factories. However,some of the provisions of this Act are concerned with prevention of water pollution.

The Mines Act, 1952

Chapter V of the Act deals with provisions regarding health and Safety of the employees. Section 19(i) emphasises upon arrangement for the quality of water for drinking purposes.

The River Boards Act, 1956

The Act provides for the creation of River Boards for regulation and development of interstate rivers and river valleys. One of the functions of the Board is to advise to the government concerned on "prevention of pollution of the waters of the interstate rivers".

The Merchant Shipping Act, 1958

The International Convention for the Prevention of Pollution of the Sea by Oil, 1954 is the first treaty for the reduction of oil pollution of the sea. In order to give effect to this Convention, the Merchant Shipping Act regulates and controls the discharge of oil or oil mixture by an Indian tanker or ship within any of the prohibited zones or by a foreign tanker or other ship within the prohibited zone adjoining the territories of India. Further, there is a prohibition for discharging any oil anywhere at sea from an Indian ship.

SOME IMPORTANT CASES ON ENVIRONMENT

RATLAM CASE

Municipal Council, Ratlam v. Vardhichand,

AIR 1980 SC 1622

DEHRADUN QUARRYING CASE

Rural Litigation and Entitlement Kendra v. State of UP.,

AIR 1987 SC 2187

SHRI RAM GAS LEAK CASE

M.C. Mehta v. Union of India, AIR 1987 SC 965

M.C. Mehta v. Union of India, AIR 1987 SC 982

M.C. Mehta v. Union of India, AIR 1987 SC 1086

RADIATION CASE OR IRISH BUTTER CASE

Dr. Shiva Rao Shantaram Wagle v. Union of India, AIR 1988 SC 952

GANGA POLLUTION (TANNERIES) CASE

M.C. Mehta v. Union of india, AIR 1988 SC 1037

GANGA POLLUTION (MUNICIPALITIES) CASE

M.C. Mehta v. Union of India, AIR 1988 SC 11 15

BHOPAL CASE

Union Carbide Corporation v. Union of India, AIR 1990 SC 273

Charan Lal Sah V. Union of india, AIR 1990 SC 1480

TAJ MAHAL CASE

M. C. Mehta v. Union of India & Others

Writ petition (civil) no. 13381 of 1984 Supreme Court decided on December 30,1996

(Kuldip Singh, J. and Faizaluddin, J)

Forests

T.N.Godavarman Tirumulpad Vs Union of India and others: AIR 1997 SC 1233.

Aqua Culture

S. Jagannath Vs Union of India (1997) 2 SCC 87: AIR 1997 SC 811.

Tannery Pollution

Vellore Citizens Welf are Forum Vs Union of India (1996) 5 SCC 647.

Indiscriminate withdrawal of underground water

M.C. Mehta Vs Union of India, (1997) 11 SCC 312.

Shifting / Relocation / Closure of Hazardous / Noxious / Heavy / Large Industries from Delhi

M.C. Mehta Vs Union of India, (1997) 11 SCC 327.

Public Trust Doctrine

M.C. Mehta Vs Kamal Nath, (1997) 1 SCC 388.

Precautionary Principle and Principle of Sustainable Development

M.C. Mehta (Badkhal and Surajkund Lakes Matter) Vs Union of India (1997) 3 SCC 715.

Annexure - 1

ACTS FOR THE PROTECTION OF THE INDIAN ENVIRONMENT SINCE 1857

The Orient Gas Company Act, 1857

The Serais Act, 1867

The Northern India Canal and Drainage Act, 1873

The Obstruction in Airways Act, 1881

The Indian Fisheries Act, 1897

The Indian Ports Act, 1901

The Bengal Smoke Nuisance Act, 1905

The Explosives Act, 1908

The Bombay Smoke Nuisance Act, 1912

The Inland Stream Vessel Act, 1917

The Mysore Destructive Insects & Pests Act, 1917

The Poison Act, 1919

The Andhra Pradesh Agricultural, Pest & Diseases Act, 1919

The Indian Boilers Act, 1923

The Workmen's Compensation Act, 1923

The Indian Forest Act, 1927

The Motor Vehicles Act, 1939

The Bihar Wastelands (Reclamation, Cultivation & Improvement) Act, 1946

The Mines and Minerals (Regulation and Development) Act 1947

The Damodar Valley Corporation (Prevention of Pollution of Water) Regulation Act, 1948

The Factories (Pollution and Pesticides) Act, 1948

The Employees State Insurance Act, 1948

The Andhra Pradesh Improvement Schemes (Land utilisation) Act, 1949

The Industries (Development and Regulation) Act, 1951

The Calcutta Municipal Act, 1951

The Madhya Pradesh Control of Music and Noises Act, 1951

The Maharashtra Prevention of Water Pollution Act, 1953

The Shore Nuisance (Bombay and Colaba) Act, 1953

The Orissa River Pollution & Prevention Act, 1953

The Assam Agricultural Pests and Disease Act, 1954

The Prevention of Food Adulteration Act, 1954

The U.P. Agricultural Pests & Disease Act, 1954

The Acquisition of Land for Flood Control and Prevention of Erosion Act, 1955

The Bihar Control of the Use and play of Loudspeakers Act, 1955

The River Boards Act, 1956

The Ancient Monuments and Archeological Sites and Remains Act, 1958

The Kerala Agricultural Pests & Disease Act, 1958

The Atomic Energy Act, 1962

The Major Port Trusts Act, 1963

The Delhi Restriction of Land Uses Act, 1964

The Beedi and Cigar Works Act, 1966

The Insecticides Act, 1968

The Maharashtra Water Pollution Prevention Act, 1969

Tamil Nadu Water Supply and Drainage (Prevention & Control of Water Pollution) Act, 1970

The Cattle Trespass Act, 1971

The wild life (Protection) Act, 1972

The Water (Prevention & Control of Pollution) Act, 1974

The Urban Land Act (Ceiling and Regulation), 1976

The Madhya Pradesh Gandhi Basti Kshetra (Sudhar Tatha Nirmulan) Adiniyam, 1976

The Territorial Waters, continental shelf, exclusive Economic Zone and other Maritime Zone Act, 1976

The Water (Prevention and Control of Pollution) Cess Act, 1977

The Water (Prevention and Control of Pollution) Amendment Act, 1978

The Coast Guard Act, 1978

The Forest (Conservation) Act, 1980

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

The Fairways Act, 1981

The Narcotic Drugs and Psychotropic Substances Act, 1985

The Environment (Protection) Act, 1986

Motor Vehicles Act, 1988

Hazardous Wastes (Management and Handling) Rules, 1989

Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

The Public Liability Insurance Act, 1991

The Public Liability Insurance Rules, 1991

The Wild LIfe (Protection) Rules, 1995

The National Environment Appellate Authority Act, 1997

Annexure - 2

CENTRAL LEGISLATIONS

Air Pollution

The Indian Boilers Act, 1923

Motor Vehicle Act, 1939 (Repealed by Act No.59 of 1988)

The Mines and Minerals (Regulation and Development) Act, 1947

The Factories Act, 1948

The Industries (Development and Regulation) Act, 1951

The Air (Prevention and Control of Pollution) Act, 1981 (amended in 1987)

Water Pollution

The River Boards Act, 1956

The Merchant Shipping (Amendment) Act, 1970

The Water (Prevention and Control of Pollution) Act, 1974 (amended in 1988)

The Water (Prevention and Control of Pollution) Cess Act, 1977 (amended in 1991)

Radiation

The Atomic Energy Act, 1962

Pesticides

The Poison Act, 1919

The Factories Act, 1948

The Insecticides Act, 1968

Miscellaneous

The Indian Fisheries Act, 1897

The Indian Forest Act, 1927

The Prevention of Food Adulteration Act, 1954

The Ancient Monuments and Archaeological Sites and Remains Act, 1958

The Wild Life (Protection) Act, 1972 (amended in 1983, 1986 and 1991)

The Urban Land (Ceilings and Regulation) Act, 1976

The Forest (Consrvation) Act, 1980 (amended in 1988)

The Environment (Protection) Act, 1986

Annexure - 3

LIST OF PROJECTS REQUIRING ENVIRONMENTAL CLEARANCE FROM THE CENTRAL GOVERNMENT

1. Nuclear Power and related projects such as Heavy Water Plants, Nuclear Fuel Compley, Rare Earths.

2. RiverValley projects including hydelpower, major irrigation and their combination including flood control.

3. Ports, Harbours, Airports (except minor ports and harbours).

4. Petroleum Refineries including crude and product pipelines.

5. Chemical Fertilizers (Nitrogenous and Phosphatic other than single super phosphate).

6. Pesticides (Technical).

7. Petrochemical complexes (Both Olefinic and aromatic) and Petro-chemical intermediates such as DMT, Caprolactam LAB etc. and production of basic plastics such as LLDPE, HDPE, PP, PVC.

8. Bulk drugs and pharmaceuticals.

9. Exploration for oil and gas and their production, transportation and storage.

10. Synthetic Rubber.

11. Asbestos and Asbestos products.

12. Hydrocyanic acid and its derivatives

13. (a) Primary metallurgical industries (such as production of Iron and Steel, Alunminium, Copper Zinc, Lead and Ferro Alloys) (b) Electric arc furnaces (Mini Steel Plants).

14. Chlor.alkali industry.

15. Integrated paint complex including manufacture of resins and basic raw materials required in the manufacture of paints.

16. Viscose Staple fibre and filament yam.

17. Storage batteries integrated with manufacture of oxides of lead and lead antimony alloys

18. All tourism projects between 200m - 500 meters of High Water Lin and at locations with an elevation of more than 1 000 Meters with investment of more than Rs. 5 crores.

19. Thermal Power Plants.

20. Mining Projects (major minerals) with leases more than 5 hectares.

21. Highway Projects.

22. Tarred Roads in himalayan and or Forest areas.

23. Distilleries.

24. Raw Skins and Hides.

25. Pulp, Paper and newsprint,

26. Dyes.

27. Cement.

28. Foundries (individual).

29. Electroplating.

Annexure - 4

INDUSTRIES WHICH REQUIRE INDUSTRIAL LICENSING

1. Coal and Lignite

2. Petroleum (other than crude) and its distillation products.

3. Distillation and brewing of alcoholic drinks.

4. Sugar

5. Animal fats and oils and their preparations

6. Cigars and cigarettes of tobacco and manufactured tobacco substitutes.

7. Asbestos and asbestos-based products.

8. Plywood, decorative veneers and other wood based products such as particle board, medium density fibre board, and block board.

9. Leather

10. Tanned or dressed furskins.

11. Paper and Newsprint except bagasse based unit. (i.e. except units based on minimum 75% pulp from agricultural residues, bagasse and other non-conventional raw materials).

12. Electronic aerospace and defence equipment all types.

13. Industrial explosives including detonating fuses, safety fuses, gun powder, nitrocellulose and matches, explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations.

14. Drugs and Pharmaceuticals (according to Drug Policy)

15. Entertainment electronics (VCRS, colour TVs, CD players, tape recorders).

Annexure - 5

LIST OF POLLUTING INDUSTRIES

1. Primary metallurgical producing industries viz. zinc, lead, copper, aluminium and steel.

2. Paper, pulp and newsprint

3. Pesticides / insecticides

4. Refineries

5. Fertilizers

6. Paints

7. Dyes

8. Leather tanning

9. Rayon

10. Sodium / potassium cyanide

11. Basic drugs

12. Foundry

13. Storage Batteries (lead acid type)

14. Acids / alkalies

15. Plastics

16. Rubber - synthetic

17. Cement

18. Asbestos

19. Fermentation industry

20. Electro-plating industry.

Annexure - 6

NATIONAL AMBIENT AIR QUALITY STANDARDS (CPCB 1994)

Pollutant	Time	Concentration in ambient air		
		Industrial area	Residential Rural & Other Areas	Sensitive Areas
Sulphur dioxide (SO2)	Annual Average* 24 hours*	80 ug/m3 120 ug/m3	60 ug/m3 80 ug/m3	15 ug/m3 30 ug/m3
Oxides of Nitrogen NOX	Annual Average* 24 hours*	80 ug/m3 120 ug/m3	60 ug/m3 80 ug/m3	15 ug/m3 30 ug/m3
Suspended Particulate Matter (SPM)	Annual Average* 24 hours*	360 ug/m3 500 ug/m3	140 ug/m3 200 ug/m3	70 ug/m3 100 ug/m3
Respirable Particulate Matter (size less than 10 um) (RPM)	Annual Average* 24 hours*	120 ug/m3 150 ug/m3	60 ug/m3 100 ug/m3	50 ug/m3 75 ug/m3
Lead (Pb)	Annual Average* 24 hours*	1.0 ug/m3 1.5 ug/m3	0.75 ug/m3 1.00 ug/m3	0.50 ug/m3 0.75 ug/m3
Carbon Monoxide (CO)	8 hours* 1 hour*	5.0 ug/m3 10.0 ug/m3	2 ug/m3 4.0 ug/m3	1.0 ug/m3 2.0 ug/m3

* Annual Arithmatic mean of minimum 104 measurements in a year taken twice a week 24 houly at uniform interval.

** 24 hously / 8 hourly values should be met 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

Annexure - 7

TOLERANCE LIMITS FOR TRADE EFFLUENTS

Sl. No.	Characteristics	Tolerance Limits for Discharge of Trade Effluents Discharged into			
		Inland Surface Water	Public Sewers	Marine Coastal Areas	on land for Irrigation
1.	Colour and Odour	-	-	-	-
2.	Suspended solids mg/1	100	600	a)For Process waste waters100 b)For cooling water effluents 10 percent above total suspended matter of influent cooling water	200
3.	Particle size of suspended solids	shall pass 850 micron	-	a) Floatable solids, max 3 mm. b) Settleable solids, max 8.50 microns	-
4.	Dissolved solids (inorganic) mg/1	2100	2100	-	2100
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature oC	40 at the point of discharge	45 at the point of discharge	45 at the point of discharge	-
7.	Oil and grease mg/1	10	20	20	10
8.	Total residual chlorine (mg/1)	1	-	1	-
9.	Ammoniacal Nitrogen (as N) mg/1	50	50	50	-
10.	Total Kjeldahl Nitrogen (as N) mg/1	100	-	100	-
11.	Free Ammonia (as NH3) mg/1	5	-	5	-
12.	Biochemical Oxygen Demand (5 days at 20oC)	30	350	100	100
13. 17.	Chemical Oxygen Hexavalent Chromium (as Cr6) mg/1	250 0.10	- 2.0	250 1.0	- 1.0
18.	Total Chromium (as Cr) mg/1	2.0	2.0	1.0	2.0
19.	Cadmium (as Cd) mg/1	2.0	1.0	2.0	1.0
20.	Copper (as Cu) mg/1	3	3	3	3
21.	Zinc (as Zn) mg/1	1	15	15	15
22.	Selenium (as Se) mg/1	0.05	0.05	0.05	0.05
23.	Nickel (as Ni) mg/1	3	3	3	3
24.	Boron (as B) mg/1	2	2	2	2
25.	Precent Sodium mg/1	-	60	-	60
26.	Residual Soduim Carbonate	-	-	-	5
27.	Cyanide (as CN) mg/1	0.2	2.0	0.2	0.2
28.	Chloride (as CI) mg/1	1000	1000	0	600
29.	Fluoride (as F) mg/1	2.0	15	15	2.0
30.	Dissolved Phosphates (as P)	5	-	-	-
31.	Sulphates (as SO3)	1000	1000	1000	1000
32.	Sulphide (as S)	2	-	5	2
33.	Pesticides	Absent	Absent	Absent	Absent
34.	Phenolic compounds (as C6H5OH)	1	5	5	5
35.	Radioactive materials a) Alpha emitters (uc/ml) b) Beta emitters (uc/ml)	10.7 10.6	10.7 10.6	10.7 10.7	10.8 10.6