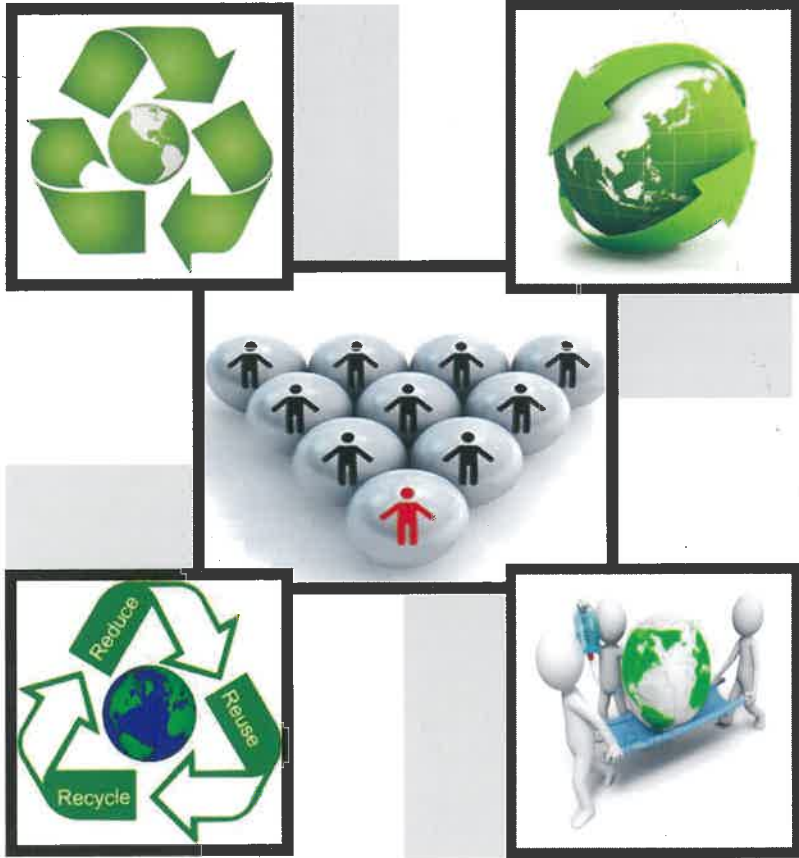


HAND BOOK & GUIDE FOR ENVIRONMENTAL CLEARANCE FOR CONSTRUCTION PROJECTS



SUDHAKAR DOKHANE

PAST PRESIDENT : PEATA (I)

Published By :



FOUNDED IN 1965

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Town Planners Association (India)**

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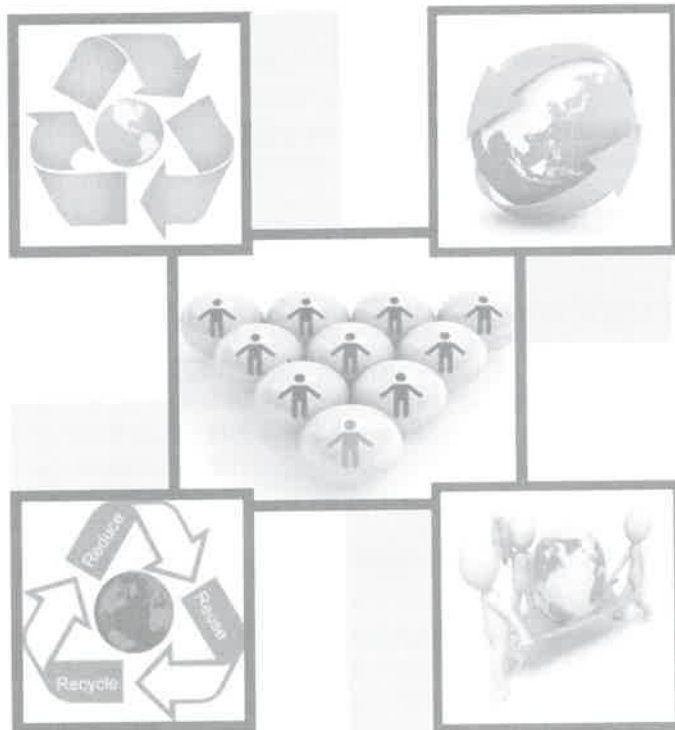
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Sudhakar Dokhane

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ENVIRONMENTAL CLEARANCE



For several decades, degradation of Environmental standards, Global Warming and Change of Climate are serious concerns and burning issues before all the nations on the planet earth. Developing countries are trying their best to control the pollution and or its hazardous effects on human environment.

Uncontrolled growth of population, increasing industrial activities and growth, deforestation, misuse or excessive use of natural resources, emission of greenhouse toxic gases into atmosphere, releasing of dangerous chemicals and hazardous effluents in water bodies, and such similar human activities are disturbing eco-balance of our nature to great extent. All these activities are collectively responsible for global warming resulting into severe changes in climatic cycles in different parts of the world. The United States of America and England are the recent victims of Nature's Wrath. Unprecedented and unpredicted floods and winter storms has crippled both the nations for months together.

The United Nations Organisation (UNO) has taken a major step to create global awareness about protection of Environment and natural resources, at Stockholm – Sweden, in a Conference held on Human Environment in June 1972, wherein the Conference has realised the necessity and absolute need for common outlook and common principles to inspire and guide the peoples of the world in the preservation and improvement of the Human Environment. UNO urged all nations for making collective efforts to achieve the objects and convictions of the said declaration which is popularly known as “**Stockholm Declaration**”.

As a matter of fact, several Acts related to Environmental protection were in force in India prior to Stockholm Declaration. However, to ensure Environmental protection, further enactments were made in laws even with penal provisions, curbing

excessive use of natural resources and restrictions on human activities which are hazardous and harmful to environmental standards, and eco-system in general.

The Ministry of Environment and Forests, (MoEF) Government of India, published a comprehensive Notification (No. S.O. 1533) on 14th September 2006, on protection of environment thereby bringing more than 38 pro-pollution activities and projects, for which it has been made mandatory to obtain prior Environmental Clearance for establishment and operation of projects as listed in the said Notification.

This Hand-Book & Guide, even though, is aimed mainly to explain about Environmental Clearance required for mega Construction Projects and activities, it was felt necessary to give information on Human Environment, Pollution, Effects of Pollution, Control, Global warming, Change of Climate, National and International Environmental Laws, Obligation of India, Environmental awareness in ancient India, for desired understanding and clarity about Environmental protection.

All required information is incorporated in this book right from making of application till obtaining Environmental Clearance for the scheduled Projects and activities thereof. It is felt that this Hand-Book and Guide will prove much helpful to Architects, Developers, and other component agencies related to Building Industry.

I express my sincere thanks to Shri. R. P. Athalye – Sr. Vice President (Liaison) and Ar. Mrs. Manisha Vishwasrao – Dy. Gen. Manager (Liaison) of **Kalpataru** Group of Companies for their valuable assistance, information and guidance for main theme of this Hand-Book. I am thankful to my hard working staff Ms. Pooja Kadam and Ms. Snehal Patwardhan for their graphic assistance and time spent for this endeavour.

I have made liberal use of the materials available on the subjects and also have referred to number of standard books, journals websites etc. and thus tried to assimilate the texts presenting in orderly manner as far as possible. My sincere thanks goes to various authors and authorities listed in bibliography, which has given me desired references for this compilation. With immense pleasure I submit this Hand-Book & Guide to PEATA (I) all my fellows professionals, Developers and all component agencies of the construction Industry.

Mumbai
2014

_____ **Sudhakar Dokhane**
(Former President PEATA(I))



PREFACE

Hand-Book and Guide for “Environmental Clearance” is an addition to already written Books on the various subjects of Site Supervision, Arbitration, Re-development of Societies, Slum Rehabilitation, and Water Supply to Mumbai etc., by veteran and prolific author Shri. Sudhakar Dokhane. Shri. Sudhakarji, has enormous experience and study of day-to-day problems and hurdles faced by all component agencies of construction Industry. He is former president of our Professional organisation popularly Known as Practising Engineers, Architects and Town Planners Association (India) P.E.A.T.A. (I).

This book mainly focuses on obtaining Environmental Clearances for building and construction projects which comes under preview of MoEF Notification of 2006. The First Part of the book (chapter 1 to 11) gives all the fundamental information about Human Environment, its protection, different kinds of Pollutions and measures to curb and control the pollutions, creation of social awareness as well as National & International legislations on Environmental protection. The Second Part of the book (chapter 12 to 21) covers complete details, information, guidance and requirements of MoEF for granting Environmental Clearance for Building, Construction, Townships and Area Development Projects as specified in the said Notification.

The information is well supported by abbreviations and definitions of commonly used terms, and answers to frequently asked questions, which will be helpful to professionals and developers, while designing mega constructions projects which attracts the provisions of Environmental Clearance from State and Central level regulatory authorities. I am sure that this will prove to be one of the best Guide and Manual to Designer, Architect and Developer of mega construction projects.

Abrupt Climatic Changes, Acidic Rain Fall, Depletion of Ozone Layer and Global Warming are the serious questions worrying today's scientists and still research is going on global level, to find out whether these changes are cyclic of the history of earth planet, or they are due to man made (pollution) activities arising out of population explosion.

No doubt that all Nations worldwide are making some sort of Legislature for Environmental Protection but the fact remains that there are no uniform legislations for environmental protection. Rich and Developing Countries like China, United Arab Emirates, United States of America are having their own (convenient) environmental protection laws which are sometime found contrary to the Environmental and Coastal Regulation Laws of other Countries. In absence of concrete scientific proofs, all predictions can be said to be more or less hypothetical and speculative. Therefore it can be said that there is fair amount of confusion world over on how to stop the global environmental degradation effectively.

The Developers, Architects and Project Management Consultants have to obtain Environmental Clearance/NOC for mega construction projects which in itself is time consuming and uphill task. Stringent conditions are being regularly added while granting EC, which are nowhere part of the directives of the Notifications or legislations. Even residential settlement are subject to long awaited bureaucratic clearances. It is fact that Environmental Clearance for mega Housing Projects can take more than couple of years which ultimately delays the projects and automatically increases price of housing stock. This needs one window clearance in the interest public at large.

Chapter-3, is very interesting which explains, "How in ancient India, respect and honour was given to environment by personifying various basic elements like Earth, Ether, Water, Fire and Air in the form of God". Even botanical variety and zoological species also are listed as carriers of these deities.

I have thoroughly enjoyed this Hand-book and I am sure that this "must book" will be necessity of personal Liabrary of every professional and developer. I salute the author Shri. Sudhakarji, for his one more dedication to PEATA (I) and I convey sincere thanks to him on behalf of all members of our Association for this timely endeavour.

SHIRISH SUKHATME
M - Arch (IIT),
President PEATA(I)

Mumbai
2014

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ABBREVIATIONS

ADA	- Area Development Authority
ASCI	- Administrative Staff College of India
BUA	- Built-up Area
CGWB	- Central Ground Water Board
CPCB	- Central Pollution Control Board
CRZ	- Coastal Regulation Zone
CSR	- Corporate Social Responsibility
CTP	- Chief Town Planner
DMP	- Disaster Management Plan
DP	- Development Plan
EAC	- Expert Appraisal Committee
EC	- Environmental Clearance
EIA	- Environmental Impact Assessment
EMP	- Environmental Management Plan
ETP	- Effluent Treatment Plant
FSI	- Floor Space Index
GC	- General condition
GRIHA	- Green Rating for Integrated Habitat Assessment
IA	- Impact Assessment
MoEF	- Ministry of Environment and Forests
MSL	- Mean Sea Level
NDC	- National Development Council
O & M	- Operation and Maintenance
RO	- Regional Office
R & R	- Rehabilitation and Resettlement
SEAC	- State Expert Appraisal Committee
SEIAA	- State Environment Impact Assessment Authority
SPCBs	- State Pollution Control Boards
STP	- Sewage Treatment Plant
TCPD	- Town and Country Planning Department
TOR	- Terms of Reference
UDPFI	- Urban Development Plans Formulation and Implementation

GLOSSARY OF COMMONLY USED TERMS (ENVIRONMENT AND POLLUTION)

A

- **Abatement** : To help or to encourage somebody in a crime. In this context, it is not to encourage or allow emission of environmental pollutants in excess of the prescribed standards.
- **Absolute Liability** : An unconditional and complete responsibility.
- **Abiotic Components** : These are non-living components which includes rocks, hills soil, water, air, gases etc.
- **Acid Rain** : Acid rain is a combination of gases such as Carbon-di-oxide, Sulphur-di-oxide, Nitrogen Oxide, and Chlorine combined with water vapours, which get converted into carbonic acid, sulphuric acid, Nitric and Hydro-chloric acid in presence of sunlight.
- **Adulteration** : To make something impure by adding some inferior and or hazardous substances/ingredients particularly in food, drink, drugs etc.
- **Air** : The invisible mixture of gases surrounding the earth, and or open space above the surface of earth.
- **Air Pollution** : The presence of various pollutants beyond prescribed limits in the Air, occurred due to discharge of industrial emissions, and from certain human activities connected with traffic, heating use of domestic fuel etc. which has detrimental effect on health of human & animal life including vegetation and property.
- **Animal** : A mammal, or a living organism that can move about of its own accord, and has specialized sense organs and nervous system, but not birds, reptile, fish or insects.
- **Apprehension of Breach of Peace** : Fear of breaking peace. Disputes arise between parties due to blockade of natural discharge sources which can cause apprehension of breach of peace.

- **Appraisal** : Detailed scrutiny of the application and documents thereof by the Expert Appraisal Committee or State Level Expert Appraisal Committee, for recommendation / rejection of Environmental Clearance for the project under reference.
- **Appeal to Authority** : To make serious or earnest request to higher authority to reverse the decision of lower authority.
- **Asphyxiation (Asphyxia)** : A condition caused by the body being deprived of Oxygen leading to suffocation, unconsciousness or death.
- **Authority** : A person nominated and or appointed on Statutory body with legal powers and rights.

B

- **Bar of Jurisdiction** : No Civil Court shall have jurisdiction to entertain any suit or proceedings under the Environment (Protection) Act, 1986, as the proceedings are of criminal nature.
- **Bio-diversity** : The variety of plant and animal life in the world or in a habitat.
- **Bio-logical Environment** : A natural mechanism that controls, certain regularly recurring physical processes is an organism.
- **Biotic Components** : These are living components consisting of animals of particular region, habitat, including human beings.
- **Building** : A structure with roof and walls constructed for different users.
- **Built-up Area** : The total constructed area covered by a building on all floors.

C

- **Civil Remedies** : In the context of India, Civil Remedies are available in the nature of compensation or damage to the victim and or cost to recover for the disturbed ecological balance or the environment from the pollutant.
- **Compulsory Acquisition** : An obligatory acquisition (of property etc.) required by Law or Rule thereof.
- **Compensation** : Something given to somebody to make up for loss, suffering, or injury caused to victim.
- **Constitution** : The Indian constitution, adopted by the constituent assembly on November 26, 1949, is a comprehensive document containing 395 articles and

several schedules. Protection of environment is fundamental right and duty of every citizen.

- **Constitution** : It is composition or formulation of a body of principles according to which a Nation, State or Organization is governed.
- **Construction** : This is the process to build or erect buildings or structures for different users.
- **Contamination** : To make something impure by its exposure to a poisonous or polluting substance or ingredient.
- **Contravention** : Committing an act that is not allowed by the Law.
- **Conservation** : A process of preservation or restoration of the Natural Environment, as well as careful use of natural resources.
- **Confiscation** : To seize or to take possession of something (property /assets) with proper legal authority.
- **Criminal Remedies** : A penal action and or punishment under Criminal Laws in connection with environmental pollution.
- **C.R.Z.** : Coastal Regulation Zone identified by the regulatory authority.

D

- **Deforestation** : Cutting or removing of large track of land covered by trees and plants.
- **Density of Population** : A quantum /quantity of people residing in a particular area. Generally it is a ratio of tenements permitted per net ha. in a Development Regulations.
- **Disaster** : Means a catastrophe, mishap, calamity or grave occurrence in any area arising from natural or man-made causes or by accident or negligence which results in substantial loss of life and property, and or degradation of environment beyond the coping capacity.
- **Disaster Management** : As per Section 2(c) of the Disaster Management Act, 2005 "Disaster Management" means a continuous and integrated process of planning, organizing, co-ordinating and implementing which are necessary and expedient for achieving objects of the Act.
- **Development** : An action of developing or the state of being developed such development of land, resources etc.

- **Development Plan** : Regional Development Plan of specific region prepared by the Civic/State Authority duly approved by State Government.
- **Dust Pollution** : Specific type of Air pollution, caused by powdery substance of earth and or waste materials / matter in powder form.

E

- **Ecology** : The branch of biology, concerned with the relations of organisms to one another and to their surroundings.
- **Eco-System** : Interdependence of non-livings and livings, having effect on each other.
- **Eco-imbalance** : It is a lack of proportion or imbalance of the interdependence of non-living and livings on each other.
- **Eco-Friendly** : Anything that is not harmful to the environment.
- **Eco-Sensitive Area/Zone (ESA)** : Extremely susceptible area of any region identified by the Environmental (Statutory) Authority.
- **Environmental Clearance** : A prior permission/clearance given for Category "A" & Category "B" development by the statutory / regulatory authority under the strict provisions of environmental requirements specified in the Notification dt. 14-09-2006 of MoEF.
- **Effluent Treatment Plant** : A cleaning or purifying mechanism of liquid waste or sewage before it discharged into river or sea.
- **E.A.C.** : Expert Appraisal Committee.
- **E.I.A.R.** : Environmental Impact Assessment Report.
- **Environment** : A natural world of surroundings or conditions in which person, animal or plant lives or operates, consists of biotic, abiotic and energy components.
- **Environmental Impact Assessment (EIA)** :- It is a report prepared by the consultant/s describing anticipatory impact of environment for the proposed project or activities, on base line parameters, both during the construction and operational phases, which also includes recommendation of mitigation measures to be implemented by the proponent.
- **Environment Protection** : The act of protecting or state of being protected to preserve the environment.

- **Environmental Pollution** : Means the introduction by a man into any part of the environment, of waste, water energy, energy or surplus energy which changes the environment adversely either directly or indirectly.
- **Environmental Pollutant** : Means any solid, liquid or gaseous substance present in such a concentration as may be, or tend to be injurious to the environment.
- **Equitable Development** : The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

E

- **Fauna** : The animals (mammals) of a particular region, habitat, or geological period. (compare with Flora).
- **Floor Space Index** : Means the quotient of the ratio of the combined gross floor area of all floors to the total area of plot.
- **Flora** : The plants of a particular region or period of time (compare with Fauna).
- **Forest Land** : A large track of land or area covered by trees and plants alongwith pastures or any other area that is declared by State as 'Forest Land' under Section 2(ii) of the Forest (Conservation) Act, 1990.
- **Forest Offence** : Means a crime or breach punishable under the Indian Forest Act, 1927.

G

- **Global Warming** : The temperature effect particularly warming, due to excessive increase of Carbon-dioxide (CO₂) in the environment /atmosphere posing danger to living organisms.

H

- **Hazardous Waste** : Means any substance or preparation which, by reason of its chemical or physio-chemical properties or handling, which may be liable to cause harm to human beings, animals, plants, micro-organism, property or the environment.
- **Heritage** : The things that has natural and or historic values that have been passed on by nature and or passed on from previous generations.
- **Human Rights** : The rights given by the Constitution of India to every Indian citizen, including right to environment that is right to life.

- **Hygiene** : The practice of keeping oneself and one's surroundings clean in order to prevent illness or diseases.

I

- **Industrial** : Anything having to do with industry and or its manufacturing activities.
- **Industrial Pollution** : It is man-made pollution. This class of pollution mainly caused by industrial waste, toxic liquids and gases produced by modern industries, which are hazardous to human health and to natural environment.

M

- **Marine Pollution** : This type of pollution occurs when solid waste, toxic liquids and gases are discharged into water bodies thereby endangering marine life and aqua spices.
- **Mining** : Excessive digging of earth to extract coal, and other such minerals.
- **MoEF** : The Ministry of Environment and Forests, - Government of India.

N

- **National Environment Control Board** : A statutory apex body constituted by the Central Government which is powered to take all actions or measures as it deem necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution.
- **Natural** : Existing in or obtained from nature, not made or caused by humans.
- **Natural Disaster** : A horrific and or tragic accident, and or a natural catastrophe that causes great damage and loss of life and property.
- **Natural Noise Pollution** : The noise pollution consists of exchanging voices of natural resources such as air, seas, volcanoes, rivers and living organs.
- **Natural Pollution** : The pollution caused due to natural calamities such as floods, earthquakes, cyclones, draughts, wildfire etc.
- **Natural Resources** : Soil, air, water, water bodies, rivers, sea, forests, and wild life are natural resources, which are god's gifts to universe.
- **N.G.T.** : National Green Tribunal, a body constituted under NGT Act & Rules, 2010.
- **Noise** : A sound or series of sounds that is loud or unpleasant.

- **Noise Pollution** : Means defilement of atmosphere due to sound. It is man-made pollution causes hearing impairment and mental imbalance besides affecting psychological health of human beings.

O

- **Occupier** : As defined in the Environment (Protection) Act, 1986, "Occupier" means a person who has control over the affairs of the factory or the premises and includes, in relation to any substance, the person in possession of the substance.
- **Offence** : Means breach, crime, fault, felony etc. In this context, it is an act that breaks the law or rules which leads to pollution of any kind and harm the environment.
- **Ozone Layer** : Ozone layer is the thin shield high up in the air/sky, that stops ultra violet rays of sun reaching the earth thus helpful in protecting human survival on planet earth.
- **Ozone Depletion** : An act which reduces quality of the ozone layers due to excessive release of chemicals such as Chlorofluoro carbons (CFCs) into the atmosphere, causing depletion of ozone layer.

P

- **Physical Infrastructure** : Means all on site services such as roads, street lights, water supply & sewerage system, storm water drains, electric and communication network sewage treatment plant etc. required for human needs.
- **Pollution** : According to Section 1 (3) of the U. K. Environment Protection Act, 1990, "the release into any environmental medium from any process of substance which are capable of causing harm to man or any other living organisms supported by Environment is Pollution".
- **Pollutant** : It is a waste material in the liquid or solid form of chemicals, toxic gases etc. which cause pollution and degrades environment.
- **Polluter** : The person or a body who causes pollution resulting degradation of environment.
- **Private Nuisance** : It is an act of affecting some particular individual or individuals as distinguished from the public at large.
- **Proponent** : A person who actively supports a cause of any idea or project.

- **Public Consultation** : It is a process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activities are ascertained.
- **Public Nuisance** : Under the provisions of Indian Penal Code, 1860, public nuisance means a common nuisance which causes any common injury, danger or annoyance to the public, which has injurious effects beyond tolerance.
- **Punishment** : In this context , it is an act to impose penalty on someone who is responsible for environmental pollution.

R

- **Radiation** : Energy sent out as electromagnetic waves or sub-atomic particles.
- **Radioactivity** : Sending out harmful radiation or particles, caused when atomic nucleus break up spontaneously.
- **Release of Toxic Substances** : An action to set free the intoxicating matter or properties in solid, liquid or gaseous forms into atmosphere leads to degradation of environment and injurious to health.
- **Reserved Forest** : Legally protected reserved track of land with trees and plants, where non-forest activities are prohibited.
- **Right to Environment and Air**: Under the Constitution of India every citizen has right to environment and fresh air essential for human survival.

S

- **Scoping** : It is a process to determine detailed and comprehensive terms of reference, by EPC and SEAC in case of project under Category "A" & "B-1"
- **Screening** : Scrutiny of an application by concerned SEAC for determining as to whether the project or activity requires further environmental studies for preparation of Environmental Impact Assessment (EIA) for its appraisal prior to grant of environmental clearance.
- **S.E.A.C.** : State or Union Territory level Experts Appraisal Committee, constituted by the Union Govt. at State and Central level.
- **S.E.I.A.A.** : State or Union Territory Environment Impact Assessment Authority, a Statutory authority constituted by the union Govt.

- **Sewage Treatment Plant** : An unit and or mechanism through which waste water and raw sewage is scientifically purified before its discharge in outlets.
- **Social Infrastructure** : Means on site all amenities supportive to the resident population such as Schools, Hospitals, Assembly halls, Gardens, Traffic Systems, Police Stations etc. defined as public reservations in the Development Plan.
- **S.P.C.B.** : State Pollution Control Board. A Statutory body Constituted by Central Govt. to function at State level.
- **Stockholm Declaration** : A charter of United Nations Conference held in June 1972 at Stockholm-Sweden, on preservation and enhancement of human environment.
- **Sustainable Development** : In the context of environmental matter, it is an improvement in human well being that allows us to meet the needs of the present without compromising the ability of future generation to meet their own needs is called sustainable development.

I

- **Terms of Reference (T.O.R)** : The guidelines for preparation of Environmental Impact Assessment which has been devised to improve the quality of report, to facilitate the decision making process transparent and easy.
- **Township/Town Planning** : Means integrated development of contiguous land which contains within itself requisite physical and social infrastructure.

U

- **Unauthorised Development** : Any type of development carried out in contravention of laws, regulations and norms prescribed there for.
- **U.T.P.C.C.** : Union Territory Pollution Control Committee, a statutory body constituted by Union Government.

W

- **Water** : The liquid which forms rivers, lakes, seas, rains and is the basis of the fluids of living organisms.
- **Water Bodies** : Means existence of water in rivers, lakes, streams and sea, either in flowing or stagnant form.

- **Water Management** : An act of management of sufficient water supply for public and private purposes including provisions and maintenance of water supply resources and water systems by Civic authority/Municipal Corporation.
- **Water Pollution** : Contamination of water or water bodies due to presence of toxic substances in solid, liquid or gaseous forms.
- **Wild Life** : As per the Wild Life (Protection) Act, 1972, Wild Life includes any type of animals, aquatic or land vegetation which forms part of any habitat on the planet earth.

NATURAL ENVIRONMENT & ENVIRONMENTAL AWARENESS IN ANCIENT INDIA

- **NATURAL ENVIRONMENT :-**

A geographical area of universe is termed and regarded as Natural Environment. It encompasses of naturally occurring Living and Non-living creatures and the interaction of all living species on the planet earth. In other words natural environment is natural home/habitat for living species.

In general, the 'Wilderness' is also known as natural environment on the planet, which is significantly valued for cultural, spiritual, moral and aesthetic reasons, since wilderness areas are vital for human habitation, spirit and creativity also. The wilderness includes areas within which natural process operates without noticeable human interference.

Therefore the natural environment encompasses broadly political, social and philosophical movement that emphasizes and advocates various actions and policies at various levels in the interest of protecting what nature plays the role in natural environment.

- **DEFINITIONS OF ENVIRONMENT :-**

- According to Section 2(a) of Indian Environment (Protection) Act, 1986, "Environment" includes water, air, land, human beings, other living creatures, plants, micro-organism and property.

_____ The Indian Environment (Protection) Act, 1986

- As per Section 1(2) of the Environment Protection Act, 1990, of United Kingdom, the term "Environment" consists of all, or any of the following medium, namely, air, water and land and the medium of air includes the air within the buildings and air within other natural or manmade structures above or below ground.

_____ The Environment Protection Act, 1990 of U.K.

- The "Environment" is the Biotic and Abiotic surrounding of an organism or population which includes the factors that have an influence in their survival, development and evolution.

_____ Wikipedia

- The Environment means the entire range of external influence acting on an organism, both the physical and biological, and other organism i.e. forces of nature surrounding an individual.

_____ Encyclopedia Britannica

- **COMPONENTS OF ENVIRONMENT :-**

Environment mainly encompasses three basic components which are :-

- i) **Living Component :-** This biotic surroundings consists of all types of animals, plants and human beings, on the planet earth.
- ii) **Non-living Component :-** This abiotic surroundings component consists of non-living things like earth/soil (Lithosphere), water (Hydrosphere) and air (Atmosphere), the natural resources available on the planet earth.
- iii) **Energy Component :-** This component consists of different types of energies i.e. solar, Geo-chemical, Hydro-electrical, Thermo-electrical, Nuclear-Atomic and energy due to radiation which in reality helps in maintaining the life of organisms.

- **TYPE OF ENVIRONMENTS :-**

Dr. S. C. Tripathi in his book of "Environmental Law" has divided environment in following two types :-

- i) **Natural Environment :-** This type of Environment is known as homeostatic environment mechanism, where in any change in the system caused due to natural processing is counter balanced by the change in the other components of the environment.
- ii) **Man-made Environment :-** This type of environment is created by men such as industrial revolution, communication network, agricultural apparatus, satellite and all other energy sources, as explained in energy component above.

- **ENVIRONMENTAL AWARENESS IN ANCIENT INDIA :-**

Hindu religion of India is one of the oldest and most renowned religion of the universe. As per Hindu mythology, right from 'Vedic Period' it is established fact that the universe is governed and controlled by 5 (five) basic elements, popularly known as "*Pancha Mahabhootas*", which are as under:-

- 1) Earth (Dharitri / Pruthvi)

2) Ether	(Antariksha / Aakash)
3) Water	(Jal)
4) Fire	(Agni / Tej)
5) Air	(Vayu)

In Vedas, Upanishads and Smruties, you will find importance of above 5 basic elements, and thereby its direct relation to human survival. To create desired awareness in human beings to respect and protect the natural environment, the above 5 elements were accepted and created as different forms of God, and adopted worshipping attitude towards them. Therefore right from Vedic period they are respected and worshiped in different format of Gods and Goddesses, as under :-

• Vasundhara	(Earth)
• Varun	(Water)
• Agni	(Fire)
• Antarikshya	(Ether)
• Vayu	(Air)

Apart from above 5 basic elements which protect human survival on earth, in ancient India to protect trees and flowers, are seen worshiped in following different divine forms :-

<u>Trees & Flowers</u>	<u>Representing Gods/Goddesses</u>
• Baniyan (Vat-Vriksha)	Brahmma / Vishwakarma
• Pipal	Vishnu & Krishna
• Lotus	Laxmi
• Mango	Govardhan & Laxmi
• Neem	Sitala & Manasa
• Palash / Palasa	Brahmma Gandharva
• Ashok	Indra & Gautam Buddha

Similarly following creatures / animals & birds are regarded as divine form of Hindu Gods & Goddesses :-

<u>Name of Animals & Birds</u>	<u>Representing Gods & Goddesses</u>
• Bull & Snake	Shiva
• Fish & Turtle	Vishnu
• Lion	Durga
• Rat & elephant	Ganesha
• Swan	Saraswati
• Owl	Laxmi

- Crocodile
 - Dog
 - Cow
 - Deer
 - Peacock
- Ganga
 - Bhairava
 - Dattatraya
 - Vayu
 - Kartikeya

During ancient time, human beings never had opportunity to pollute natural environment. In ancient period, environment and human beings were treated and respected as inseparable part of each other.

It can be seen from following various religious philosophies that in ancient India, there was great awareness amongst all religions in respecting and protecting natural environment.

- **Hindu Religion :-**

Under Hindu mythology, the Hindu religion and environment were having harmonious relations, which emphasizes environmental protection and as such environment was defined in various divine forms and were respected and worshiped as explained above. No human activities were permitted responsible for degradation of nature and natural resources.

- **Arya Chanakya :-**

Before 2000 years back, in **Kautilya's Arthshastra**, you will find the concept of protection of environment, where animals, trees, water, air, and earth were respected, worshiped and treated as divine power which supervise and control the universe. Every individual was made duty bound to protect the natural environment, and held responsible and made liable for punishment against breach of jurisprudence.

- **Other Religions :-**

The Jainism, Buddhism, Sikhism as well as Islamism also advocates, and emphasizes greater stress against destruction of natural resources. Almost all religions preach and promote non-violence, proper use of natural resources, as well as to respect, conserve and protect natural environment since they are considered as God's gift to the universe.

INTERNATIONAL ENVIRONMENTAL LAWS AND OBLIGATIONS OF INDIA

The international community under the flag of the UNO (United Nations Organisation) has proved its concern and commitment for environmental protection and thereby maintaining ecological balance. The UNO is responsible for several international Treaties, Declarations and Resolutions to guide member nations to take immediate and adequate measures to protect and maintain environmental standards in their countries.

UNO has gone one step further, and made it obligatory upon member nations to respond in maintaining environmental standards, even in the absence of any treaty, law, or declaration, and made it compulsory for the nations to adopt the principles of customary international law. At International forum it was also suggested that a Nation be prohibited to undertake activities within its jurisdiction, which will have effect of polluting water and air of neighbouring nation. It is rightly said that, in any legal system there must be liability of failure to observe obligations imposed by its laws, and as such this liability is called "responsibility" in the context of International laws. It is established fact that a treaty becomes international law if it is ratified by the requisite number of nations.

As far as preservation, protection and maintaining of environmental standards, the Stockholm (Sweden) declaration of 1972, on Human Environment has played key role in advocating to create common out look to inspire and guide the people across the globe, in preservation of nature and human environment.

• OBLIGATIONS OF INDIA :-

As regards environmental issues are concerned, India had ratified several treaties as a contracting parties, thus comes under international obligations that are related to preservation and protection of natural resources and environmental standards.

Following are some of the international treaties, adopted by India in respect to environmental problems and issues thereof :-

- i) The **Antarctic Treaty** (Washington, 1959) came in force on 23rd June 1961. India ratified on 19-08-1983.

- ii) Convention on **Wetlands of International Importance** (Ramsar-1971) India adopted on 01-10-1981.
- iii) Convention on **Protection of the World Cultural and Natural Heritage** (Paris-1972). India acceded on 16-11-1972.
- iv) Convention on **International Trade in Endangered Species of Wild Fauna & Flora** (Washington – 1973) In ratified on 20-07-1976.
- v) Convention on **Prevention of Pollution from Ships, 1973**, ratified by India on 24-11-1986.
- vi) Convention on **Conservation of Migratory Species of Wild Animals** (Bonn-1979), ratified by India on 04-05-1982.
- vii) Convention on **Conservation of Antarctic Marine Living Resources** (Canberra-1980) acceded by India on 17-06-1985.
- viii) UNO Convention on **Law of the Sea** (Montego Bay : 1982) signed and ratified by India on 10-12-1902.
- ix) Convention on **Protection of the Ozone Layer** (Vienna-1985) India ratified on 18-03-1991.
- x) Protocol on **Substances Deplete the Ozone Layer** (Montreal – 1987), acceded by India on 19-06-1992.
- xi) Convention on **Trans Boundary Movements of Hazardous Wastes and their Disposal** (Basel : 1989) ratified by India on 24-06-1992.
- xii) Convention on **Climate Change** (Res-de-Janeiro – 1992) ratified by India on 01-11-1993.
- xiii) Convention on **Biological Diversity** (Res-de-Janeiro – 1992), acceded by India on 18-02-1994.
- xiv) Convention on **Combat Desertification** in those countries experiencing serious Draught, particularly in Africa (Paris : 1994), ratified by India on 17-12-1996.
- xv) **International Tropical Timber Agreement** (Geneva : 1994) ratified by India on 17-10-1996.
- xvi) Protocol on **Environmental Protection to the Antarctica Treaty** (Madrid-1991) ratified by India on 15-01-1998.

It can be seen from the above conventions that all nations parties to treaties have realised the seriousness of environmental degradation, and have given their assurance to each other countries that they are duty bound to observe and honour the obligation under the said treaties, and will help each other countries to preserve and maintain the global environmental standards.

It is to be understood that the International Forums are not directly responsible for enforcement of international environmental laws. It has limited role of monitoring diplomatic roles. Every nation is responsible and accountable for its efforts in improvement of natural environment, since it is a duty of every contracting countries to treaty, to avoid and to abstain from any acts that will be injurious to other countries.

ENACTMENTS IN INDIA FOR ENVIRONMENTAL PROTECTION

The United Nations Conference on human environment have met at Stockholm-Sweden, during 5 to 16 June 1972, to consider the need for a human outlook to promote common principles to inspire and guide the peoples in the world in the preservation and enhancement of human environment, which is popularly known as “**Stockholm Declaration**”.

All the nations made amendmends in their then existing laws and or made new environmental laws, based on the principles under Stockholm Declaration. Besides environment related laws in force prior to 1972, in India, the Union Government has also made several amendments, provisions and new enactments for preservation, improvement and protection of natural environment, which are elaborated as under :-

- 1) **Indian Penal Code, 1860 (Environment Protection provisions)**
Sections 268 to Section 294-A of Indian Penal Code, 1860, are related and deal with the provisions of environmental protection. It defines negligent/malignant acts in relation to public hardship including punishment for such offences.
- 2) **Indian Forest Act, 1927,**
This is an enactment of British regime promulgated for conservation and protection of forests in India.
- 3) **The Factories Act, 1948,**
Under this Act, the occupier of every hazardous unit is required to disclose to the workers the health hazards involved in the activities, as well as punitive provisions for non-compliance of provisions of the Act.
- 4) **The Mines and Minerals (Regulation and Development) Act, 1957,**
This Act intended to promote the scope of mines and minerals development. Realising devastating environmental impact on mining, the Act now provides measures for greater environmental security.
- 5) **The Atomic Energy Act, 1962,**
Under this Act, the Union Government is under legal obligation to lay down the norms to prevent workers, and public handling or dealing with radioactive substances, from radiation hazards, and also guarantee for their safety.

- 6) The Insecticides Act, 1968,**
Under this Act, the system of licensing the process of manufacture and distribution of insecticides is regulated, including norms of safety of workers manufacturing and handling of insecticides.
- 7) The Wild Life (Protection) Act, 1972,**
This Act provides for the protection of wild animals, birds, plants and matters connected therewith or ancillary or incidental thereto, with a view to ensure ecological balance and environmental security.
- 8) Code of Criminal Procedure, 1973 (Environment Protection provisions)**
The provisions made in Section 133 to Section 143 of this code is related specially to public & private nuisance, particularly powers to remove unlawful obstruction or nuisance from public places, including nuisance of construction activities, in public interest.
- 9) The Water (Prevention And Control of Pollution) Act, 1974,**
Main objects of this Act are (1) preservation, control and abatement of water pollution (2) Investigation and research of water pollution, (3) Developing economic methods of sewage effluents treatments etc.
- 10) The Forest (Conservation) Act, 1980**
An Act to provide for the conservation of forests, matters concerned therewith or ancillary or incidental thereto, with strict and punitive provisions against deforestation, to save ecological imbalance and prevent environmental deterioration.
- 11) The Air (Prevention And Control of Pollution) Act, 1981**
Main objects of this Act is to preserve, control and abate Air pollution, as well as establishment of State and Central regulatory boards, with legal powers and functions related thereto for its implementation.
- 12) The Environment (Protection) Act, 1986,**
The main objects of the Act are (1) Improvement and protection of environment (2) Regulations for discharge of pollutants, (3) Handling of hazardous substances (4) Deterrent punishment to those who endanger human environment, safety and health etc.
- 13) The Public Liability Insurance Act, 1991,**
Under the Act, the owner is required to compensate victim, irrespective of the fact whether accident occurred due to victim's default or not.. The Act makes it

obligatory for owner to take out insurance policy for workers covering potential liability arising out of accidents.

14) The National Environmental Tribunal Act, 1995,

This Tribunal is established under the Act, for expeditious disposal of cases arising out of industrial accidents and disasters due to mishandling of hazardous materials and substances harmful to human life.

15) The National Environment Appellate Authority Act, 1997,

An Act to provide for the establishment of a National Environment Appellate Authority to hear appeals with respect to restrictions of areas in which any industries, operations, processes, class of industry, operations and processes carried out subject to certain safeguards under Environment (Protection) Act, 1986, with legal powers for matters connected and incidental thereto.

16) The Noise Pollution (Regulation And Control) Rules, 2000,

The main object of this enactment is to regulate and control noise producing and generating sources with the objective to maintain the ambient air quality standards incidental to noise pollution.

17) The Wild Life Conservation Strategy, 2002,

The Central Government has adopted new strategy for conservation and protection of Wild Life in the Country, and constituted a Statutory authority of Forest Commissioner to look into reforms, restructure and preservation of forests and wild life therein.

18) The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2007,

An Act to recognize forest rights, rights of occupation in forest land, of forest dwelling scheduled tribes and other traditional forest dwellers, who have been residing in such forests for generations, who are dependent on the forest or forest land for their bonafied livelihood.

19) The National Green Tribunal Act, 2010.

This is an Act to provide for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases related to environmental protection and conservation of forests and other natural resources, with powers to enforce legal rights related to environment including grant of relief and compensation to victims for damages.

GLOBAL WARMING AND CLIMATIC CHANGES

- **GLOBAL WARMING :-**

Global warming is a serious issue of paramount importance, since it is directly related to degradation of environmental standards and is most injurious to natural resources. Environmental scientists have spent decades figuring out what exactly is causing global warming and its adverse effects thereof. They have also looked into natural cycles and events responsible for influencing climate, resulting in climatic changes.

The scientists came to the conclusion that several types of greenhouse gases emitted by humans in various ways are most responsible for global warming. Carbon dioxide (CO₂) in excessive quantity in the atmosphere, which is generated from the combustion of fossil fuels in cars, factories, and electricity production. Apart from carbon dioxide, other contributors to global warming include methane released from landfills, agriculture and industrial processes, as well as deforestation. The forests otherwise can store and neutralize carbon dioxide (CO₂) to a great extent.

- **CLIMATIC CHANGES :-**

The Organisation of leading climatic scientists in the world, i.e. "The Intergovernmental Panel on Climate" concluded that, since 1990, yearly emissions have gone up by about 6 billion metric tons of "Carbon dioxide equivalent" worldwide, which is more than a 20% increase, has established beyond doubt that the earth is warming. The climatic scientists also estimated that the planet earth will warm anywhere from 2.7 to 11 degrees Fahrenheit between 1990-2100. Only God and nature will predict the catastrophic effects of climatic changes in such a situation.

- **PROBABLE EFFECTS OF WARMING & CLIMATIC CHANGE ON ENVIRONMENT:-**

Global warming resulting in a change of climate is a serious threat to the environment and a challenge before India, which at least at this stage seems to be unstoppable and uncontrollable. A 2-degree Celsius temperature increase is considered as the maximum tolerance limit, and further temperature increase will create chaos and will be harmful to every living habitant.

Global warming progress, may lead to sea level rise and submerging of coastal habitation, drying up of rivers, lakes and underground water. Due to climate changes rainfall patterns will be changed, as well as glaciers will melt resulting into floods causing rivers to die. Rising of temperature and lack of water will cause agricultural catastrophe.

January & February 2014 are most wettest and coolest months for UK and USA. Both countries are facing effects of climate change which has caused heavy floods and winter storms, resulting great suffering and total disturbance in day to day life of the citizens of both the countries. This is most dangerous call of Global warming and should be taken very seriously by every nation to avoid future catastrophe.

On this backdrop it has become need of the hour, that India should take immediate steps and impose strict implementation of regulations for maintaining eco-balance and to protect nature and natural environment.

POLLUTION AND EFFECTS OF POLLUTION

Pollution and Pollution Control are serious and burning issues throughout the world. All nations are facing effects of environmental imbalance, causing of global warming and health hazards to mankind. Before going further into details of degradation of environment, it is essential to understand pollution in reality, which is main villain in the environmental melodrama. The Pollution is defined by various authorities as under:-

- **DEFINITIONS :-**

- "Pollution is the introduction of contaminants to natural resources which causes adverse effects and changes in natural environment".
- "The introduction by man into environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structure or amenity or interference with legitimate uses of environment".

_____ Royal Commission on Environmental Pollution - UK

- "The release (into any environmental medium) from any process of substances which are capable of causing harm to man or any other living organisms supported by the environment.

_____ Environment Protection Act, 1990 - UK

- "Presence in the Environment of any Environmental Pollutant injurious to the Environment"

_____ The Indian Environment (Protection) Act, 1986

- "Pollution means any substance or activity capable to damage or injury, lowering the environmental quality.

_____ Dr. S. C. Tripathi in his book "Environmental Law".

- **CLASSIFICATION OF ENVIRONMENTAL POLLUTION :-**

As per Section 2(C) of the Indian Environment (Protection) Act, 1986, 'Environment Pollution' means the presence in the environment of any environmental pollutants. Like environment, the pollution also can be classified into two categories as explained below :-

- i) **Natural Pollution:-** The pollution caused by natural calamities like deluge, great floods, earthquakes, land-slides, cyclones, volcano irruptions, hurricanes, tornadoes, famine, draughts etc. are covered in this classification.
- ii) **Man-made Pollution :-** This is a man-made creation of pollution, mainly due to emission of industrial waste, chemicals and toxic gases, into atmosphere as well as deforestation, which cause health hazards to men and animals resulting into adverse effects on soils making them infertile.

- **TYPES OF POLLUTIONS, ITS COMPONENTS & HEALTH HAZARDS :-**

The pollution occurs in different forms due to exposure of pollutants to the environment. Various types of pollutants, and several components are responsible for different types of pollutions which causes health hazards to living species, which are explained as under:-

- **Air Pollution :-** Air pollution is the contamination of air by harmful toxic gases, smoke, oxides of carbon, as well as sulfur and nitrogen, released in excessive quantity into atmosphere.

This is the most prominent and dangerous form of pollution. Excessive burning of fossil fuels, exhaust fumes from vehicles, release of hazardous chemical substances, toxic gases, radiation spills etc. are main causes and culprits of air pollution, which is directly linked to asthma and all types of respiratory illnesses, including lung cancer.

Note : As per recent survey Delhi (India) is the most (air) polluted city in the world.

- **Water Pollution :-** Water pollution is the contamination of any water and or water bodies such as rivers, lakes, ground water, oceans etc. due to its exposure to excessive hazardous pollutants.

Almost 60% of the species live in the water bodies. Water pollution occurs due to dumping of industrial waste, waste water, chemicals, raw sewage, oil (Spills), detergents etc. in water bodies which causes severe contamination and irreparable damage to aquatic species. It not only harms marine life but it also contaminates entire food chain, severely affecting human health. This pollution is responsible for water borne diseases like Cholera, Diarrhea, Dysentery, Eczema, Itch, Jaundice, Pityriasis, Ringworms etc. Water pollution causes approximately 14000 deaths per day, mostly due to contamination of drinking water by untreated sewage, in developing countries.

- **Land / Soil Pollution :-** Land/Soil pollution is the degradation of Earth's surfaces and its inner layers caused by misuse of natural resources and improper disposal of hazardous waste mainly by human activities.

Excess use of pesticides and insecticides, absorbs nitrogen compounds from the soil, making it unfit for plants. Deforestation, mining, erosion of soil due to cutting hills and reclamation of soil with harmful debris are main factors for Land/Soil pollution.

Land Pollution is responsible for infertile soil and erosion of soil, and causes health hazards to plants, crops, humans and animals too.

- **Noise Pollution :-** Noise pollution occurs due to excessive loud and irritating sounds harmful to humans and animals, which encompasses roadway noise, aircraft noise, loud speakers, concerts, industrial noises as well as high intensity sonar. Construction activities on large scale either erection or demolition are equally responsible for noise pollution due to continuous use of heavy construction equipments on site.

Noise pollution leads to psychological problems like stress, hypertension, hearing impairments etc.

- **Light Pollution :-** Light pollution mainly occurs due to prominent illumination of an area, which largely visible in mega cities, particularly on advertising boards and billboards, and also in any mega night events /concerts. This greatly affects specifically residential areas. It also affects the astronomical observations and activities making stars almost invisible.

The light pollution involve excessive use of energy. This pollution causes health hazards. Specifically it disturbs our sleep cycles, corrupts our kids, telescopes & their curiosity.

- **Thermal / Heat Pollution :-** This causes due to excess heat in the environment creating unwarranted changes in atmosphere as well as increase of temperature due to human activities. Use of water as coolant in a power plants, excessive construction activities (mainly in cities), increase in automobile vehicles, deforestation etc, are responsible to increase the earth /atmosphere temperature to great extent.

This pollution is harmful for human health and specifically wild life preservations.

- **Visual Pollution :-** This pollution can be refer to the presence of overhead transmission lines, sky scrapers, motorway billboards, large hoardings, junk yards, open strash storages, municipal solid waste and debris dumping grounds.

Mostly this kind of pollution is annoying and depressing which may be subjective topic. This pollution can cause psychological problems mainly depression and irritation etc.

- **Radioactive Pollution :-** This pollution is highly dangerous to human health which can occur due to malfunction of nuclear plants, improper disposal of nuclear waste, nuclear accidents, and disposal of waste of nuclear power generation etc.

It causes cancer, infertility, blindness, sterilization of soil and also can adversely affect air and water quality to great extent.

- **FACTORS RESPONSIBLE FOR POLLUTION :-**

Following man-made factors are responsible for causing environmental pollution :-

- i) Discharge of pollutants into air and water.
- ii) Uncontrolled and excessive use of pollutants.
- iii) Unmindful exploitation of natural resources.
- iv) Non-stop industrial growth and development.
- v) Improper disposal of industrial chemicals, solid waste, raw sewage etc.
- vi) Lack of management of solid waste
- vii) Inadequate management of electro-magnetic energy.
- viii) Uncontrolled population growth.
- ix) Unplanned urbanization.
- x) Deforestation.
- xi) Lack of education and environmental awareness.
- xii) Poverty, and so on.

- **MAJOR PROBLEMS RELATED TO ENVIRONMENTAL POLLUTION :-**

Environmental pollution and or environmental degradation both are equally injurious to human health. This is a most worrying and serious issue before all nations. Many countries worldwide, have enacted legislations to regulate and control various types of pollutions, and simultaneously mitigating the adverse effects of pollution on human beings.

Even though the developing countries are religiously and strictly observing pollution control norms, however the condition of non-developing, semi-developing countries is pathetic. Mumbai, Delhi, Calcutta are one of the most polluted cities in the world, which is alarming situation and need immediate protective measures and actions.

Even through, there are several factors responsible for pollution, specifically in India following are major problems related to environmental pollution :-

- i) **Uncontrolled Growth of Population** :- Uncontrolled growth of population is a major responsible factor for environmental pollution. India is a second largest populated country in world, thus facing direct impact on environmental pollution. The uncontrolled growth in population always demands more food, more water, more land and more shelters. The growing demands of population, are steadily giving rise to man-made pollution.
- ii) **Unplanned Urbanization** :- Heavy and constant migration of population from rural areas to urban centers has practically crossed all limits of tolerance. This explosion of population in urban centers from time to time is creating chaos resulting in total confusion and disorder in civic organization which has to provide minimum infrastructure facilities to the population. This uncontrolled situation leads to unauthorised and unplanned urbanization which causes environmental pollution to great extent.
- iii) **Growth of Industrial Development** :- Economic prosperity and Industrial development are two sides of one coin, and as such industrial growth is seen increasing in every nation across the globe. The rapid industrialization has created enormous exploitation of natural resources, causing heavy damage to the environment. These industries are emitting excessive toxic gases and industrial waste, affecting human health, aquatic life, plants and trees. Since the industrial growth is need of hour, it is essential to maintain scientific balance between industrial development and environmental standards.
- iv) **Deforestation** :- Conversion of forest land into agricultural and urban land use, are main culprits of deforestation. We are conveniently forgetting that forest is a god's gift to man-kind and is a shelter and habitat of numerous kinds of animals which plays major role in the process of photosynthesis thus giving natural support for survival. The deforestation is disturbing eco-balance to great extent.
- v) **Poverty** :- It is a fact that poverty invariably causes damage to environment. To meet their day today needs, such as food, water, fuel, shelter, fodder for cattle etc., poor are always constrained to exploit natural resources. Unless and until necessary steps are taken to eradicate the poverty, it will remain as a major polluter.
- vi) **Lack of Awareness** :- The present education system in India is not at par with developed countries, and as such lack of education and awareness of

environment is also responsible for degradation of environmental quality to certain extent. A common man is hardly aware of environmental problems, since he was never taught or never made aware of environment importance and his mandatory duty of environment protection. Environmental awareness should be taught right from the primary education. One should never forget that lack of awareness of environmental education is a root cause of environmental degradation in our country.

- **ADVERSE EFFECTS OF POLLUTION :-**

The pollution is greatly responsible for human and animal health hazards, degradation of environment, infertile lands, depletion of Ozone Layer, and most importantly Global warming, which has created alarming situation and far reaching adverse effects, now being faced by every developed country in the world.

Following are some of the adverse effects of pollution :-

i) Human Health :- Asthma, Lung Cancer, Chest Pain, Congestion, Throat inflammation and such respiratory diseases including Cardiovascular diseases, are caused by Air pollution.

Skin related problems, irritations, rashes etc. are caused due to water pollution, whereas noise pollution leads to stress, hearing loss and sleep disturbance.

ii) Degradation of Environment :- Environment is the first casualty of air and water pollution. Regular increase in the amount of carbon dioxide (CO₂) in the atmosphere leads to smog, thus prevent sunlight reaching to earth, and prevent process of photosynthesis which is essential for human survival. Toxic gases in air can cause acid rain degrading quality of soil.

Water pollution leads to life threat to marine and wildlife species.

iii) Depletion of Ozone Layer :- Ozone Layer is a thin shield high up in atmosphere preventing ultra violet rays of sun reaching the earth.

Chemicals such as Chlorofluorocarbons (CFCs) released excessively into atmosphere leads to depletion of Ozone Layer.

iv) Infertility of Lands :- It is seen that various forms of chemicals generated from industrial waste released in to water affects the quality of soil to great extent.

Excessive and constant use of insecticides and pesticides under the disguise of fertilizers, affects agricultural produce considerably, thereby soil may remain infertile for indefinite period.

v) Global Warming :- The emission of greenhouse gases, particularly excessive carbon dioxide (CO₂) leads to Global warming. Increase in Industrial growth,

automobile vehicles, tree cutting for excessive construction activities, deforestation factors are responsible to increase CO₂ in the environment.

The increase of CO₂ in atmosphere leads to melting of polar ice caps resulting into increases in sea and river levels and change in its temperature levels which can pose danger to human habitation along coastal areas.

Since 1990, yearly emissions have gone up by about 6 billion metric tons of "Carbon dioxide equivalent" worldwide, which is more than 20% increase. It is a fact that planet earth is warming. The Intergovernmental Panel on climate change (The organization of leading climate scientists in the world), concluded that the earth will warm anywhere from 2.7 to almost 11 degrees Fahrenheit between 1990 and 2100.

- **MOST POLLUTED PLACES IN THE WORLD :-**

The Blacksmith Institute, an international non-for-profit organization issues annual list of some of the worst polluted places. In 2007 issue, Azerbaijan, China, India, Peru, Russia, Ukraine and Zambia are declared most polluted places in the developing world.

- **RECENT STUDY AND SURVEY :-**

As per recent environmental study and survey carried out by the scholars of Yale and Columbia University-USA, out of 178 countries, as per index, India is on number 155, which is much below than China & even Pakistan. In spite of ample natural resources, India is miserably failing in protection of environment due to its lack of political and social will which do not give priority for strict implementation of environmental regulations.

CONTROL OF ENVIRONMENTAL POLLUTION (PREVENTIVE & REMEDIAL MEASURES)

Pollution Control is the most challenging issue before all the nations. Degradation of Environment leads to health hazards to all living species. Development and uncontrolled population growth, regular exodus from rural to urban centres are some of the major factors responsible mainly for environmental pollution in urban areas.

- **STOCKHOLM DECLARATION :-**

The “**Stockholm Declaration**” on Human Environment of 1972, actually brought the seriousness of this issue before all the countries across the globe. The United Nations Conference held on June 1972, considered common outlook and common principles to inspire and guide people worldwide, in preservation, protection and enhancement of human environment, which has officially advocated for :-

- **Common Principles :-**

- i) Right to environment means right to life itself.
- ii) Protection of human environment a major issue.
- iii) Gross deficiencies harmful to human environment.
- iv) Environment problems caused by under development.
- v) Uncontrolled growth of population.
- vi) Prudent care for environment.
- vii) Common efforts for preservation and improvement of human environment.

The “**Stockholm Declaration**” is based on some of the following convictions and basic principles which advocates for fundamental rights of every human being, which includes :-

- **Convictions and Fundamental Rights :-**

- i) Quality environment for life.
- ii) Protection of natural eco-system
- iii) Maintaining renewable resources.
- iv) Protection of Wild Life and its habitats
- v) Careful use of non-renewable resources.
- vi) Stoppage of release of toxic substance in atmosphere.

- vii) Government to undertake to take preventive measures.
- viii) Promoting sustainable developments.
- ix) Removing of environmental deficiencies.
- x) Unified measures to prevent environment.
- xi) Education for proper awareness about preservation and protection of natural environment.

• **OBJECTS OF ENVIRONMENTAL PROTECTION :-**

Environmental Protection in simple term is a practice of protecting natural environment at individual, organizational and or at Governmental levels, for the benefit of humans, and all living species on the planet earth. The objects of environmental protection can be successfully achieved by ethics, educational awareness and proper legislations. Environment protection to become reality, it is obligatory and essential for the societies to develop each of these areas very carefully. On this background the objectives of environmental protection can be said as under :-

- i) Proper and mindful exploitation of natural resources.
- ii) Controlled, restricted and mindful use of natural resources.
- iii) Protection and maintenance of environmental quality.
- iv) Balancing and protecting of the eco-system.
- v) Achievement of substantial sustainable development.
- vi) Identifying pollution problems.
- vii) Environmental Education and Training for desired awareness.
- viii) Punitive provisions and laws for punishing the polluters.

• **RECOMMENDATION OF ENVIRONMENTAL SCIENTISTS :-**

The Environmental scientists world over expressed their concern on control of pollution and advocated for certain remedial measures to prevent and control pollution to save the natural environment and to achieve following goals :-

- i) Reduction and clean up of pollution, with future goals of zero pollution.
- ii) Conversion of non-recyclable materials into energy or secondary fuels.
- iii) Reduction in societal consumption of non-renewable fuels.
- iv) Development of alternative, green, low-carbon or renewable energy sources.
- v) Conservation and sustainable use of scarce natural resources such as water, air and soil/land.
- vi) Protection to unique eco-systems
- vii) Protection to endangered species extinction.
- viii) Protection of bio-diversity and eco-systems.
- ix) Protection of nature and bio-sphere resources.

- **POLLUTION CONTROL :-**

Pollution control means control of emissions and effluents into air, water or soil. Pollution prevention and waste minimization are more effective methods than process of pollution control. In the field of land development, low impact development technique can prevent urban runoff.

“The solution to pollution is dilution”. It is a dictum summarizing a traditional approach to pollution management. Simple dilution treatments on a large scale for controlling environmental pollution are most effective methods since sufficiently diluted pollution may not be harmful to human existence. However following are some of the preventive and remedial measures to control pollution :-

- **PREVENTIVE & REMEDIAL MEASURES :-**

- **Air Pollution :-**

- i) The exhausts from automobiles and workshop machinery should be controlled.
- ii) The ISO standards must be rigorously followed and strictly implemented for industrial usages.
- iii) Toxic & gaseous pollutants, chemicals etc. should not be released into air without proper purification treatment and its enough dilution.

- **Water Pollution :-**

- i) Industrial waste, chemicals, waster water, raw sewage etc. should not be discharged into out let, unless the same are purified through scientific processes and diluted enough.
- ii) Avoide excessive use of pesticides and insecticides. Advocate for use of organic fertilizers for agricultural produce.
- iii) Pre-treatment to remove toxic components from domestic sewage, industrial waste water, Agricultural waste water through treatment plants before its discharge in water bodies.
- iv) Proper disposal of storm water and effective water management.

- **Soil Pollution :-**

- i) Construction activities in sensitive area should be discouraged to prevent soil erosion.
- ii) Adopt Reduce-Reuse-Recycle methods at domestic & social level. This will effectively reduce solid waste.

- iii) Adopt bio-fertilizers and manures instead of use of chemical fertilizers.
 - iv) Adopt biological methods of pest control, which can reduce use of chemical pesticides, thereby minimizing soil pollution.
 - v) Recycling and recovery of materials methods be adopted, which will decrease the volume of refuse, and will help in conservation of natural resources.
 - vi) Control of land loss and soil erosion can be achieved by restoring forest, grass and green cover.
 - vii) Crop rotation or mixed cropping can improve fertility of soil.
- **Solid waste treatment :-**
 - i) Proper scientific methods should be adopted for management of solid waste disposal.
 - ii) Industrial waste can be treated physically, chemically and biologically until they can be neutralized and or made much diluted, and become less hazardous.
 - iii) Environmental and aesthetic considerations must be taken into consideration before selecting solid waste dumping sites.
 - **Noise Pollution :-**
 - i) Steps to be taken against the noise levels in area/zone that it shall not exceed the ambient air quality standards.
 - ii) To impose responsibilities and to implement and enforce noise control measures decided by the authority.
 - iii) A loud speaker or any other public address system except in closed premises should not be allowed to operate without permission from authority.

TOWN PLANNING AND ENVIRONMENT

There is a direct relation between Town Planning and Environmental Standards. It is essential for all States and Civic Authorities to keep in mind scientific and technological development conducive to environment in general. The planning authorities has to study and examine the problems of health and unhygienic living environment, and its impact on the society while planning township and framing its Development Control Rules to stop any unauthorised development.

It is to be clearly understood that only sustainable development will prevent and control environmental hazards. Hap hazardous, unmindful and poor urban and rural planning are the main factors to cause impact on environmental pollution. The environmental pollution in fact, is a negative, denial, and or refusal effect of non-sustainable development.

Our country is a fabric of complex and composite society. Since India has adopted socialistic pattern of constitution, every state has to carry out enormous obligations and duties for taking care of health, education, living conditions of peoples of various casts and creeds, having its own social complexity. Therefore welfare of society remains paramount consideration for states.

On this backdrop it becomes obligatory for State and planning authorities to make town planning in such a way and manner so that benefits of proper use of natural resources will reach to people, without endangering the environmental standards. Since unplanned development is environmental hazards, it becomes essential and obligatory for the town planners to take into consideration adverse environmental impacts, and workout proper solutions to make the development eco-friendly.

• OBJECTS AND FEATURES OF TOWN & COUNTRY PLANNING :-

To achieve proper balance between minimum and correct use of natural resources, sustainable development and protection of natural environment, the town planners for planning purpose, has to take into consideration following objects :-

- i) Sanitation and Health care of rural & urban population.
- ii) Controlled use of natural resources.
- iii) Proper utilization of natural and man-made components.
- iv) Developmental requirements and needs of population based upon economic viability.

- v) Needs of the societies and its impact on environmental standards.
- vi) Provisions of social and regular infrastructure services, public utility spaces, road network, transport, water supply etc.
- vii) Role of State and Civic bodies.
- viii) Balanced distribution of resources in the society.

• **PLANNING AND ENVIRONMENTAL STANDARDS :-**

Preparing Development Plan and framing development regulations thereof is collective responsibility of State Government along with concerned civic bodies, since they are under obligation to safeguard the interests of the society at large as well as to prevent anticipated impact on environment. Therefore following issues and factors relevant to environment should be taken into consideration :-

- i) Regulations, Policies & Rules should be framed in such a manner that it will cause least disturbance to the existing environment.
- ii) Environment protection at all levels should be ensured while preparing development plans and framing of rules thereof.
- iii) Local/Civic authorities should strictly monitor the development according to development plan and to adhered to the environmental safeguards.
- iv) While approving project plans, local/civic authorities should impose specific conditions which will ensure environmental protection.

The statutory bodies of self-government (civic authorities) are under obligation to prepare and plan for economic development and social justice. Under 12th Schedule of the Constitution of India, the main function and service to be made available to society by their bodies / authorities are as under :-

- i) To propose zoning plan for economic and social development specifying land users, public reservation etc.
- ii) To Regulate use of land and construction activities within the parameters of Rules.
- iii) Supply of water for industrial and domestic purpose.
- iv) Solid water management and sanitation conservancy
- v) Public Health
- vi) Urban Forestry
- vii) Slum Improvement
- viii) Urban facilities, amenities for citizens etc.

CENTRAL POLLUTION CONTROL BOARD (CPCB) AND MAHARASHTRA POLLUTION CONTROL BOARD (MPCB)

- **ESTABLISHMENT AND OBJECTS OF CPCB:-**

The Environment (Protection) Act, 1986, came into force on 19th November 1986 (29 of 1986) to close the gaps in the Water and Air Acts in force. While constituting the Central Pollution Control Board (**CPCB**) some more functions were added to CPCB to play an important role in abatement and control of pollution by collection of relevant data, providing scientific information and rendering technical inputs in the National policies for promoting awareness of Environmental Protection at the different levels of the Government and Public at large.

Under Section 3 of the Water (Prevention and Control of Pollution) Act, 1974, the Central Pollution Control Board (CPCB) was constituted on 22nd November 1974. It is a statutory organisation working under the Ministry of Environment and Forests (MoEF) of Union Government. CPCB is an apex /appellate authority / body in our country in the field of pollution control popularly known as technical wing of MoEF.

- **FUNCTIONS OF CPCB :-**

The CPCB conducts Environmental Assessment and Research continuously and is responsible for maintaining National Standards under various Environmental laws. It also monitors the Water and Air quality and maintains its quality data. It also works with different levels of the Government as well as with various industries in arranging variety of pollution prevention programmes and energy conservation. CPCB has to advise the Central Government to prevent and control Water and Air Pollution, along with its counter parts i.e. State Pollution Control Boards (SPCBs) throughout India. The CPCB is responsible for implementation of legislations related to prevention and control of Environmental Pollution.

- **ORGANISATIONAL DATA OF CPCB :-**

CPCB is having its Head Office in New Delhi. It has 7 Zonal Offices and 5 Laboratories to cater the needs of various Pollution Control Boards at State levels. The Zonal Offices are located at Kolkata, Bangaluru, Shillong, Bhopal, Lucknow, Vadodara and a project office at Agra. It has about 500 full time employees which includes Engineers, Scientists and Environmental Protection Specialists.

The Central Pollution Control Board is headed by a full time Chairman, nominated and appointed by the Central Government. The other members of the Board are as under:-

- i) A full time Member Secretary.
- ii) Central Government representatives not more than 5.
- iii) Members of the State Pollution Control Board not more than 5
- iv) Public members not exceeding 3 expert in Agriculture, Fishery etc.
- v) 2 Members to represent the Companies or Corporations owned, and control by the Central Government.

Note : *All the members of the Central Pollution Control Board are nominated and or appointed by the Central Government only.*

• **APPELLATE AUTHORITY AND APPEAL:-**

The Central Pollution Control Board is an appellate authority to whom a aggrieved project proponent can appeal against any decision, order, direction and or any condition laid down either by State Pollution Control Board (SPCB), State Environment Impact Assessment Authority (SEIAA) or State Expert Appraisal Committee (SEAC) within the time limit prescribed from the date of receipt of such order by the proponent.

MAHARASHTRA POLLUTION CONTROL BOARD (MPCB)

• **ESTABLISHMENT :-**

Maharashtra Pollution Control Board was established on 7th September, 1970 under the provisions of Maharashtra Prevention of Water Pollution Act, 1969. The Water (P&CP) Act, 1974, a central legislation, was adopted in Maharashtra on 1-06-1981 and accordingly Maharashtra Pollution Control Board was formed under the provisions of section 4 of Water (P&CP) Act, 1974. The Air (P&CP) Act, 1981, was adopted in the Maharashtra in 1983 and initially, some areas were declared as Air Pollution Control Areas on 02-05-1983. The entire state of Maharashtra has been declared as Air Pollution Control Area since 06-11-1996. The Board is also functioning as the State Board under section 5 of the Air (P&CP) Act, 1981.

• **OBJECTS AND FUNCTIONS OF MPCB :-**

The Maharashtra Pollution Control Board is implementing various Environmental legislations of Union Government in the State of Maharashtra mainly including water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution)

Act, 1981, Water (Cess) Act, 1977 and some of the provisions under environmental (Protection) Act, 1986 and also the Rules framed there under like, Biomedical Waste (M&H) Rules, 1998, Hazardous Waste (M&H) Rules, 2000, Municipal Solid Waste Rules, 2000 etc. The MPCB is functioning under the administrative control of Environment Department of Government of Maharashtra. Some of the important functions of MPCB are as under :-

- To plan comprehensive program for the prevention, control or abatement of pollution and secure execution thereof.
 - To collect and disseminate information relating to pollution and the prevention, control or abatement thereof
 - To inspect sewage or trade effluent treatment and disposal facilities, and air pollution control systems and to review plans, specification or any other data relating to the treatment plants, disposal systems and air pollution control systems in connection with the consent granted.
 - Supporting and encouraging the developments in the fields of pollution control, waste recycle reuse, eco-friendly practices etc.
 - To educate and guide the entrepreneurs in improving environment by suggesting appropriate pollution control technologies and techniques.
 - Creation of public awareness about the clean and healthy environment and attending the public complaints regarding pollution.
- **ORGANISATIONAL SET-UP :-**

The Board consists of following persons :-

- i) Chairman.
- ii) Member Secretary.
- iii) State Government officials not more than 5.
- iv) Members from local authorities not more than 5.
- v) Expert members not more than 3, who are expert in Agriculture, Fishery or Industry etc.
- vi) 2 Members representing the Companies and Corporations owned and controlled by the State Government only.

Note : *All the above members of the Board are nominated and or appointed by the Maharashtra State Government.*

• **APPELLATE AUTHORITY AND APPEAL:-**

Under the provisions of Environmental legislations, an aggrieved project proponent can make an appeal against the order, decision, direction, directive and or

any condition laid down by the State Pollution Control Board in its order or decision while approving and or rejecting the clearance, to the Central Pollution Control Board and as well as also can appeal to the Supreme Court against the order passed by the CPCB, as the case may be.

• **MPCB OFFICE ADDRESS :**

Kalpa-Taru Point, 3rd & 4th Floor,
Opp. Cine Planet Cinema,
Near Sion Circle, Sion
Mumbai – 400 022. Tel : 022-24010437.

THE NATIONAL GREEN TRIBUNAL (NGT)

• ESTABLISHMENT OF NATIONAL GREEN TRIBUNAL :-

India participated in the United Nations Conference on Environment and Development held at Rio de Janeiro in June 1992, wherein all nations were called upon to provide effective access to judicial and administrative proceedings, including redress and remedies and to develop national laws regarding liability and compensation for the victims of pollution and other environmental damages.

Under article 21 of the Constitution, the Indian citizen has been given the right to healthy environment which has been construed as a part of the right to life. To implement the decisions taken in the said UNO Conference, the Government of India felt it appropriate to establish the National Tribunal considering multidisciplinary issues involved related to the protection of environment.

With the result 'The National Green Tribunal Act, 2010', an enactment of Union Government of India came into force w.e.f. 2nd June 2010.

• OBJECTS OF TRIBUNAL :-

Followings are the main objects of the National Green Tribunal :-

- i) To make effective and expeditious disposal of cases related to the environmental protection and conservation of forests and other natural resources.
- ii) To enforce legal right relating to environment and giving relief and compensation for damages to persons and property and the matters connected therewith or incidental thereto.

• COMPOSITION OF TRIBUNAL :-

According to Section 4 of The National Green Tribunal Act, 2010, the Tribunal shall consist of following full time members :-

- i) Chairman / Chairperson
- ii) Judicial members – minimum 10 and maximum 20
- iii) Expert members – minimum 10 and maximum 20
- iv) A special invitee/s having specialised knowledge and experience in particular case to assist the Tribunal in that case.

Note : *The appointments of the Chairman / Chairperson, Judicial Members, and Expert Members are appointed by the Central Government as deemed fit from time to time.*

• **JURISDICTION OF TRIBUNAL :-**

As per Section 14 of the Act, The Tribunal shall have the jurisdiction overall civil cases where a substantial questions relating to environment (including enforcement of any legal rights related to environment) are involved and questions arising out of the implementation of the Legislations specified in Schedule – I of the Act.

As per Section 16 of the Act, the Tribunal established will have appellate jurisdiction against the Order/s passed by the authorities under various laws concerning environment. Any person aggrieved by such order passed may within 30 days from the date on which the Order or Decision or Direction or Determination is communicated, can appeal to the National Green Tribunal for the necessary relief.

• **FUNCTIONS OF TRIBUNAL :-**

According to Section 19(4) the Tribunal for the purpose of discharging its functions under the present Act, shall have same powers as are vested in a Civil Court under the Code of Civil Procedure, 1908 and as such the National Green Tribunal is treated as a “**Civil Court**”, while trying a suit in respect of the following matters namely :-

- i) Summary and enforcing the attendance of any person and examining him on oath.
- ii) Requiring the discovery and production of documents.
- iii) Receiving evidence on affidavits.
- iv) Requisitioning any public record or documents.
- v) Issuing commissions for examination of witnesses or documents.
- vi) Reviewing its decision.
- vii) Dismissing an application for default or deciding *ex parte*.
- viii) Setting aside any order or dismissal of any application for default or any order passed by it *ex parte*.
- ix) Pass an interim order (including granting an injunction or stay) after providing the parties concern an opportunity to be heard on an application made or appeal file under this Act.
- x) Pass an order requiring any person to cease or desist from committing or causing any violation of any enactment specified in the Schedule – I.
- xi) Any other matter which may be prescribed.

In view of aforesaid functions of Tribunal, all proceedings before the Tribunal shall be deemed to be the judicial proceedings within the meaning of Sections 193, 219

and 228 for the purposes of Section 196 of the Indian Penal Code (45 of 1860) and the Tribunal shall be deemed to be a Civil Court for the purposes of Section 195 and Chapter XXVI of the Code of Criminal Procedure, 1973.

• **POWERS OF TRIBUNAL :-**

The Tribunal is empowered to grant and provide :-

- i) Relief and compensation to the victims of pollution and other Environmental damages arising under the enactments specified in the Schedule – I, including accidents occurring while handling any hazardous substances.
- ii) For Restitution of property damaged.
- iii) For Restitution of the Environment for such area or areas as the Tribunal may think fit.

• **APPEALS :-**

If the project proponent is aggrieved with the decision of State Expert Appraisal Committee (SEAC), and or State Environment Impact Assessment Authority (SEIAA) or is not satisfied with the condition/s imposed thereof while approving or rejecting the clearance, he can make an appeal to National Green Tribunal (**NGT**) for necessary relief. The Tribunal being a Civil Court, its decision on such appeal will be binding on all the parties concerned.

• **PROVISION OF APPEAL AGAINST TRIBUNAL:-**

As per Section 22 of the Act, any person aggrieved by any award, decision or order of the Tribunal, may file an appeal to the Supreme Court, within 90 days from the date of communication of such award, decision or order of the Tribunal, to him, on any one or more of the grounds specified in Section 100 of the Code of Civil Procedure, 1908 (5 of 1908).

Provided that the Supreme Court may entertain any appeal after the expiry of 90 days, if it is satisfied that the appellant was prevented by sufficient cause from preferring the appeal.

(Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii)

MINISTRY OF ENVIRONMENT AND FORESTS

New Delhi 14th September, 2006

Notification

S.O.1533 Whereas, a draft notification **under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 for imposing** certain restrictions and prohibitions on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification, being undertaken in any part of India (Includes the territorial waters), unless prior environmental clearance has been accorded in accordance with the objectives of National Environment Policy as **approved by the Union Cabinet on 18th May, 2006** and the procedure specified in the notification, by the Central Government or the State or Union territory Level Environment Impact Assessment Authority (SEIAA), to be constituted by the Central Government in consultation with the State Government or the Union territory Administration concerned under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for the purpose of this notification, was published in the Gazette of In India ,Extraordinary, Part II, section 3, sub-section (ii) vide number S.O. 1324 (E) dated the 15th September ,2005 inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the public;

And whereas, copies of the said notification were made available to the public on 15th September, 2005;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986, read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 and in supersession of the notification number S.O. 60 (E) dated the 27 January, 1994, except in respect of things done or omitted to be done before such supersession, the Central Government hereby directs that on and from the date of its publication the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to this notification entailing capacity addition with change in process and or technology shall be undertaken in any part of India only after the prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority,

duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified hereinafter in this notification.

2 Requirements of prior Environmental Clearance (EC):- The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall hereinafter referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

- (i) All new projects or activities listed in the Schedule to this notification;
- (ii) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization;
- (iii) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range.

3 State Level Environment Impact Assessment Authority:- (1) A State Level Environment Impact Assessment Authority hereinafter referred to as the SEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of three Members including a Chairman and a Member - Secretary to be nominated by the State Government or the Union territory Administration concerned.

- (2) The Member-Secretary shall be a serving officer of the concerned State Government or Union territory administration familiar with environmental laws.
- (3) The other two Members shall be either a professional or expert fulfilling the eligibility criteria given in Appendix VI to this notification.
- (4) One of the specified Members in sub-paragraph (3) above who is an expert in the Environmental Impact Assessment process shall be the Chairman of the SEIAA.
- (5) The State Government or Union territory Administration shall forward the names of the Members and the Chairman referred in sub- paragraph 3 to 4 above to the Central Government and the Central Government shall constitute the SEIAA as an authority for the purposes of this notification within thirty days of the date of receipt of the names.
- (6) The non-official Member and the Chairman shall have a fixed term of three years (from the date of the publication of the notification by the Central Government constituting the authority).
- (7) All decisions of the SEIAA shall be unanimous and taken in a meeting.

4. Categorization of projects and activities:-

- (i) All projects and activities are broadly categorized in to two categories - Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man made resources.
- (ii) All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;
- (iii) All projects or activities included as Category 'B' in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the General Conditions (GC) stipulated in the Schedule, *will* require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In the absence of a duly constituted SEIAA or SEAC, a Category 'B' project shall be treated as a Category 'A' project;

5. Screening, Scoping and Appraisal Committees:-

The same Expert Appraisal Committees (EACs) at the Central Government and SEACs (hereinafter referred to as the (EAC) and (SEAC) at the State or the Union territory level shall screen, scope and appraise projects or activities in Category 'A' and Category 'B' respectively. EAC and SEAC's shall meet at least once every month.

- (a) The composition of the EAC shall be as given in Appendix VI. The SEAC at the State or the Union territory level shall be constituted by the Central Government in consultation with the concerned State Government or the Union territory Administration with identical composition;
- (b) The Central Government may, with the prior concurrence of the concerned State Governments or the Union territory Administrations, constitutes one SEAC for more than one State or Union territory for reasons of administrative convenience and cost;
- (c) The EAC and SEAC shall be reconstituted after every three years;
- (d) The authorised members of the EAC and SEAC, concerned, may inspect any site(s) connected with the project or activity in respect of which the prior environmental clearance is sought, for the purposes of screening or scoping or appraisal, with prior notice of at least seven days to the applicant, who shall provide necessary facilities for the inspection;
- (e) The EAC and SEACs shall function on the principle of collective responsibility. The Chairperson shall endeavour to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

6. Application for Prior Environmental Clearance (EC):-

An application seeking prior environmental clearance in all cases shall be made in the prescribed Form 1 annexed herewith and Supplementary Form 1A, if applicable, as given in Appendix II, after the identification of prospective site(s) for the project and/or activities to which the application relates, before commencing any construction activity, or preparation of land, at the site by the applicant. The applicant shall furnish, along with the application, a copy of the pre-feasibility project report except that, in case of construction projects or activities (item 8 of the Schedule) in addition to Form 1 and the Supplementary Form 1A, a copy of the conceptual plan shall be provided, instead of the pre-feasibility report.

7. Stages in the Prior Environmental Clearance (EC) Process for New Projects:-

7(i) The environmental clearance process for new projects will comprise of a maximum of four stages, all of which may not apply to particular cases as set forth below in this notification. These four stages in sequential order are:-

- Stage (1) Screening (Only for Category 'B' projects and activities)
- Stage (2) Scoping
- Stage (3) Public Consultation
- Stage (4) Appraisal

I. Stage (1) - Screening:

In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project . The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

II. Stage (2) - Scoping:

- (i) "Scoping": refers to the process by which the Expert Appraisal Committee in the case of Category 'A' projects or activities, and State level Expert Appraisal Committee in the case of Category 'B1' projects or activities, including applications for expansion and / or modernization and/or change in product mix of existing projects or activities, determine detailed and comprehensive Terms Of Reference (TOR) addressing all relevant environmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought. The Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the Terms of Reference on the basis of the information furnished

in the prescribed application Form 1/Form 1A including Terms of Reference proposed by the applicant, a site visit by a sub- group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, Terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. All projects and activities listed as Category 'B' in Item 8 of the Schedule (Construction/Township/Commercial Complexes /Housing) shall not require Scoping and will be appraised on the basis of Form 1/ Form 1A and the conceptual plan.

- (ii) The Terms of Reference (TOR) shall be conveyed to the applicant by the Expert Appraisal Committee or State Level Expert Appraisal Committee as concerned within sixty days of the receipt of Form 1. In the case of Category A Hydroelectric projects Item 1(c) (i) of the Schedule the Terms of Reference shall be conveyed along with the clearance for pre-construction activities .If the Terms of Reference are not finalized and conveyed to the applicant within sixty days of the receipt of Form 1, the Terms of Reference suggested by the applicant shall be deemed as the final Terms of Reference approved for the EIA studies. The approved Terms of Reference shall be displayed on the website of the Ministry of Environment and Forests and the concerned State Level Environment Impact Assessment Authority.
- (iii) Applications for prior environmental clearance may be rejected by the regulatory authority concerned on the recommendation of the EAC or SEAC concerned at this stage itself. In case of such rejection, the decision together with reasons for the same shall be communicated to the applicant in writing within sixty days of the receipt of the application.

III. Stage (3) - Public Consultation:

- (i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category 'A' and Category B1 projects or activities shall undertake Public Consultation, except the following:-
 - a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).
 - b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.
 - c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
 - d) all Building / Construction projects /Area Development projects and Townships (item 8).
 - e) all Category 'B2' projects and activities.
 - f) all projects or activities concerning national defense and security or involving other strategic considerations as determined by the Central Government.

- (ii) The Public Consultation shall ordinarily have two components comprising of:-
 - (a) A public hearing at the site or in its close proximity- district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons;
 - (b) Obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.
- (iii) the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45(forty five) of a request to the effect from the applicant.
- (iv) in case the State Pollution Control Board or the Union territory Pollution Control Committee concerned does not undertake and complete the public hearing within the specified period, and/or does not convey the proceedings of the public hearing within the prescribed period directly to the regulatory authority concerned as above, the regulatory authority shall engage another public agency or authority which is not subordinate to the regulatory authority, to complete the process within a further period of forty five days,.
- (v) If the public agency or authority nominated under the sub paragraph (iii) above reports to the regulatory authority concerned that owing to the local situation, it is not possible to conduct the public hearing in a manner which will enable the views of the concerned local persons to be freely expressed, it shall report the facts in detail to the concerned regulatory authority, which may, after due consideration of the report and other reliable information that it may have, decide that the public consultation in the case need not include the public hearing.
- (vi) For obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity, the concerned regulatory authority and the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee(UTPCC) shall invite responses from such concerned persons by placing on their website the Summary EIA report prepared in the format given in Appendix IIIA by the applicant along with a copy of the application in the prescribed form , within seven days of the receipt of a written request for arranging the public hearing. Confidential information including non-disclosable or legally privileged information involving Intellectual Property Right, source specified in the application shall not be placed on the web site. The regulatory authority concerned may also use other appropriate media for ensuring wide publicity about the project or activity. The regulatory authority shall, however, make available on a written request from any concerned person the Draft EIA report for inspection at a notified place during normal office hours till the date of the public hearing. All the responses received as part of this public consultation process shall be forwarded to the applicant through the quickest available means.
- (vii) After completion of the public consultation, the applicant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the

draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the applicant to the concerned regulatory authority for appraisal. The applicant may alternatively submit a supplementary report to draft EIA and EMP addressing all the concerns expressed during the public consultation.

IV. Stage (4) - Appraisal:

- (i) Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the Final EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance. This appraisal shall be made by Expert Appraisal Committee or State Level Expert Appraisal Committee concerned in a transparent manner in a proceeding to which the applicant shall be invited for furnishing necessary clarifications in person or through an authorized representative. On conclusion of this proceeding, the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.
- (ii) The appraisal of all projects or activities which are not required to undergo public consultation, or submit an Environment Impact Assessment report, shall be carried out on the basis of the prescribed application Form 1 and Form 1A as applicable, any other relevant alidated information available and the site visit wherever the same is considered as necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.
- (iii) The appraisal of an application be shall be completed by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within sixty days of the receipt of the final Environment Impact Assessment report and other documents or the receipt of Form 1 and Form 1 A, where public consultation is not necessary and the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee shall be placed before the competent authority for a final decision within the next fifteen days .The prescribed procedure for appraisal is given in Appendix V ;

7(ii). Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:

All applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product - mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal

Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

8. Grant or Rejection of Prior Environmental Clearance (EC):

- (i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.
- (ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days.
- (iii) In the event that the decision of the regulatory authority is not communicated to the applicant within the period specified in sub-paragraphs (i) or (ii) above, as applicable, the applicant may proceed as if the environment clearance sought for has been granted or denied by the regulatory authority in terms of the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.
- (iv) On expiry of the period specified for decision by the regulatory authority under paragraph (i) and (ii) above, as applicable, the decision of the regulatory authority, and the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be public documents.
- (v) Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons.

- (vi) Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

9. Validity of Environmental Clearance (EC):

The "Validity of Environmental Clearance" is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted under sub paragraph (iv) of paragraph 7 above, to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects (item 8 of the Schedule), to which the application for prior environmental clearance refers. The prior environmental clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects (item 1(c) of the Schedule), project life as estimated by Expert Appraisal Committee or State Level Expert Appraisal Committee subject to a maximum of thirty years for mining projects and five years in the case of all other projects and activities. However, in the case of Area Development projects and Townships [item 8(b)], the validity period shall be limited only to such activities as may be the responsibility of the applicant as a developer. This period of validity may be extended by the regulatory authority concerned by a maximum period of five years provided an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form 1, and Supplementary Form 1A, for Construction projects or activities (item 8 of the Schedule). In this regard the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee as the case may be.

10. Post Environmental Clearance Monitoring:

- (i) It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1 June and 1st December of each calendar year.
- (ii) All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority.

11. Transferability of Environmental Clearance (EC):

A prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written "no objection" by the transferor, to, and by the regulatory authority concerned, on the same terms and conditions

under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases.

12. Operation of EIA Notification, 1994, till disposal of pending cases:

From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27 January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such suppression to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I , or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification.

[No. J-11013/56/2004-IA-II (I)]

(R.CHANDRAMOHAN)
JOINT SECRETARY TO THE GOVERNMENT OF INDIA

SCHEDULE
(See paragraph 2 and 7)

LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE

Project or Activity		Category with threshold limit		Conditions if any
		A	B	
1		Mining, extraction of natural resources and power generation (for a specified production capacity)		
(1)	(2)	(3)	(4)	(5)
1(a)	Mining of minerals	<p>≥50 ha. of mining lease area</p> <p>Asbestos mining irrespective of mining area</p>	<p><50 ha</p> <p>≥ 5 ha .of mining lease area</p>	<p>General Condition shall apply</p> <p><u>Note</u> Mineral prospecting (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey</p>
1(b)	Offshore and onshore oil and gas exploration, development & production	<p>All projects</p> <p>(not involving drilling developments)</p>		<p><u>Note</u> Exploration Surveys (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey</p>
1(c)	River Valley projects	<p>(i) ≥50 MW hydroelectric power generation;</p> <p>(ii) >10,000 ha. of culturable command area</p>	<p>(i) < 50 MW ≥ 25 MW hydroelectric power generation;</p> <p>(ii) < 10,000 ha. of culturable command area</p>	General Condition shall apply
1(d)	Thermal Power Plants	<p>≥ 500 MW (coal/lignite/naphta & gas based);</p> <p>≥50 MW (Pet coke diesel and all other fuels)</p>	<p>< 500 MW (coal/lignite/naphta & gas based);</p> <p><50 MW</p> <p>≥5MW (Pet coke ,diesel and all other fuels)</p>	General Condition shall apply
1(e)	Nuclear power projects and processing of nuclear fuel	All projects		

(1)	(2)	(3)	(4)	(5)
2		Primary Processing		
2(a)	Coal washeries	1 million ton/annum throughput of coal	<1million ton/annum throughput of coal	General Condition shall Apply (If located within mining area the proposal shall be appraised together with the mining proposal)
2 (b)	Mineral beneficiation	1million ton/annum mineral throughput	< 0.1million ton/ annum mineral throughput	General Condition shall apply (Mining proposal with Mineral beneficiation shall be appraised together for grant of clearance)
3		Materials Production		
(1)	(2)	(3)	(4)	(5)
3(a)	Metallurgical industries (ferrous & non ferrous)	a)Primary metallurgical industry All projects b) Sponge iron manufacturing _ 200TPD c)Secondary metallurgical processing industry All toxic and heavy metal producing units ≥ 20,000 tonnes /annum	Sponge iron manufacturing < 200 TPD Secondary metallurgical processing industry i.)All toxic and heavy metal producing units <20,000 tonnes /annum ii.)All other non –toxic secondary metallurgical processing industries >5000 tonnes/annum	General Condition shall apply for Sponge iron manufacturing
3 (b)	Cement plants	≥1.0 million tonnes/annum production capacity	<1.0 million Tonnes /annum production capacity. All Stand alone grinding units	General Condition shall apply
4		Materials Processing		
4(a)	Petroleum refining industry	All projects		
4(b)	Coke oven plants	≥2,50,000 tonnes/annum	<2,50,000 & ≥ 25,000 tonnes/annum	

4(c)	Asbestos milling and asbestos based products	All projects		
4(d)	Chlor-alkali industry	≥300 TPD production Capacity or a unit located outside the notified industrial area/estate	<300 TPD production Capacity and located within a notified industrial area/estate	Specific Condition shall apply No new Mercury Cell based plants will be permitted and existing units converting to membrane cell technology are exempted from this Notification
4(e)	Soda ash Industry	All projects		
4(f)	Leather/skin/hide processing industry	New projects outside the industrial area or expansion of existing units outside the industrial area	All new or expansion of projects located within a notified industrial area/estate	Specific condition shall apply
5	Manufacturing/Fabrication			
5(a)	Chemical fertilizers	All projects		
5(b)	Pesticides industry and pesticide specific intermediates (excluding formulations)	All units producing technical grade pesticides		
5(c)	Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and / or reforming to aromatics)	All projects		
5(d)	Manmade fibres manufacturing	Rayon	Others	General Condition shall apply

5(e)	Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes)	Located out side the notified industrial area/estate	Located in a notified industrial area / estate	Specific Condition shall apply
5(f)	Synthetic organic chemicals industry (dyes & dye intermediates bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	Located outside the notified industrial area/estate	Located in a notified industrial area/ estate	Specific Condition shall apply
5(g)	Distilleries	(i) All Molasses based distilleries (ii) All Cane juice / non-molasses based distilleries ≥ 30 KLD	All Cane juice /non molasses based distilleries – <30 KLD	General Condition shall apply
5(h)	Integrated paint industry		All projects	General Condition shall apply
5(i)	Pulp & paper industry excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp with out bleaching	Pulp manufacturing and Pulp & Paper manufacturing industry	Paper manufacturing industry without pulp manufacturing	General Condition shall apply
5(j)	Sugar Industry		≥ 5000 tcd cane crushing capacity	General Condition shall apply
5(k)	Induction/arc furnaces/cupola furnaces 5TPH or more		All projects	General Condition shall apply

(1)	(2)	(3)	(4)	(5)
6		Service Sectors		
6(a)	Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks /sanctuaries /coral reefs /ecologically sensitive areas including LNG Terminal	All projects		
6(b)	Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000)		All projects	General Condition shall apply

(1)	(2)	(3)	(4)	(5)
7		Physical Infrastructure including Environmental Services		
7(a)	Air ports	All projects		
7(b)	All ship breaking yards including ship breaking units	All projects		
7(c)	Industrial estates/ parks/ Complexes / areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes.	If at least one industry in the proposed industrial estate falls under the Category A, entire industrial area shall be treated as Category A, irrespective of the area. Industrial estates with area greater than 500 ha. and housing at least one Category B industry.	Industrial estates housing at least one Category B industry and area <500 ha. Industrial estates of area >500 ha. and not housing any industry belonging to Category A or B.	Special condition shall apply Note: Industrial Estate of area below 500 ha. and not housing any industry of category A or B does not require clearance.

7(d)	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	All integrated facilities having incineration & landfill or incineration alone	All facilities having land fill only	General Condition shall apply
7(e)	Ports, Harbours	≥ 5 million TPA of cargo handling capacity (excluding fishing harbours)	< 5 million TPA of cargo handling capacity and/or ports/ harbours ≥ 10,000 TPA of fish handling capacity	General Condition shall apply
7(f)	Highways	i) New National High ways; and ii) Expansion of National High ways greater than 30 KM, involving additional right of way greater than 20m involving land acquisition and passing through more than one State.	i) New State High ways; and ii) Expansion of National / State Highways greater than 30 km involving additional right of way greater than 20m involving land acquisition	General Condition shall apply
7(g)	Aerial ropeways		All projects	General Condition shall apply
7(h)	Common Effluent Treatment Plants (CETPs)		All projects	General Condition shall apply
7(i)	Common Municipal Solid Waste Management Facility (CMSWMF)		All projects	General Condition shall apply

(1)	(2)	(3)	(4)	(5)
8		Building /Construction projects/Area Development projects and Townships		
8(a)	Building and Construction projects		_20000 sq.mtrs and <1,50,000 sq.mtrs. of built-up area#	#(built up area for covered construction; in the case of facilities open to the sky, it will be the activity area)
8(b)	Townships and Area Development projects.		Covering an area _ 50 ha and or built up area _1,50,000 sq .mtrs ++	++All projects under Item 8(b) shall be appraised as Category B1

Note:-

General Condition (GC):

Any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries.

Specific Condition (SC):

If any Industrial Estate/Complex / Export processing Zones /Special Economic Zones/Biotech Parks / Leather Complex with homogeneous type of industries such as Items 4(d), 4(f), 5(e), 5(f), or those Industrial estates with pre –defined set of activities (not necessarily homogeneous, obtains prior environmental clearance, individual industries including proposed industrial housing within such estates /complexes will not be required to take prior environmental clearance, so long as the Terms and Conditions for the industrial estate/complex are complied with (Such estates/complexes must have a clearly identified management with the legal responsibility of ensuring adherence to the Terms and Conditions of prior environmental clearance, who may be held responsible for violation of the same throughout the life of the complex/estate).

APPENDIX I
(See paragraph – 6)
FORM 1

(I) Basic Information

Name of the Project:

Location / site alternatives under consideration:

Size of the Project: *

Expected cost of the project:

Contact Information:

Screening Category:

- *Capacity corresponding to sectoral activity (such as production capacity for Manufacturing, mining lease area and production capacity for mineral production, area for mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc..)*

(II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)		
1.2	Clearance of existing land, vegetation and buildings?		
1.3	Creation of new land uses?		
1.4	Pre-construction investigations e.g. bore houses, soil testing?		
1.5	Construction works?		
1.6	Demolition works?		
1.7	Temporary sites used for construction works or housing of construction workers?		

1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations		
1.9	Underground works including mining or tunnelling?		
1.10	Reclamation works?		
1.11	Reclamation works? Dredging?		
1.12	Offshore structures		
1.13	Production and manufacturing processes?		
1.14	Facilities for storage of goods or materials?		
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?		
1.16	1.16 Facilities for long term housing of operational workers?		
1.17	New road, rail or sea traffic during construction or operation?		
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?		
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?		
1.20	New or diverted transmission lines or pipelines?		
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.22	Stream crossings?		
1.23	Abstraction or transfers of water form ground or surface waters?		
1.24	Changes in water bodies or the land surface affecting drainage or run-off?		
1.25	Transport of personnel or materials for construction, operation or decommissioning?		

1.26	Long-term dismantling or decommissioning or restoration works?		
1.27	Ongoing activity during decommissioning which could have an impact on the environment?		
1.28	Influx of people to an area in either temporarily or permanently?		
1.29	Introduction of alien species?		
1.30	Loss of native species or genetic diversity?		
1.31	Any other actions?		

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)		
2.2	Water (expected source & competing users) unit: KLD		
2.3	Minerals (MT)		
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)		
2.5	Forests and timber (source – MT)		
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)		
2.7	Any other natural resources (use appropriate standard units)		

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities / rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)		
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)		
3.3	Affect the welfare of people e.g. by changing living conditions?		
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,		
3.5	Any other causes		

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes		
4.2	Municipal waste (domestic and or commercial wastes)		
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)		
4.4	Other industrial process wastes		
4.5	Surplus product		

4.6	Sewage sludge or other sludge from effluent treatment		
4.7	Construction or demolition wastes		
4.8	Redundant machinery or equipment		
4.9	Contaminated soils or other materials		
4.10	Agricultural wastes		
4.11	Other solid wastes		

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities / rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources		
5.2	Emissions from production processes		
5.3	Emissions from materials handling including storage or transport		
5.4	Emissions from construction activities including plant and equipment		
5.5	Dust or odours from handling of materials including construction materials, sewage and waste		
5.6	Emissions from incineration of waste		
5.7	Emissions from burning of waste in open air (e.g. slash materials, Construction debris)		
5.8	Emissions from any other sources		

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities / rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers		
6.2	From industrial or similar processes		
6.3	From construction or demolition		
6.4	From blasting or piling		
6.5	From construction or operational traffic		
6.6	From lighting or cooling systems		
6.7	From any other sources		

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities / rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials		
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)		
7.3	By deposition of pollutants emitted to air into the land or into water		
7.4	From any other sources		
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?		

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment.

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities / rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances		
8.2	From any other causes		
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?		

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities / rates, wherever possible) with source of information data
9.1	Lead to development of supporting. lities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other 		
9.2	Lead to after-use of the site, which could have an impact on the environment		
9.3	Set a precedent for later developments		
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects		

(III) Environmental Sensitivity

S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions , national or local legislation for their ecological, landscape, cultural or other related value 27		
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration		
4	Inland, coastal, marine or underground waters		
5	State, National boundaries		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas		
7	Defence installations		
8	Densely populated or built-up area		
9	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)		
10	Areas containing important, high quality or scarce resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>)		
11	Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>)		
12	Areas susceptible to natural hazard which could cause the project to present environmental Problems (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>)		

(IV). Proposed Terms of Reference for EIA studies

APPENDIX II
(See paragraph 6)

FORM-1 A (only for construction projects listed under item 8 of the Schedule)
CHECK LIST OF ENVIRONMENTAL IMPACTS

(Project proponents are required to provide full information and wherever necessary attach explanatory notes with the Form and submit along with proposed environmental management plan & monitoring programme)

1. LAND ENVIRONMENT

(Attach panoramic view of the project site and the vicinity)

- 1.1. Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan /Development Plan of the area. Change of land use if any and the statutory approval from the competent authority be submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. If not available attach only conceptual plans.
- 1.2. List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.
- 1.3. What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing land use, disturbance to the local ecology).
- 1.4. Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).
- 1.5. Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)
- 1.6. What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)
- 1.7. Give details regarding water supply, waste handling etc during the construction period.
- 1.8. Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)

- 1.9. Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)

2. WATER ENVIRONMENT

- 2.1. Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.
- 2.2. What is the capacity (dependable flow or yield) of the proposed source of water?
- 2.3. What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)
- 2.4. How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)
- 2.5. Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)
- 2.6. What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)
- 2.7. Give details of the water requirements met from water harvesting? Furnish details of the facilities created.
- 2.8. What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way?
- 2.9. What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)
- 2.10. What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)
- 2.11. How is the storm water from within the site managed?(State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)
- 2.12. Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)

- 2.13. What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)
- 2.14. Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.

3. VEGETATION

- 3.1. Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with it's unique features, if any)
- 3.2. Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)
- 3.3. What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)

4. FAUNA

- 4.1. Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.
- 4.2. Any direct or indirect impacts on the avifauna of the area? Provide details.
- 4.3. Prescribe measures such as corridors, fish ladders etc to mitigate adverse impacts on fauna.

5. AIR ENVIRONMENT

- 5.1. Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)
- 5.2. What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.
- 5.3. Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.
- 5.4. Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.
- 5.5. Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.

- 5.6. What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.

6. AESTHETICS

- 6.1. Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?
- 6.2. Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?
- 6.3. Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.
- 6.4. Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.

7. SOCIO-ECONOMIC ASPECTS

- 7.1. Will the proposal result in any changes to the demographic structure of local population? Provide the details.
- 7.2. Give details of the existing social infrastructure around the proposed project.
- 7.3. Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?

8. BUILDING MATERIALS

- 8.1. May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)
- 8.2. Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?
- 8.3. Are recycled materials used in roads and structures? State the extent of savings achieved?
- 8.4. Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.

9. ENERGY CONSERVATION

- 9.1. Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?
- 9.2. What type of, and capacity of, power back-up to you plan to provide?

- 9.3. What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?
- 9.4. What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.
- 9.5. Does the layout of streets & buildings maximise the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details.
- 9.6. Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been effected?
- 9.7. Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.
- 9.8. What are the likely effects of the building activity in altering the micro-climates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?
- 9.9. What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.
- 9.10. What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.
- 9.11. If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.
- 9.12. What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.
- 9.13. To what extent the non-conventional energy technologies are utilised in the overall energy consumption? Provide details of the renewable energy technologies used.

10. Environment Management Plan

The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.

APPENDIX III
(See paragraph 7)

GENERIC STRUCTURE OF ENVIRONMENTAL IMPACT ASSESMENT DOCUMENT

S.NO	EIA STRUCTURE	CONTENTS
1.	Introduction	<ul style="list-style-type: none"> • Purpose of the report • Identification of project & project proponent • Brief description of nature, size, location of the project and its importance to the country, region • Scope of the study – details of regulatory scoping carried out (As per Terms of Reference)
2.	Project Description	<ul style="list-style-type: none"> • Condensed description of those aspects of the project (based on project feasibility study), likely to cause environmental effects. Details should be provided to give clear picture of the following: <ul style="list-style-type: none"> • Type of project • Need for the project • Location (maps showing general location, specific location, project boundary & project site layout) • Size or magnitude of operation (incl. Associated activities required by or for the project) • Proposed schedule for approval and implementation • Technology and process description • Project description. Including drawings showing project layout, components of project etc. Schematic representations of the feasibility drawings which give information important for EIA purpose • Description of mitigation measures incorporated into the project to meet environmental standards, environmental operating conditions, or other EIA requirements (as required by the scope) • Assessment of New & untested technology for the risk of technological failure
3.	Description of the Environment	<ul style="list-style-type: none"> • Study area, period, components & methodology • Establishment of baseline for valued environmental components, as identified in the scope • Base maps of all environmental components
4.	Anticipated Environmental Impacts & Mitigation Measures	<ul style="list-style-type: none"> • Details of Investigated Environmental impacts due to project location, possible accidents, project design, project construction, regular operation, final decommissioning or rehabilitation of a completed project • Measures for minimizing and / or offsetting adverse impacts identified • Irreversible and Irretrievable commitments of environmental components • Assessment of significance of impacts (Criteria for determining significance, Assigning significance) • Mitigation measures

5	Analysis of Alternatives (Technology & Site)	<ul style="list-style-type: none"> • In case, the scoping exercise results in need for alternatives: • Description of each alternative • Summary of adverse impacts of each alternative • Mitigation measures proposed for each alternative and • Selection of alternative
6.	Environmental Monitoring Program	<ul style="list-style-type: none"> • Technical aspects of monitoring the effectiveness of mitigation measures (incl. Measurement methodologies, frequency, location, data analysis, reporting schedules, emergency procedures, detailed budget & procurement schedules)
7.	Additional Studies	<ul style="list-style-type: none"> • Public Consultation • Risk assessment • Social Impact Assessment. R&R Action Plans
8.	Project Benefits	<ul style="list-style-type: none"> • ≥Improvements in the physical infrastructure • Improvements in the social infrastructure • ≥Employment potential –skilled; semi-skilled and unskilled • ≥Other tangible benefits
9.	Environmental Cost Benefit Analysis	If recommended at the Scoping stage
10.	EMP	<ul style="list-style-type: none"> • Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA
11	Summary & Conclusion (This will constitute the summary of the EIA Report)	<ul style="list-style-type: none"> • Overall justification for implementation of the project • Explanation of how, adverse effects have been mitigated
12.	Disclosure of Consultants engaged	<ul style="list-style-type: none"> • ≥The names of the Consultants engaged with their brief resume and nature of Consultancy rendered

APPENDIX III A (See paragraph 7)

CONTENTS OF SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT

The Summary EIA shall be a summary of the full EIA Report condensed to ten A-4 size pages at the maximum. It should necessarily cover in brief the following Chapters of the full EIA Report: -

1. Project Description
2. Description of the Environment
3. Anticipated Environmental impacts and mitigation measures
4. Environmental Monitoring Programme
5. Additional Studies
6. Project Benefits
7. Environment Management Plan

APPENDIX IV (See paragraph 7)

PROCEDURE FOR CONDUCT OF PUBLIC HEARING

1.0 The Public Hearing shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site(s) or in its close proximity District -wise, by the concerned State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC).

2.0 The Process:

2.1 The Applicant shall make a request through a simple letter to the Member Secretary of the SPCB or Union Territory Pollution Control Committee, in whose jurisdiction the project is located, to arrange the public hearing within the prescribed statutory period. In case the project site is extending beyond a State or Union Territory, the public hearing is mandated in each State or Union Territory in which the project is sited and the Applicant shall make separate requests to each concerned SPCB or UTPCC for holding the public hearing as per this procedure.

2.2 The Applicant shall enclose with the letter of request, at least 10 hard copies and an equivalent number of soft (electronic) copies of the draft EIA Report with the generic structure given in Appendix III including the Summary Environment Impact Assessment report in English and in the local language, prepared strictly in accordance with the Terms of Reference communicated after Scoping (Stage-2). Simultaneously the applicant shall arrange to forward copies, one hard and one soft, of the above draft EIA Report along with the Summary EIA report to the Ministry of Environment and Forests and to the following authorities or offices, within whose jurisdiction the project will be located:

- (a) District Magistrate/s
- (b) Zila Parishad or Municipal Corporation
- (c) District Industries Office
- (d) Concerned Regional Office of the Ministry of Environment and Forests

2.3 On receiving the draft Environmental Impact Assessment report, the abovementioned authorities except the MoEF, shall arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities. They shall also make available the draft EIA Report for inspection electronically or otherwise to the public during normal office hours till the Public Hearing is over. The Ministry of Environment and Forests shall promptly display the Summary of the draft Environmental Impact Assessment report on its website, and also make the full draft EIA available for reference at a notified place during normal office hours in the Ministry at Delhi.

- 2.4 The SPCB or UTPCC concerned shall also make similar arrangements for giving publicity about the project within the State/Union Territory and make available the Summary of the draft Environmental Impact Assessment report (Appendix III A) for inspection in select offices or public libraries or panchayats etc. They shall also additionally make available a copy of the draft Environmental Impact Assessment report to the above five authorities/offices viz, Ministry of Environment and Forests, District Magistrate etc.

3.0 Notice of Public Hearing:

- 3.1 The Member-Secretary of the concerned SPCB or UTPCC shall finalize the date, time and exact venue for the conduct of public hearing within 7(seven) days of the date of receipt of the draft Environmental Impact Assessment report from the project proponent, and advertise the same in one major National Daily and one Regional vernacular Daily. A minimum notice period of 30(thirty) days shall be provided to the public for furnishing their responses; 3.2 The advertisement shall also inform the public about the places or offices where the public could access the draft Environmental Impact Assessment report and the Summary Environmental Impact Assessment report before the public hearing.
- 3.3 No postponement of the date, time, venue of the public hearing shall be undertaken, unless some untoward emergency situation occurs and only on the recommendation of the concerned District Magistrate the postponement shall be notified to the public through the same National and Regional vernacular dailies and also prominently displayed at all the identified offices by the concerned SPCB or Union Territory Pollution Control Committee;
- 3.4 In the above exceptional circumstances fresh date, time and venue for the public consultation shall be decided by the Member –Secretary of the concerned SPCB or UTPCC only in consultation with the District Magistrate and notified afresh as per procedure under 3.1 above.

4.0 The Panel

- 4.1 The District Magistrate or his or her representative not below the rank of an Additional District Magistrate assisted by a representative of SPCB or UTPCC, shall supervise and preside over the entire public hearing process.

5.0 Videography

- 5.1 The SPCB or UTPCC shall arrange to video film the entire proceedings. A copy of the videotape or a CD shall be enclosed with the public hearing proceedings while forwarding it to the Regulatory Authority concerned.

6.0 Proceedings

- 6.1 The attendance of all those who are present at the venue shall be noted and annexed with the final proceedings.

- 6.2 There shall be no quorum required for attendance for starting the proceedings.
- 6.3 A representative of the applicant shall initiate the proceedings with a presentation on the project and the Summary EIA report.
- 6.4 Every person present at the venue shall be granted the opportunity to seek information or clarifications on the project from the Applicant. The summary of the public hearing proceedings accurately reflecting all the views and concerns expressed shall be recorded by the representative of the SPCB or UTPCC and read over to the audience at the end of the proceedings explaining the contents in the vernacular language and the agreed minutes shall be signed by the District Magistrate or his or her representative on the same day and forwarded to the SPCB/UTPCC concerned.
- 6.5 A Statement of the issues raised by the public and the comments of the Applicant shall also be prepared in the local language and in English and annexed to the proceedings:
- 6.6 The proceedings of the public hearing shall be conspicuously displayed at the office of the Panchayats within whose jurisdiction the project is located, office of the concerned Zila Parishad, District Magistrate, and the SPCB or UTPCC. The SPCB or UTPCC shall also display the proceedings on its website for general information. Comments, if any, on the proceedings which may be sent directly to the concerned regulatory authorities and the Applicant concerned.
- 7.0 Time period for completion of public hearing**
- 7.1 The public hearing shall be completed within a period of 45 (forty five) days from date of receipt of the request letter from the Applicant. Therefore the SPCB or UTPCC concerned shall sent the public hearing proceedings to the concerned regulatory authority within 8(eight) days of the completion of the public hearing. The applicant may also directly forward a copy of the approved public hearing proceedings to the regulatory authority concerned along with the final Environmental Impact Assessment report or supplementary report to the draft EIA report prepared after the public hearing and public consultations.
- 7.2 If the SPCB or UTPCC fails to hold the public hearing within the stipulated 45(forty five) days, the Central Government in Ministry of Environment and Forests for Category 'A' project or activity and the State Government or Union Territory Administration for Category 'B' project or activity at the request of the SEIAA, shall engage any other agency or authority to complete the process, as per procedure laid down in this notification.

APPENDIX –V
(See paragraph 7)

PROCEDURE PRESCRIBED FOR APPRAISAL

1. The applicant shall apply to the concerned regulatory authority through a simple communication enclosing the following documents where public consultations are mandatory: -
 - ≥ Final Environment Impact Assessment Report [20(twenty) hard copies and 1 (one) soft copy]]
 - ≥ A copy of the video tape or CD of the public hearing proceedings
 - ≥ A copy of final layout plan (20 copies)
 - ≥ A copy of the project feasibility report (1 copy)
2. The Final EIA Report and the other relevant documents submitted by the applicant shall be scrutinized in office within 30 days from the date of its receipt by the concerned Regulatory Authority strictly with reference to the TOR and the inadequacies noted shall be communicated electronically or otherwise in a single set to the Members of the EAC /SEAC enclosing a copy each of the Final EIA Report including the public hearing proceedings and other public responses received along with a copy of Form -1or Form 1A and scheduled date of the EAC /SEAC meeting for considering the proposal .
3. Where a public consultation is not mandatory and therefore a formal EIA study is not required, the appraisal shall be made on the basis of the prescribed application Form 1 and a pre-feasibility report in the case of all projects and activities other than Item 8 of the Schedule .In the case of Item 8 of the Schedule, considering its unique project cycle , the EAC or SEAC concerned shall appraise all Category B projects or activities on the basis of Form 1, Form 1A and the conceptual plan and stipulate the conditions for environmental clearance . As and when the applicant submits the approved scheme /building plans complying with the stipulated environmental clearance conditions with all other necessary statutory approvals, the EAC /SEAC shall recommend the grant of environmental clearance to the competent authority.
4. Every application shall be placed before the EAC /SEAC and its appraisal completed within 60 days of its receipt with requisite documents / details in the prescribed manner.
5. The applicant shall be informed at least 15 (fifteen) days prior to the scheduled date of the EAC /SEAC meeting for considering the project proposal.
6. The minutes of the EAC /SEAC meeting shall be finalised within 5 working days of the meeting and displayed on the website of the concerned regulatory authority. In case the project or activity is recommended for grant of EC, then the minutes shall clearly list out the specific environmental safeguards and conditions. In case the recommendations are for rejection, the reasons for the same shall also be explicitly stated.

APPENDIX VI
(See paragraph 5)

COMPOSITION OF THE SECTOR/ PROJECT SPECIFIC EXPERT APPRAISAL COMMITTEE (EAC) FOR CATEGORY A PROJECTS AND THE STATE/UT LEVEL EXPERT APPRAISAL COMMITTEES (SEACs) FOR CATEGORY B PROJECTS TO BE CONSTITUTED BY THE CENTRAL GOVERNMENT

1. The Expert Appraisal Committees (EAC(s) and the State/UT Level Expert Appraisal Committees (SEACs) shall consist of only professionals and experts fulfilling the following eligibility criteria:

Professional: The person should have at least (i) 5 years of formal University training in the concerned discipline leading to a MA / MSc Degree, or (ii) in case of Engineering / Technology/Architecture disciplines, 4 years formal training in a professional training course together with prescribed practical training in the field leading to a B.Tech/B.E./B.Arch. Degree, or (iii) Other professional degree (e.g. Law) involving a total of 5 years of formal University training and prescribed practical training, or (iv) Prescribed apprenticeship/article ship and pass examinations conducted by the concerned professional association (e.g. Chartered Accountancy), or (v) a University degree , followed by 2 years of formal training in a University or Service Academy (e.g. MBA/IAS/IFS). In selecting the individual professionals, experience gained by them in their respective fields will be taken note of.

Expert: A professional fulfilling the above eligibility criteria with at least 15 years of relevant experience in the field, or with an advanced degree (e.g. Ph.D.) in a concerned field and at least 10 years of relevant experience.

Age: Below 70 years. However, in the event of the non-availability of /paucity of experts in a given field, the maximum age of a member of the Expert Appraisal Committee may be allowed up to 75 years

2. The Members of the EAC shall be Experts with the requisite expertise and experience in the following fields /disciplines. In the event that persons fulfilling the criteria of "Experts" are not available, Professionals in the same field with sufficient experience may be considered:

- **Environment Quality Experts:** Experts in measurement/monitoring, analysis and interpretation of data in relation to environmental quality

- **Sectoral Experts in Project Management:** Experts in Project Management or Management of Process/Operations/Facilities in the relevant sectors.

≥ **Environmental Impact Assessment Process Experts:** Experts in conducting and carrying out Environmental Impact Assessments (EIAs) and preparation of Environmental Management Plans

(EMPs) and other Management plans and who have wide expertise and knowledge of predictive techniques and tools used in the EIA process

- **Risk Assessment Experts**

- > **Life Science Experts in floral and faunal management**

- > **Forestry and Wildlife Experts**

- **Environmental Economics Expert with experience in project appraisal**

3. The Membership of the EAC shall not exceed 15 (fifteen) regular Members. However the Chairperson may co-opt an expert as a Member in a relevant field for a particular meeting of the Committee.
4. The Chairperson shall be an outstanding and experienced environmental policy expert or expert in management or public administration with wide experience in the relevant development sector.
5. The Chairperson shall nominate one of the Members as the Vice Chairperson who shall preside over the EAC in the absence of the Chairman /Chairperson.
6. A representative of the Ministry of Environment and Forests shall assist the Committee as its Secretary.
7. The maximum tenure of a Member, including Chairperson, shall be for 2 (two) terms of 3 (three) years each.
8. The Chairman / Members may not be removed prior to expiry of the tenure without cause and proper enquiry.

MANDATORY ENVIRONMENTAL CLEARANCE FOR BUILDING, CONSTRUCTION, TOWNSHIPS AND AREA DEVELOPMENT PROJECTS

- **CONSTRUCTION ACTIVITIES IN REALITY :-**

Uncontrolled population resulting into unplanned urbanization, has created serious problems practically in all metropolis and developing cities in India. Construction activities in our country are being pursued without giving much attention towards environmental issues.

In fact unmindful, unplanned and non-sustainable development is leading to severe environmental problems and pressure thereto. With the result green coverage, ground water level and other natural sources are forced to give away to the rapidly developing centers.

Modern buildings throughout our country are the centers of high level consumption of energy. About 50% energy is being diverted and used for heating, cooling, ventilation and lighting. Due to regular increase in population growth, water and shelter demand is increasing day by day. Excess use of water resources are making our water bodies crippled and constant water lifting is causing increase in salinity as well as drying of underground water tables and bore wells.

- **NECESSITY OF ENVIRONMENTAL CLEARANCE :-**

- **BACKGROUND :-**

The Central Government of India, based on the spirit of Stockholm Declaration, enacted detailed Act for preservation, conservation and protection of natural environment, popularly known as "The Environment (Protection) Act, 1986. Since then many amendmends were made to make this act as powerful as possible, and accordingly several Notifications were issued by the Ministry of Environment and Forest from time to time making all the processes more transparent.

In this chapter, the matters & policies of MoEF related to buildings and construction industry are discussed. IT is to be mentioned here that first Notification No. S. O. 60(E) dt. 27-01-1994, was published in the Gazette of India (S. O. 1236) on 27-10-2003, asking for suggestions for proposed amendmends and after completing the

process the Notification (S. O. 801(E) was published on 07-07-2004 related to construction activities which requires environmental clearance for construction projects.

• **2004 GUIDELINES FOR E. C. CLEARANCE :-**

“ Any construction project falling under entry 31 of Schedule – I, including new townships, industrial townships, settlement colonies, commercial complexes, hotel complexes, hospital and office complexes (designed) for 1000 (one thousand) persons or below, or discharging sewage of 50000 (Fifty Thousand) liters per day or below or with an investment of Rs. 50,00,00,000/- (Rs. Fifty Crores only) or below needs Environment clearance.

In this Notification it was explaining that “New construction projects which were undertaken without obtaining the clearance required under this Notification, and where construction work has not come up to the plinth level, shall require Environmental Clearance w.e.f. 07-07-2004”.

The proposals were being cleared for issue of Environmental Clearance as per above guidelines of policy Notification, up to 2006.

• **NEW AMENDMEMENDS :-**

During this 10 years period (1994-2004) the Ministry of Environment And Forests Govt. of India came to conclusion that more stringent provisions are required to achieve desired results. To make construction activities environmental friendly, integrated approach is required to keep control on pollution, and as such like other sectors, building, construction, townships and Area development projects are brought under the ambit of environmental clearance.

The ministry of Environment and Forests (MoEF) of Government of India, vide its “Environmental Impact Notification : S01533(E) of 14th September 2006 (EIA) issued under the Environment (Protection) Act, 1986, made it mandatory for any developer to obtain prior environmental clearance for specific scheduled development projects as stated therein.

The said Notification has classified development projects which requires environmental clearance in to two categories namely Category “A” & Category “B”.

- i) The development projects including expansion and modernization of existing projects are covered under **category “A”** which requires environmental clearance from the Ministry of Environment and Forests, Govt. of India.
- ii) Prior environmental clearance is required from the State Environmental Impact Assessment Authority (SEIAA) constituted by the Government of India particularly for development projects under **category “B”** which are related to

Building, Construction, Townships and Area Development Projects as defined in the item No. 8, 8(a) & 8 (b) of MoEF Notification 14-09-2006.

The extract from the Notification schedule/table related to Buildings, Construction, Township and Area Developments projects is reproduced here for ready reference :-

S. No.	Project or Activity	Category with threshold limit - B Category	General Conditions
8	Building / Construction Projects / Area Development Projects and Townships.		
8 (a)	Building/s Construction Projects	> 20,000.00 Sq. Mtrs. < 1,50,000.00 Sq. Mtrs. Built-up Area for covered construction. In the case of facilities open to sky it will be (treated) the activity area.	Any Project or activity specified in Category 'B' will be treated as Category 'A' if located in whole or in part within 10 km from the boundary of (i) Protected areas notified under Wildlife, (Protection) Act, 1972, (ii) Critically polluted areas as identified by Central Pollution Control Board from time to time, (iii) Eco-sensitive areas as notified under section 3 of the Environment (Protection) Act, 1986, such as, Mahabaleswar, Panchangi, Matheran, Pachmarhi, Dahanu, Doon Valley and (iv) inter-state boundaries and international boundaries. Provided that the requirement regarding distance of 10 km of the inter-state boundaries can be reduced or completely done away with by an agreement between the respective states or U.Ts sharing the common boundary, in the case the activity does not fall within 10 kilometers of the areas mentioning at item (i) , (ii) and (iii) above.
8 (b)	Townships and Area Development Projects	Covering an area > 50 Ha. And or built-up area > 1,50,000 Sq. Mtrs.	
Note : All projects under item No. 8 (b) shall be appraised as Category - B1			

• **GENERAL CONDITIONS (GC) :-**

Any project or activity specified in Category "B", will be treated as Category "A", if the same is located either in part or in whole, within 10 kmtrs from the boundary of :-

- i) Protected areas notified under the Wild Life (Protection) Act, 1972
- ii) Critically polluted areas as notified by the Central Pollution Board from time to time.
- iii) Notified Eco-sensitive areas.
- iv) Inter-State boundaries and international boundaries.

- **PROJECT CLEARANCE IN CRZ AREA :-**

The projects involving clearance under Coastal Regulation Zone Notification, 1991 shall submit with the application, a CRZ map duly demarcated by one of the authorised agencies, showing the project activities, w.r.t. C.R.Z. (at the stage of TOR) and the recommendations of the State Coastal Zone Management Authority (at the stage of EC) for simultaneous action to be taken to obtain the requisite clearance under the provisions of the CRZ notification, 1991 for the proposed projects/activities located in the CRZ for environmental clearance.

- **PROJECT CLEARANCE FOR AREAS LOCATED WITHIN 10 KM OF WILD LIFE :-**

The projects proposed to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory corridors of wild animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-a-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon for obtaining environmental clearance.

- **PROJECT PROPONENT & AUTHORISED SIGNATORY :-**

All correspondence with the Ministry of Environment & Forests including submission "of application for TOR/Environmental Clearance, subsequent clarifications, as may be required from time to time, including participation in the EAC meeting on behalf of the project proponent shall be made by the authorised signatory only.

The authorised signatory should also submit a document in support of his claim of being an authorised signatory along with application to obtain environmental clearance for the specific project".

SALIENT FEATURES OF ENVIRONMENTAL CLERANCE

It can be seen from the provisions of the Notification issued by the Ministry of Environment and Forests Govt. of India (MoEF) dt. 14-09-2006 (which is reproduced here before), and in particular Category item No. 8 (8-a) & (8-b) requires advance/prior clearance from MoEF for the specified construction projects of any nature i.e. Residential, industrial and Commercial in the said notification.

The Notification made it mandatory for the developers to obtain Environmental Clearance of specific site and specific size before commencement of construction on site. The Municipal Corporation of Greater Mumbai has made this clearance (wherever required) as a obligatory prerequisite before the development permission is granted.

The main object of the Notification is to set procedures of environmental clearance before establishment of identified project its nature and size. The suitability of project site for intended and permissible development is one of the primary concerns in granting environmental clearance to the project.

The applicant has to furnish set of conceptual plans of the project along with the application together with Form No. 1, and supplementary Form No. 1-A duly filled in and signed by the authorised signatory. However, before we discuss about environment clearance process, it is essential to understand its salient features which are explained hereunder :-

- **CLEARANCE GIVING REGULATORY AUTHORITIES :-**

The Ministry of Environment and Forest (MoEF) Govt. of India and State Environmental Impact Assessment Authority (SEIAA) are regulatory authorities, which are empowered to grant prior Environmental Clearance as explained hereunder :-

Category - "A"

- i) The Ministry of Environment and Forests (MoEF), Government of India (GOI) is empowered to grant Environmental clearance for **Category "A"** projects, including expansion and modernization of existing projects.

Category "B"

- ii) The State Environmental Impact Assessment Authority (SEIAA) is constituted by the Government of India at state levels to grant Environmental Clearance

for the projects covered under **Category "B"** as specified in the said notification.

• **MoEF : SECTOR IDENTIFICATION :-**

The EIA Notification, 2006, has identified and notified 39 different developmental sectors, which requires prior environmental clearance based on the capacity size & site location of the projects, which have been categorized into Category "A" or "B". The Category 'B' projects are further categorized as B-1, or B-2.

By 2010, The Ministry of Environment and Forests (MoEF) has constituted 25 State level Environment Impact Assessment Authorities (SEIAs) and State Expert Appraisal Committees (SEACs) to appraise category "B" projects.

• **ENVIRONMENTAL IMPACT ASSESSMENT (EIA) :-**

As envisaged in the terms of reference of MoEF Notification of 2006, the Environmental Impact Assessment Report is essential for the clearance of certain projects of Category B-1. The EIA document should consist following details and information :-

- i) Introduction
- ii) Project Description
- iii) Description of the Environment
- iv) Anticipated Environmental Impacts & Mitigation measures.
- v) Analysis of Alternatives (use of alternative technology at Sites.)
- vi) Environmental monitoring Programme
- vii) Additional Studies
- viii) Project Benefits
- ix) Environmental Management Plan
- x) Summary & consultants engaged

Notes : i) *The projects identified under category "B1" shall require Environmental Impact Assessment Report /Document. (EIAR) for environmental clearance.*

ii) *The projects identified under Category "B" in item No. 8 of schedule, such proposals shall be appraised and will be considered for environmental clearance on the basis of Form No. 1 and Form No. 1-A and conceptual plans of the project.*

• **TERMS OF REFERENCE (TOR) :-**

The Terms of Reference (TOR) are pertinent to the preparation of Environmental Impact Assessment (EIA) study report /documents, for Building, Construction, Township

and Area Development Projects as specified in the table of Annexure – A of the MoEF Notification, 2006.

The terms of Reference relevant to individual projects are required to be enclosed (wherever applicable) along with application, Form No. 1, Form No. 1-A etc. for the study of the project by the State Level Experts Appraisal Committee (SLEAC).

- **VALIDITY OF ENVIRONMENTAL CLEARANCE :-**

The Environmental Clearance granted by the regulatory authority for specific project or activity, is **valid for the period of 5 (five) years** w.e.f. the date it has been issued.

- **REVALIDATION OF ENVIRONMENTAL CLEARANCE :-**

The regulatory authority is empowered to extend the validity period for **another period of 5 (five) years**, on reasonable grounds, provided that the applicant has made the application for extension of time, within the first validity period of 5 years of the granted clearance.

- **TRANSFERABILITY OF ENVIRONMENTAL CLEARANCE :-**

The prior environmental clearance granted to a person or an agency (Transferor) for establishment of specific project and or activities, **can be transferred to another person or agency (Transferee)** who is legally entitled to undertake said project or activity, any time during validity of such clearance on the same terms and conditions under which prior Environmental clearance is granted, provided that the Transferor and Transferee should make such application jointly or Transferee can make such application with written "No Objection" of the Transferor.

- **POST ENVIRONMENTAL CLEARANCE MONITORING :-**

- I) For public information, the project proponent has to advertise prominently in leading 2 newspapers (in English & local Language) informing public that the project has been accorded environmental clearance and the details of said clearance are available on MoEF website when it is displayed. This compliance is a mandatory obligation for project proponent under category "B" projects, irrespective of whether prior clearance is granted by MoEF & or SEIAA.
- II) The project proponent / management shall have to submit half yearly Report (i.e. on 1st June and 1st December of each year) to regulatory authority in respect to the compliance of the stipulated terms and conditions according to which clearance is granted. These reports are treated as public documents.

**APPLICATION FOR
PRIOR ENVIRONMENTAL CLEARANCE (EC)
(FOR CATEGORY "B" (B-1 & B-2) PROPOSALS)**

The Ministry of Environment and Forest, Govt. of India, vide its Notification No. S. O. 1533 dt. 14-09-2006, has made it mandatory for builders/developers to obtain Environmental Clearance prior to commencement of any proposal under Category "B" (B-1 & B-2) for Building, Construction, Township & Area Development project, where the construction area exceeds than threshold limit as specified in the schedule of said Notification dt. 14-09-2006. The details are as under :-

• **CATEGORY 'B' (B-1 & B-2) PROPOSALS :-**

B-1 : All projects under item No. 8 (b) of Schedule of Notification i.e. Township and Area Development Projects covering built-up area above 1,50,000.00 M² shall be appraised treated as Category – B-1 where Environmental Impact Assessment Report is required.

B-2 : All projects under item No. 8 (a) of Schedule of Notification i.e. Building and Construction Projects covering built-up area above 20000.00 M² (Building) less than 1,50,000.00 M² (Construction Projects) shall be appraised as Category – B-2, where Environmental Impact Assessment Report will not be insisted.

• **APPLICATION FORMAT FOR ENVIRONMENTAL CLEARANCE:-** The application for prior environmental clearance shall have to be made in the format of **FORM No. 1** and supplementary **FORM – 1A** as applicable. The format of said Form No. 1 & 1A are already reproduced herein before as a part of the Notification of MoEF dt. 14-09-2006 for information and use of proponent.

• **CONTENTS OF FORM NO. 1**

The proponent has to submit all information and details specified in Form No. 1. The contents & features of Form No. 1 (on which information is sought) is as under:-

- i) **Basic Information:-** Proposal, project, location, size of project and related information.
- ii) **Activity:-** Construction, operation, decommissioning of project, and actions which may cause physical changes in the Locality (Topography, Land use, Changes in water bodies etc.)

- iii) **Use of Natural Resources:-** Use of natural resources for construction and or operation, energy, materials particularly any resources which are non-renewable or in short supply.
- iv) **Use of Substances:-** Use, storage, transport, handling of substances or materials which may be harmful to human health or environmental degradation.
- v) **Solid Waste:-** Production of solid wastes, during construction or operation or decommissioning and its quantity per month.
- vi) **Pollutants:-** Release of pollutants or any hazardous, toxic or noxious substances into air its quantity per hour.
- vii) **Noise, Vibration, Emission:-** Details of generation of noise, vibrations and emissions of light and heat during construction and operation.
- viii) **Contamination Risks:-** Risks of contamination of land or water due to release of pollutants into ground, sewer, ground water etc.
- ix) **Accident Risks:-** Risks of accidents which could harm human health or the environment during construction and or operation.
- x) **Development Factors:-** Details of the consequential developments which may lead to environmental effects, and its impact on other existing activities in the vicinity.
- xi) **Environmental Sensitivity:-** Areas important or sensitive for ecological reasons, areas protected under international conventions, defence installations, areas susceptible to natural hazard etc.

- **CONTENTS OF FORM NO. 1-A :**

Form No. 1-A is a supplementary Form to Form No. 1, applicable only for construction projects described under item No. 8 of the Schedule of the Notification dt. 14-09-2006. This form requires information on following items :-

- i) **Land Environment:-** Complete details of project site surrounding features, proposed development including total built-area, earth work, infrastructure facilities etc.
- ii) **Water Environment:-** Total quantity of water requirement, water resources, water management, waste water cycling, and pollution load etc.
- iii) **Vegetation :-** Local eco-system, threat of biodiversity, tree plantation etc.

- iv) **Fauna** :- Probability of displacement of fauna – both terrestrial and aquatic if any, direct or indirect impacts on the avifauna of the area.
- v) **Air Environment** :- Air quality level, predicted value, impact of dust, smoke, fumes or hazardous gases, increase in Noise, Vibration etc.
- vi) **Aesthetics** :- Obstruction of view, scenic amenities and landscaping, impact of new construction on existing construction, urban designing influence etc.
- vii) **Socio-Economic Aspects** :- Demographic structure of population, existing social infrastructure etc.
- viii) **Building Materials** :- Selection of building materials and their energy efficiency, pollution due to handling and transport etc.
- ix) **Energy Conservation** :- Power requirement, sources of supply, assumed energy consumption, renewable energy technologies proposed to be used etc.
- x) **Environment Management Plan**:- Activities to be undertaken, mitigation measures, environmental impact, monitoring plan and management plan in case of emergency.

• **LIST OF MAHARASHTRA E. C. REGULATORY AUTHORITIES & ADDRESSES**

MAHARASHTRA STATE LEVEL EXPERT APPRAISAL COMMITTEES

Authority	Scrutinize projects Area	Type of Development	Communication: Full address
SEAC-I	Maharashtra State	Industries, Mining, Irrigation and others, excluding building construction projects	The Secretary, State Level Expert Appraisal Committee-I, 15 th Floor, Environment Dept., Mantralaya, Mumbai – 400 032
SEAC-II	MMR (Mumbai Metropolitan Region)	Construction Projects (New cases & compliance cases)	The Secretary, State Level Expert Appraisal Committee-II, 15 th Floor, Environment Dept., Mantralaya, Mumbai – 400 032
SEAC-III	Non MMR from Maharashtra State	Construction Projects (New cases & compliance cases)	The Secretary, State Level Expert Appraisal Committee-III, 15 th Floor, Environment Dept., Mantralaya, Mumbai – 400 032

SEIAA	Maharashtra State	All recommended by SEAC-I, SEAC-II & SEAC-III	The Secretary, State Level Impact Assessment Authority, 15 th Floor, Environment Dept., Mantralaya, Mumbai – 400 032
Central Expert Appraisal Committee			The Secretary (Environment), Room No. 217(Annex), Mantralaya, Mumbai – 400 032

- **ENCLOSURES REQUIRED WITH APPLICATION OF E. C. :-** The list of accompaniments to the application for prior Environmental Clearance is as under :-
 - 1) Application Covering letter address to Member Secretary E. C. from proponent.
 - 2) Form No. 1 & Form No. 1-A duly filled and signed by the proponent.
 - 3) Ownership Documents, & Development Plan or Regional Zonal Remarks.
 - 4) Document empowering Authorised Signatory to the application.
 - 5) Pre-feasibility Report.
 - 6) Consolidated Statement.
 - 7) Set of Conceptual plans of the project.
 - 8) Terms of Reference (TOR) wherever required.
 - 9) Environmental Impact Report (If applicable).
 - 10) Public Hearing Report (If applicable).
 - 11) Any other document desired by regulatory authority.

PROCEDURE FOR ENVIRONMENTAL CLEARANCE

As defined in the Notification of MoEF dt. 14-09-2006, the application for Environmental Clearance, has to go through following stage wise procedures such as :-

- i) Screening (Stage No. 1)
- ii) Scoping (Stage No. 2)
- iii) Public Consultation (Stage No. 3)
- iv) Appraisal (Stage No. 4)

As per Categorization of the project either Category – A or Category – B as defined in the Schedule of Notification, the applicant has to make application for E. C. to Member Secretary of respective authority which are as under :-

- For Category – A : Central level Expert Appraisal Committee (EAC) constituted by the Central Govt.
- For Category – B :
 - i) State level Impact Assessment Authority (SEIAA)
 - ii) State level Expert Appraisal Committee (SEAC)
- **PROCEDURE** :- Once the application for E. C. is made to appropriate authority it is scrutinized and assessed by SEAC/SEIAA adopting aforesaid procedures at respective stages which are explained hereafter :-
- **STAGE NO. 1 : Screening** :-

At this stage the State Level Expert Appraisal Committee (SEAC) scrutinizes the application for Category "B" projects or activities. After initial scrutiny it is left for SEAC as to whether the proposal requires further environmental studies for preparation of Environmental Impact Assessment (EIA) depending upon nature and location of schedule project.

Note : *The projects requiring Environmental Impact Assessment Report, are termed as Category B-1 projects and remaining projects are termed as Category B-2 proposals.*

- **STAGE NO. 2 : Scoping :-**

This is the process in which Expert Appraisal Committee (EAC) (Category – A Projects) and State Level Expert Appraisal Committee (SEAC) determine for TOR in respect of the project or activity seeking E. C. It is possible that application for Environmental Clearance may be rejected by the apex regulatory authority on the recommendation of EAC or SEAC, on specific reasons and grounds.

- **STAGE NO. 3 : Public Consultation :-**

Except the proposals (excluded) as defined in the Notification, all proposals of Category – A and Category B-1, are required to complete the process of Public Consultation as detailed in the said Notification. In this exercise the concerns of local affected persons and others who have plausible stake in the environmental impacts of the proposed project or the activity is taken into consideration.

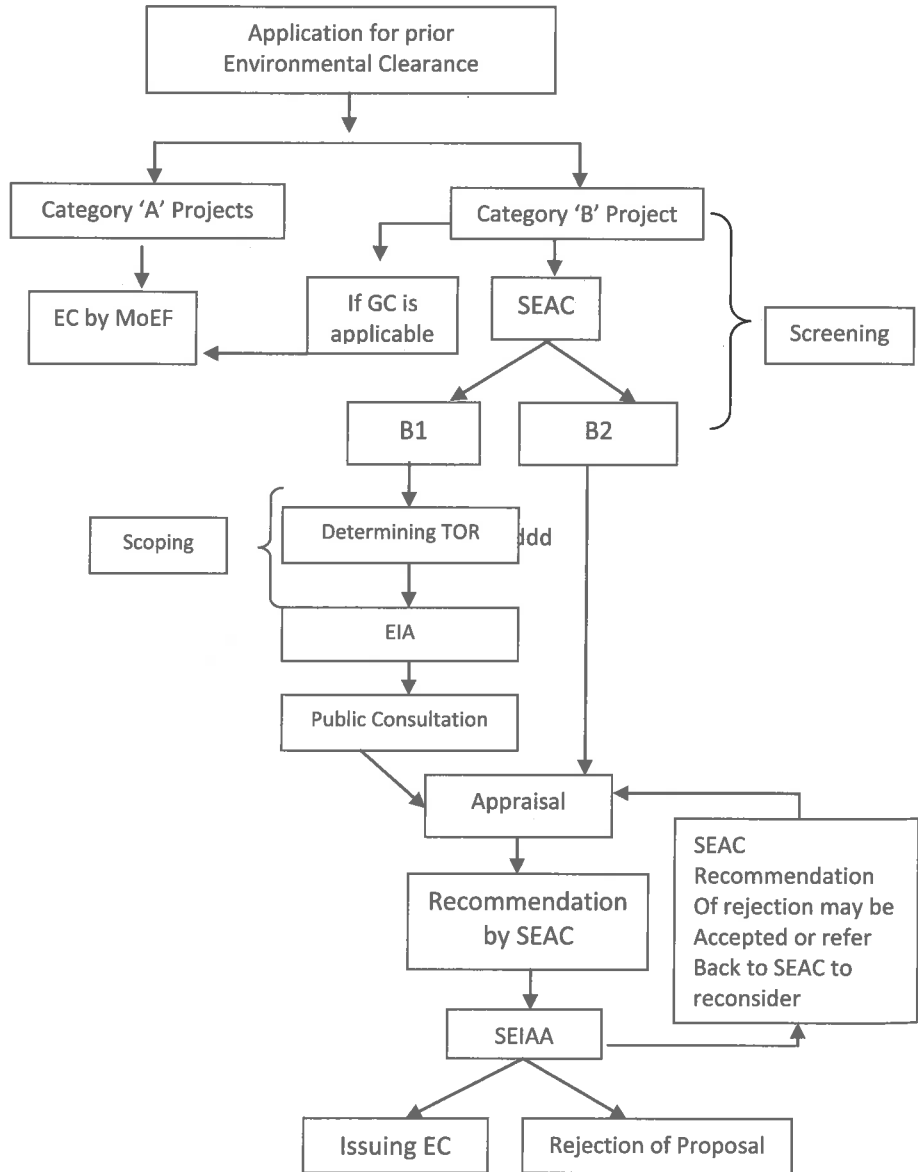
- **STAGE NO. 4 : Appraisal :-**

This process involves detailed scrutiny by the EAC or SEAC as the case may be, of the application and pre-requisite documents/reports as well as public hearing proceeding for grant of environmental clearance.

For the benefit of project proponents and expert consultants of the project, the procedural work flow (Chart) for the Environmental Clearance is reproduced here under :-

Cont...

PROCEDURAL WORK FLOW FOR ENVIRONMENTAL CLEARANCE



ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

The International Association for Impact Assessment (IAIA) defines an environmental impact assessment as "The process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of development proposals prior to major decisions being taken and commitments made".

The purpose of the assessment is to ensure that the decision makers while considering environmental impacts, should have clarity as to whether to proceed further or not with the project. The Environmental Impact Assessment is a technical evaluation intended to contribute more objective decision making in the light of detailed environmental studies on potential environmental impacts.

Environmental Impact Assessment (EIA) is a technical exercise carried out by the experts to predict environmental impact, assessment of its significance and recommendations for mitigating measures in respect to schedule project seeking environmental clearance. The report has to specifically emphasis, and visualize concept of project, and also to envisage procedures and equipments potentially relevant in preparation of EIA Report, for obtaining environmental clearance for the project from regulatory authority.

The EIA Report has to cover wide range of related technical disciplines and also should have to consider probable impacts of Air, Water, Noise, Vibration, Ecology, Cultural heritage, Sustainability etc. on the project. The Report should also have to explain as to how the project can be made environmental friendly.

- **CONTENTS OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT :-**

The generic structure of Environmental Impact Assessment Document as defined in the Appendix-III, of MoEF Notification dt. 14-09-2006, should cover following aspects and considerations:-

- i) **Introduction :-** Purpose, identification, description and scope of study of EIA.
- ii) **Project Description :-** Type & size of project, aspects likely to cause environmental effects, technology and process proposed to be involved etc.
- iii) **Description of Environment :-** Study, area, period, components, methodology, and baseline of environmental components identified in the scope of study.

- iv) **Anticipated Environmental Impact and Mitigation Measures :-** Details of probable environmental impacts due to location, design, construction, operation of project etc. and measures of minimizing of impact indentified.
- v) **Analysis of Alternatives (Technology and Site):-** Need for alternatives, its description, summary of adverse impact, mitigation methods proposed and its implementation and selection of alternatives.
- vi) **Environmental Monitoring Programme:-** Technical aspects of monitoring the effectiveness of mitigation measures.
- vii) **Additional Studies :-** Public consultation, Risk assessment, Social Impact Assessment and Rehabilitation and Resettlement (R & R) action plans.
- viii) **Project Benefits :-** Improvement in physical and social infrastructure, employment potential and other tangible benefits.
- ix) **Environmental Benefit Analysis :-** Cost if recommended at the scoping stage.
- x) **Environmental Management Plan:-** Administrative aspects ensuring that mitigating measures mentioned in the management plan will be implemented effectively.
- xi) **Summary and Conclusion :-** Overall justification for implementation of project and to explain as to how adverse effects can be mitigated.
- xii) **Disclosure of Consultants Engaged :-** The names of consultants engaged for the project along with their brief resume and nature of consultancy and services being rendered.

For the guidance to experts for preparation of Environmental Impact Assessment Report/Document, the Questionary format as devised by the Administrative Staff College of India, Hyderabad, are reproduced hereafter for projects of Building and Construction as well as for Township and Area Development projects under item 8(a) & 8(b) of the Notification of 2006 respectively.

Cont

QUESTIONNAIRE FOR ENVIRONMENTAL IMPACT ASSESSMENT OF BUILDING AND CONSTRUCTION PROJECTS

Note 1 : All information to be given in the form of Annexures should be properly numbered and from part of this proforma

Note 2 : No abbreviations to be used – Not available or not applicable should be clearly mentioned

1. General Information

- 1.1 Name of the project :**
- (a) Name of the authorised signatory :**
- (b) Mailing address :**
- E-mail :
- Telephone :
- Fax No. :
- (c) Does the proposal relate to new project/ expansion/modernization :**

1.2 Site Information

(a) Project Site :

Village(s)	Tehsil	District	State

(b) Geographical Information

- Latitude :
- Longitude :
- Total area envisaged for setting up of project (in ha.) :
- Nature of terrain (hilly, valley, plains, coastal plains etc.) :
- Nature of soil (sandy, clayey, sandy loam etc) :
- Seismic zone classification :
- Does the site falls under CRZ classification? :
- Land usage of the proposed project site :

1.3 Environmental sensitivity details within 10 km from the boundary of the project for applicability of "General Condition (GC)" as per EIA notification dated 14-09-2006 and amendments as on date.

S. No.	Item	Name	Aerial Distance (in km)
1	Protected areas notified under the wild life (protection) Act, 1972		
2	Critically polluted areas as identified by the CPCB		
3	Eco-sensitive areas as notified under section 3 of the E(P) Act 1986		
4	Inter-State boundaries and international boundaries		

1.4 Environmental sensitivity areas as mentioned at column 9(III) of EIA Notification 2006

S. No.	Areas	Name / Identity	Aerial distance (within 15 km) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value		
2	Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, resting, migration etc.		
4	Inland, coastal, marine or underground waters		
5	State, National boundaries		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas		
7	Defense Installations		
8	Densely populated for built-up area		
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)		
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)		

11	Areas already subjected to pollution or environmental damage (those where existing legal environmental standards are exceeded)		
12	Areas susceptible to natural hazards which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)		

0.5 km from Railway Lines/National/State Highway should be maintained

Description of the flora / vegetation in the project area

Description of fauna (non-domesticated) in the project area

1.5 Baseline data /Meteorological Data

Ambient Air Quality Data

Water Quality Data

Human Settlement

Description	Within the project site	Within 1 km from the project boundary
Population		
No. of Villages		
Number of households		
Village-wise		

1.6 Current Land Use of the Proposed Project Site Area (in ha.)

Level – I
1. Built-up Land
2. Agricultural Land
3. Forest
4. Wastelands
5. Water bodies
6. Others
Total

2. Land Use Plan :

2.1 Does the proposed project conform to the approved land use all over the site? (To be certified by the concerned Department of State Government).

Yes No

If not, clearly indicate which of the stretches are not as per approved land use.

2.2 Project Site Preparation :

Is the proposed project located in low-lying area?

Yes No

Level before filling (above MSL in m)

Level after filling (above MSL in m)

Details of fill material required:

Quantity of FILL material required (in cu.m)

Source

Gradient Details

2.3 Would the above filling result in complete/partial filling of water bodies

2.4 Does the site involve stripping?

Yes No

If yes, provide the following details :

1. Size of the area to be stripped
2. Location
3. Soil Type
4. Volume and quantity of earth to be removed
5. Location of dump site
6. Proposal for utilization of removed topsoil

2.5 Does it involve cutting?

Yes No

If yes, please furnish the following details :

1. Size of the area to be cut
2. Depth of cut
3. Location
4. Soil Type
5. Volume and quantity of earth and other material to be removed
6. Location of dump site

2.6 Does the site preparation require cutting of trees?

Yes No

If yes, please furnish the following details :

1. How many trees are proposed to be cut
2. Species of the above trees
3. Are there any protected / endangered species?

Yes No

4. If yes, please provide details :

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2.7 In case the site covers a flood plain of a river, Please furnish:

- 1. Detailed micro-drainage
- 2. Flood passages
- 3. Flood periodically in the area

2.8 Does the proposed project involve construction on any sandy stretch?

Yes No

If yes, please furnish details :

Height (above MSL in metres)

2.9 Does the project involve extraction of sand, levelling or digging of sandy stretches within 500 metres of high tide line?

Yes No

If yes, mention the activity involved and area

- 1. Stretch
- 2. Area (sq. metre)

2.10 Does the project involve any dredging?

Yes No

2.11 Whether there will be any change in the drainage pattern after the proposed activity?

Yes No

If yes, what are the changes?

- A. What is the maximum extent?
- B. Is any additional area to be flooded?

3. Raw Material Required During Construction:

S. No.	Item	Quantity (Tones)	Mode of transport	Source
1)	Bricks			
2)	Sand			
3)	Cement			

4)	Metal			
5)	Diesel			
6)	Others			

4. Water Required for Construction and Operational Phases:

4.1 Water Requirement

Water Requirement (cu.m/day)					
S. No.	Purpose	Average demand	Peak demand	Source	Type-Treated / untreated Recycled
1.	Construction				
2.	Air Pollution reduction (dust suppression etc.)				
3.	Domestic purposes				
4.	Others				
	Total				

4.2 Source of Raw Water Supply during Construction Phase

Source of Raw Water Supply during Construction phase		
S. No.	Source	Cu. m/day
1.	Sea	
2.	River	
3.	Water body	
4.	Ground Water	
5.	Municipal Water Supply	
6.	Others	

4.3 Water Supply during Operational Phase

Water Supply during Operational phase		
S. No.	Source	Cu. m/day
1.	Sea	
2.	River	
3.	Water body	
4.	Ground Water	
5.	Municipal Water Supply	
6.	Others	

4.4 Sewage, Collection, Treatment and Disposal

Sewage, Collection, Treatment and Disposal		
S. No.	Item	Quantity / Day
1.	Mode of collection of domestic effluent	
a.	Surface drains	
b.	Under ground	
c.	System and capacity	
2.	Mode of Treatment	
a.	Septic tank and filters (capacity)	
b.	Biological treatment capacity	
c.	Others	
3.	Mode of Disposal	
a.	Soak pits	
b.	Disposal to local sewer	
c.	Water bodies	
d.	Others	

5. Energy Consumption :

Hydrocarbons Yes _____ No _____

Gas Yes _____ No _____

Electricity Yes _____ No _____

Any other non-conventional energy source Yes _____ No _____

6. Power Distribution in the Region

Power system		
S. No.	Item	Remarks
1.	Source and power supply capacity	
2.	Distribution system at present	
3.	Alternate supply if any	
4.	In case of DG set (Fuel type)	

7. State the impacts predicted on the quality and quantity of Transport linkages:

a. Road _____

b. Rail _____

c. Water _____

d. Air _____

e. Others _____

8. Impact of the Development activity on surroundings :

Impact of the new development on the surrounding areas		
S. No.	Item	Impact
1.	Traffic management at peak hours	
2.	Buffer zone planned, if so, details	
3.	Provision of service roads	
4.	Measures proposed to regulate unplanned slums, shops etc.	
5.	Others	

9. Landscaping / Tree Plantation :

S. No.	Phase	Areas/no. with reference to total project area
1	Total area of project	
2	Area planted during construction phase	
3	Area to be planted during operational phase	
4	No. of trees already planted	
5	No. of trees proposed to be planted	
6	Parks and gardens to be developed	
7	Impacts from proposed landscaping	
8	Special features of proposed landscape design	

10. Special features in development / construction :

S. No.	Phase	Areas/no. with reference to total project area
1	Greening of supply chain	
2	Flyash utilization	
3	Green rating	
4	Intelligent building	
5	Timber free construction	
6	Energy efficiency for lighting & ventilation	
7	Measurable impacts on human health	
8	Impact on heat islands and inversions	

11. Environmental Management Plan :

11.1 Details of Pollution Control Systems :

Description	Existing	Proposed
Air		
Water		
Noise		
Solid waste		

11.2 Expenditure on Environmental Measures :

S. No.		Capital Cost		Annual recurring cost	
		Existing	Proposed	Existing	Proposed
1	Pollution control (provide break-up separately)				
2	Pollution monitoring (provide break-up separately)				
3	Fire fighting & emergency handling				
4	Green Belt				
5	Training in the area of environment & occupational health				
6	Others (specify)				

11.3 Details of organizational set up/cell for environmental management and monitoring :

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11.4 Details of community welfare/peripheral development programmes envisaged/being undertaken by the project proponent :

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12. Compliance with environmental safeguards (for existing units)

- a. Status of the compliance of conditions of Environmental Clearance issued by MoEF, if any enclosed Yes No
- b. Status of compliance of 'Consent to Operate' issued by SPCB, if any, enclosed Yes No

Date :

Name and Signature of the Competent Officer / authority

E-mail :

Phone and Fax Nos :

Given under the seal of organization on behalf of whom the applicant is signing

Notes :

- (i) The project authorities are earnestly advised in their own interest to provide complete information on points, which they think are relevant to their proposal. Non-supply of required information may result in considerable delay in according environmental clearance.
- (ii) All correspondence with MoEF shall be made by the authorised signatory only. The authorised signatory should also submit a document in support of his claim of being an authorised signatory for the specific project (refer notification No. SO 3067 (E) dated 1st December 2009)

QUESTIONNAIRE FOR ENVIRONMENTAL IMPACT ASSESSMENT OF TOWNSHIPS AND AREA DEVELOPMENT PROJECTS

Note 1 : All information to be given in the form of Annexures should be properly numbered and from part of this proforma

Note 2 : No abbreviations to be used – Not available or not applicable should be clearly mentioned

1. General Information

- 1.7 Name of the project :**
- (d) Name of the authorised signatory :
 - (e) Mailing address :
 - E-mail :
 - Telephone :
 - Fax No. :
 - (f) Does the proposal relate to new project/
expansion/modernization :

1.8 Site Information

(c) Project Site :

Village(s)	Tehsil	District	State

(d) Geographical Information

Latitude	:	<input type="text"/>
Longitude	:	<input type="text"/>
Total area envisaged for setting up of project (in ha.)	:	<input type="text"/>
Nature of terrain (hilly, valley, plains, coastal plains etc.)	:	<input type="text"/>
Nature of soil (sandy, clayey, sandy loam etc)	:	<input type="text"/>
Seismic zone classification	:	<input type="text"/>
Does the site falls under CRZ classification?	:	<input type="text"/>
Land usage of the proposed project site	:	<input type="text"/>

1.9 Environmental sensitivity details within 10 km from the boundary of the project for applicability of "General Condition (GC)" as per EIA notification dated 14-09-2006 and amendments as on date.

S. No.	Item	Name	Aerial Distance (in km)
1	Protected areas notified under the wild life (protection) Act, 1972		
2	Critically polluted areas as identified by the CPCB		
3	Eco-sensitive areas as notified under section 3 of the E(P) Act 1986		
4	Inter-State boundaries and international boundaries		

1.10 Environmental sensitivity areas as mentioned at column 9(III) of EIA Notification 2006

S. No.	Areas	Name/ Identity	Aerial distance (within 15 km) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value		
2	Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, resting, migration etc.		
4	Inland, coastal, marine or underground waters		

5	State, National boundaries		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas		
7	Defense Installations		
8	Densely populated for built-up area		
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)		
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)		
11	Areas already subjected to pollution or environmental damage (those where existing legal environmental standards are exceeded)		
12	Areas susceptible to natural hazards which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)		

**0.5 km from Railway Lines/National/State Highway should be maintained
Description of the flora / vegetation in the project area**

Description of fauna (non-domesticated) in the project area

1.11 Baseline data

Meteorological Data

Ambient Air Quality Data

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Water Quality Data

--

Human Settlement

Description	Within the project site	Within 1 km from the project boundary
Population		
No. of Villages		
Number of households Village-wise		

1.12 Current Land Use of the Proposed Project Site Area (in ha.)

Level – I
1. Built-up Land
2. Agricultural Land
3. Forest
4. Wastelands
5. Water bodies
6. Others
Total

2. Land Use Plan :**2.1 Does the proposed project conform to the approved land use all over the site? (To be certified by the concerned Department of State Government).**

Yes No

If not, clearly indicate which of the stretches are not as per approved land use.

2.2 Project Site Preparation :

Is the proposed project located in low-lying area?

Yes No

Level before filling (above MSL in m)

Level after filling (above MSL in m)

Details of fill material required:

Quantity of FILL material required (in cu.m)

Source

Gradient Details

2.3 Would the above filling result in complete/partial filling of water bodies

2.4 Does the site involve stripping?

Yes

No

If yes, provide the following details :

1. Size of the area to be stripped

2. Location

3. Soil Type

4. Volume and quantity of earth to be removed

5. Location of dump sit

6. Proposal for utilization of removed topsoil

2.5 Does it involve cutting?

Yes

No

If yes, please furnish the following details :

1. Size of the area to be cut,

2. Depth of cut,

3. Location,

4. Soil Type,

5. Volume and quantity of earth and other material to be removed

6. Location of dump site

2.6 Does the site preparation require cutting of trees?

Yes No

If yes, please furnish the following details :

1. How many trees are proposed to be cut
2. Species of the above trees
3. Are there any protected / endangered species?

Yes No

4. If yes, please provide details :

a. In case the site covers a flood plain of a river, Please furnish:

1. Detailed micro-drainage,
2. Flood passages,
3. Flood periodically in the area

2.8 Does the proposed project involve construction on any sandy stretch?

Yes No

If yes, please furnish details :

Height (above MSL in metres)

2.9 Does the project involve extraction of sand, levelling or digging of sandy stretches within 500 metres of high tide line?

Yes No

If yes, mention the activity involved and area

1. Stretch
2. Area (sq. metere)

2.10 Does the project involve any dredging?

Yes No

2.11 Whether there will be any change in the drainage pattern after the proposed activity?

Yes

No

If yes, what are the changes?

a. What is the maximum extent?

b. Is any additional area to be flooded?

3. Details of New Town

Provide a Key map showing the location of the New Town

Area of the New Town

Population (Dwelling units)

Township density

Gross Density

Net Density

Provide a land use map of the proposed town giving the break up of area and percentages under different land use types

Total number of houses to be constructed and percentage of the demand which these will satisfy

House types – Areas / income levels

Attach master plan for the New Town, indicating sectors/neighborhoods with densities/population and amenities provided.

4. Details of facilities provided in the New Town

4.1 Residential

i) Type of development

(a) low rise/high rise/medium rise/mixed

(b) specify the number of storey's in each case

ii) Population in each of the neighborhood sectors

iii) Density, plot size, floor area ratio, site coverage

iv) Development controls, if any.

4.2 Commercial

I. Hierarchy of commercial activities and approximate population served by each

II. Types and numbers of commercial establishments

III. Extent of commercial activities in the formal sector/informal sector

4.3 Educational

- a. Nursery school
- b. Primary school
- c. Higher Secondary School
- d. College
- e. Technical/Vocational Training Institutes

4.4 Health

- a. Dispensaries
- b. Health Clinics
- c. Nursing Homes (No. of beds)
- d. Bio-medical waste management

4.5 Parks, Playgrounds

- a. Toilets
- b. Cluster Open spaces
 - a. Neighborhood open spaces
 - b. Sector open spaces
 - c. Open spaces at town level

4.6 Recreational

- a. Area and percentage of open spaces under recreation
- b. Cinema Hall
- c. Swimming pools
- d. Water-based recreation
- e. Others

4.7 Other facilities

- a. Post Office
- b. Bank
- c. Telephone Booth
- d. Milk Booth
- e. Police Station
- f. Any other, specify

4.8 Infrastructural Facilities : Transport

1. Mode of travel from residence to work place
2. Mode of travel to surrounding areas
3. Mode of travel within the town

5. Phase wise development of the New Town

1. Provide a phase wise breakup of area, population and facilities planned
2. Indicate the time lag between the phases
3. Densities at different phases of town development
4. Future development envisaged

6. Impact of the new Town on surrounding Areas

1. Proposed land use plan for peripheral area, if any
2. Is there a buffer zone planned around the new town? Detailed thereof.
3. What are the activities that are likely to come up in the surrounding areas relating to the demand of the proposed new town during the construction phase (stone quarrying manufacturing of lime, bricks, extraction of timber etc.)
4. Agencies and the measures proposed to regulate development in the periphery.

Proposed Institutional set up

- a. Management of the township, Name of Authority and functions.
- b. Association of Residents, if any.

7. Raw Material Required During Construction:

S. No.	Item	Quantity (Tonnes)	Mode of transport	Source
1)	Bricks			
2)	Sand			
3)	Cement			
4)	Metal			
5)	Diesel			
6)	Others			

8. Water Required for Construction and Operational Phases:

8.1 Water Requirements

Water Requirement (cu.m/day)					
S. No.	Purpose	Average demand	Peak demand	Source	Type-Treated/untreated Recycled
1.	Construction				
2.	Air Pollution reduction (dust suppression etc.)				
3.	Domestic purposes				
4.	Others				
	Total				

8.2 Source of Raw Water Supply during Construction Phase

Source of Raw Water Supply during Construction phase		
S. No.	Source	Cu. m/day
1.	Sea	
2.	River	
3.	Water body	
4.	Ground Water	
5.	Municipal Water Supply	
6.	Others	

8.3 Sources of Water Supply during Operational Phase

Water Supply during Operational phase		
S. No.	Source	Cu. m/day
1.	Sea	
2.	River	
3.	Water body	
4.	Ground Water	
5.	Municipal Water Supply	
6.	Others	

8.4 Sewage, Collection, Treatment and Disposal

Sewage, Collection, Treatment and Disposal		
S. No.	Item	Quantity / day
1.	Mode of collection of domestic effluent	
a.	Surface drains	
b.	Under ground	
c.	System and capacity	
2.	Mode of Treatment	
a.	Septic tank and filters (capacity)	
b.	Biological treatment capacity	
c.	Others	
3.	Mode of Disposal	
a.	Soak pits	
b.	Disposal to local sewer	
c.	Water bodies	
d.	Others	

8.5 Water Harvesting and Recharging Scheme

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8.6 Storms water drainage

- a. Collection
- b. Disposal
- c. Treatment, if any

9. Energy Consumption :

Hydrocarbons	Yes _____	No _____
Gas	Yes _____	No _____
Electricity	Yes _____	No _____
Any other non-conventional energy source	Yes _____	No _____

10. Power Distribution in the Region

Power system		
S. No.	Item	Remarks
1.	Source and power supply capacity	
2.	Distribution system at present	
3.	Alternate supply if any	
4.	In case of DG set (Fuel type)	

11. State the impacts predicted on the quality and quantity of Transport linkages:

- a. Road _____
- b. Rail _____
- c. Water _____
- d. Air _____
- e. Others _____

12. Impact of the Development activity on surroundings :

Impact of the new development on the surrounding areas		
S. No.	Item	Impact
1.	Traffic management at peak hours	
2.	Buffer zone planned, if so, details	
3.	Provision of service roads	
4.	Measures proposed to regulate unplanned slums, shops etc.	
5.	Others	

13. Is the new town population likely to utilize any of the facilities in the surrounding region? Specify the extent of use in each case:

- a. Education
- b. Health
- c. Transport
- d. Commerce
- e. Recreation
- f. Others

14. Landscaping / Tree Plantation :

S. No.	Phase	Areas/no. with reference to total project area
1	Total area of project	
2	Area planted during construction phase	
3	Area to be planted during operational phase	
4	No. of trees already planted	
5	No. of trees proposed to be planted	
6	Parks and gardens to be developed	
7	Impacts from proposed landscaping	
8	Special features of proposed landscape design	

15. Other Information:

- (i) Measures proposed for construction labour – their living requirement, health and hygienic conditions, sewage treatment and disposal arrangements etc.
- (ii) Measures proposed to counter encroachments in and near the new town
- (iii) Housing of construction workers in the different construction phases and the amenities provided for them. What is the future of such Housing?
- (iv) How are the service population proposed to be accommodated in the new town? What percentage of service population has been catered to?
- (v) How are the informal sector population proposed to be accommodated in the New Town in regard to their living and working.
- (vi) Does the New Town intend to provide services and amenities (ex Education, Health, Recreation, etc.) to population living in the surrounding areas? Specify the type of services and approximate number of people likely to utilize these services.
- (vii) How are the running costs of the town proposed to be met? Mention the approximate amount and percentage of total – by residents, town authorities and others.
- (viii) Proposed employment prospects within the New Town to dependents of the employees other than jobs in the agency building the New Town.

16. Environmental Management Plan :

16.1 Details of Pollution Control Systems :

Description	Existing	Proposed
Air		
Water		
Noise		
Solid waste		

16.2 Expenditure on Environmental Measures :

S. No.	Description	Capital Cost		Annual recurring cost	
		Existing	Proposed	Existing	Proposed
1	Pollution control (provide break-up separately)				
2	Pollution monitoring (provide break-up separately)				
3	Fire fighting & emergency handling				
4	Green Belt				
5	Training in the area of environment & occupational health				
6	Others (specify)				

16.3 Details of organizational set up/cell for environmental management and monitoring :

--

16.4 Details of community welfare / peripheral development programmes envisaged / being undertaken by the project proponent :

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17. Compliance with environmental safeguards (for existing units)

- a. Status of the compliance of conditions of Environmental Clearance issued by MoEF, if any, enclosed Yes No
- b. Status of compliance of 'Consent to Operate' issued by SPCB, if any, enclosed Yes No

Date :

Name and Signature of the Competent Officer / authority

E-mail :

Phone and Fax Nos :

Given under the seal of organization on behalf of whom the applicant is signing

Note :

The project authorities are earnestly advised in their own interest to provide complete information on points, which they think are relevant to their proposal. Non-supply of required information may result in considerable delay in according environmental clearance.

All correspondence with MoEF shall be made by the authorised signatory only. The authorised signatory should also submit a document in support of his claim of being an authorised signatory for the specific project (refer notification No. SO 3067 (E) dated 1st December 2009)

**CONSOLIDATED STATEMENT
FOR
CONSTRUCTION PROJECTS
(Requirement of Maharashtra EC Authorities only)**

This is an overall collective summary of the project at a glance in the form of consolidated statement specially prepared for Construction Projects such as Building, Construction, Township and Area Development projects defined under item No. 8 (a) & (b) of the schedule of the MoEF Notification dt. 14-09-2006, wherein all the related information is given in detail to enable regulatory authority to scrutinize the proposal more comfortably. This statement generally covers information on the following heads :-

• **HEADS OF CONSOLIDATED STATEMENT :-**

- i) Name of Project.
- ii) Name, address & contact numbers of Proponent, Consultants and their accreditation.
- iii) Type and location of Project.
- iv) Governing Development Regulations.
- v) Project details such as plot area, permissible F.S.I./built-up area, proposed built-up area, number of buildings proposed, its heights, Tenament Density and all such required information.
- vi) Water and power requirement.
- vii) Infrastructural services i.e. S.W.D. sewage & waste water disposal, S.W.M. etc.
- viii) NOCs/Clearances from local and statutory authorities etc.

Apart from above related information of the project the summary of technical details of project construction should be highlighted in the following manner:-

• **TECHNICAL SUMMARY OF PROJECT PROPOSAL :-**

- a) Total area of Plot.
- b) Land use permissible.
- c) F.S.I. Permissible for the zone.
- d) Total built-up area proposed.
- e) Total F.S.I. consumed.
- f) Area of Amenity space reservation/open space (Layout RG).
- g) Number of buildings proposed.
- h) Floor & maximum height of building/s.

- i) Number of podiums proposed and its area.
- j) Number of basements proposed and its area.
- k) Area of stilt floor.
- l) Total number of Tenaments (Residential + Commercial)
- m) Phases programme proposed for project execution.

The model Consolidated Statement format is reproduced hereafter for information and ready reference of all concerned.

**FORMAT OF
CONSOLIDATED STATEMENT ON VARIOUS ENVIRONMENTAL ASPECTS
FOR
CONSTRUCTION PROJECTS**

Important Note before filling the form:

1. Fill the form in the same format (i.e. Font: Times New Roman and font size: 12)
2. Do not edit / delete the columns if its not applicable
3. Send soft copy to the mahaseac@gmail.com and seiaa.mah@gmail.com in the word format (doc file)

Sr. No.	Particular	Commitment On
1	Name of Project	
2	Name, contact number & address of Proponent	<ul style="list-style-type: none"> • Name: • Address: • Telephone number: • Mobile number: • Email ID:
3	Name, contact number & address of Consultant	<ul style="list-style-type: none"> • Name: • Address: • Telephone number: • Mobile number: • Email ID:
4	Accreditation of consultant (NABET Accreditation)	<ul style="list-style-type: none"> • QCI NABET List for the construction project / Area development project / Township

5	Type of project: Housing project / Industrial Estate / SRA scheme / MHADA / Township or others	
6	Location of the project	
7	Whether in Corporation / Municipal / other area	
8	Applicability of the DCR	
9	Note on the initiated work (If applicable)	<ul style="list-style-type: none"> • Total constructed work (FSI+ Non FSI) • Date and area details in the necessary approvals issued by the competent authority (attach scan copies)
10	LOI / NOC from MHADA / Other approvals (If applicable)	Date and construction area details mentioned in the approved letter
11	Total Plot Area (sq. m.) Deductions Net Plot area	
12	Permissible FSI (including TDR etc.)	
13	Proposed Built-up Area (FSI & Non-FSI)	<ul style="list-style-type: none"> • FSI area (sq. m.): • Non FSI area (sq. m.): • Total BUA area (sq. m.):
14	Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	
15	Estimated cost of the project	
16	No. of building & its configuration(s)	
17	Number of tenants and shops	
18	Number of expected residents / users	
19	Tenant density per hector	
20	Height of the building(s)	

21	Right of way (Width of the road from the nearest fire station to the proposed building(s))	
22	Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	
23	Existing structure(s)	
24	Details of the demolition with disposal (If applicable)	
25	Total Water Requirement	<p>Dry season:</p> <ul style="list-style-type: none"> • Fresh water (CMD): & Source: • Recycled water (CMD): • Total Water Requirement (CMD): • Swimming pool make up (Cum): • Fire fighting (Cum): <p>Wet Season:</p> <ul style="list-style-type: none"> • Fresh water (CMD): & Source: • Recycled water (CMD): • Total Water Requirement (CMD): • Swimming pool make up (CMD): • Fire fighting (CMD):
26	Rain Water Harvesting (RWH)	<ul style="list-style-type: none"> • Level of the Ground water table • Size and no of RWH tank(s) and Quantity • Location of the RWH tank(s) • Size, no of recharge pits and Quantity • Budgetary allocation (Capital cost and O&M cost)
27	UGT tanks	<ul style="list-style-type: none"> • Location(s) of the UGT tank(s)
28	Storm water drainage	<ul style="list-style-type: none"> • Natural water drainage pattern • quantity of storm water • Size of SWD
29	Sewage and Waste water	<ul style="list-style-type: none"> • Sewage generation (CMD) • STP technology • Capacity of STP (CMD) • Location of the STP • DG sets (during emergency) • Budgetary allocation (Capital cost and O&M cost)

30	Solid waste Management	<p>Waste generation in the Pre Construction and Construction phase:</p> <ul style="list-style-type: none"> • Waste generation • Quantity of the top soil to be preserved • Disposal of the construction way debris <p>Waste generation in the operation Phase:</p> <ul style="list-style-type: none"> • Dry waste (Kg/day): • Wet waste (Kg/day): • E – waste (Kg/month): • Hazardous waste (Kg/month): • Biomedical waste (Kg/month) (If applicable): • STP Sludge (Dry sludge) (Kg/day): <p>Mode of Disposal of waste:</p> <ul style="list-style-type: none"> • Dry waste: • Wet waste: • E – waste: • Hazardous waste: • Biomedical waste (If applicable): • STP Sludge (Dry sludge): <p>Area requirement:</p> <ol style="list-style-type: none"> 1. Location(s) and total area provided for the storage and treatment of the solid waste: <p>Budgetary allocation (Capital cost and O&M cost)</p>
31	Green Belt Development	<p>Total RG area:</p> <ol style="list-style-type: none"> 1. RG area other than green belt (Please specify for playground, etc.) 2. RG area under green belt: <ul style="list-style-type: none"> • RG on the ground (sq. m.) • RG on the podium (sq. m.) 3. Plantation: <ul style="list-style-type: none"> • Number and list of trees species to be planted in the ground RG: • Number and list of shrubs and bushes species to be planted in the podium RG: • Number and list of trees species to be planted around the border of nallah / stream / pond (If any): • Number, size, age and species of trees to be cut, trees to be transplanted • NOC for the Tree cutting / transplantation/ compensatory plantation, if any 4. Budgetary allocation (Capital cost and O&M cost)

32	Energy	<p>Power supply:</p> <ul style="list-style-type: none"> • Maximum demand • Connected load • Source <p>Energy saving by non-conventional method:</p> <ul style="list-style-type: none"> • Energy saving measures • Detail calculations & % of saving • Compliance of the ECBC guidelines: (Yes / No) (If yes then submit compliance in tabular form) • Budgetary allocation (Capital cost and O&M cost) <p>DG Set:</p> <ul style="list-style-type: none"> • Number and capacity of the DG sets to be used • Type of fuel used
33	Environmental Management plan Budgetary Allocation	<p>Construction phase (with Break-up):</p> <ul style="list-style-type: none"> • Capital cost • O & M cost (Please ensure manpower and other details) <p>Operation Phase (with Break-up)-</p> <ul style="list-style-type: none"> • Capital cost • O&M cost (Please ensure manpower and other details) • Quantum and generation of Corpus fund and Commitment • Responsibility for further O &M
34	Traffic Management	<p>Nos. of the junction to the main road & design of confluence</p> <p>Parking details:</p> <ul style="list-style-type: none"> • Number and area of basement • Number and area of podia • Total Parking area • Area per car • 2-Wheeler • 4-Wheeler • Public Transport <p>Width of all Internal roads (m):</p>
35	CRZ/RRZ clearance obtain ,if any	
36	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas / inter-State boundaries	

Check list for the other necessary approvals				
		Status of the approval	Name of the competent authority	Date of the issued letter
37	CFO NOC for the above said building structure(s)			
38	HRC NOC for the above said building structure(s) (If applicable)			
39	NOC for the above said building structure(s) from the Aviation authority (If applicable)			
40	Consent for the water for the above said detail(s)			
41	Consent for the drainage for the above said detail(s)			
42	Consent for the electric supply for the proposed demand			
43	Precertification for Green Building from Indian Green Building Council and other recognized institutes (If applicable)			
44	Court Order (If applicable)			
45	Other approvals (If any)			

Declaration

I/We hereby declare that no work has been initiated for the said project.

Date :

Name & Signature
of the project proponent

Name & Signature
of the consultant

SUMMARY OF PROJECT PROPOSALS

1. Total Plot area
2. Total built up area permissible
3. F.S.I. Permissible
4. F.S.I. Proposed to be consumed
5. Nos. of building/s proposed in the Project
6. Maximum floor height and height of building/s
7. Area and nos. of the basements proposed
8. Area and nos. of podiums are proposed
9. Area of proposed amenity space / open space
10. Nos. of phases proposed for project execution
11. Expected nos. of residential and non-residential tenaments

Note : *The aforesaid Consolidated Statement for construction project is a requirement of environmental clearance regulatory authority of Maharashtra State only. This is not a statutory requirement under MoEF Notification, 2006.*

**CONSENT / AUTHORIZATION
OF
STATE GOVERNMENT
FOR
ENVIRONMENTAL CLEARANCE**

Maharashtra pollution Control Board (MPCB) of Government of Maharashtra has made it mandatory for project proponents to obtain its Consent and Authorization either for establishment or operation of any project or activity falling under section 25 & 26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21 of the Air (Prevention & control Pollution) Act, 1981, and under Rule No. 5 of the Hazardous Wastes (Management and Handling) Rules 1989 as amended up January 2000 thereof.

As per Environmental Impact Assessment Notification issued by the Ministry of Environment and Forest, Govt. of India, dt. 14-09-2006, the construction activities of Category – B-1 & B-2 as per item No. 8(a) & (b) of the Notification requires Environmental Clearance for Building, Construction, Township and Area Development Projects.

The buildings/construction activities which requires/needs large quantity of excavation of earth for foundation and other construction requirements, as well as filling up of land, cutting of soil, and or planting or cutting of trees etc. the Developer has to obtain State's approval/Consent and Authorization by paying necessary Consent Fees/Charges to the State Government. The charges are based on total investment value of the project as prescribed by the MPCB of State Government in its Notification dt. 25-08-2011.

The proponent has to make application for necessary Consent and Authorization for the project/activity, to the Zonal Sub-Regional Officer of the Maharashtra Pollution Control Board (MPCB) in whose jurisdiction project activity falls, in the prescribed format, in triplicate, duly filled in and signed retaining one copy for his own records,

The documents required to be submitted alongwith the application for (i) Consent to Establish and (ii) Consent to Operate are specified on the last pages of application format. These application and accompaniments are mainly even though are for industrial products and activities the said consent may be required for mega construction projects and activities from the environmental clearance point of view.

The application FORMAT for Consent / Authorization along with explanatory notes, information and instructions are reproduced hereafter for the benefit of the applicant.

FORM

**Common Application for Consent under
Water (Prevention and Control of Pollution) Act, 1974,
Air (Prevention and Control of Pollution) Act, 1981) and Authorization under
Hazardous Wastes (Management and Handling) Rules, 1989 as amended.**

No

Accompanying form in triplicate to be submitted by the applicant. One copy may be retained applicant.

**Explanatory note for filling in application form for
Consent/Authorization**

1. Any applicant knowingly giving incorrect information or suppressing any Information pertaining to any of the items of the application shall be liable for punishment as per provisions under the relevant Act.
2. The application form shall be submitted at the respective Sub - Regional Officer of the Board under whose jurisdiction the applicants activity falls.
3. The application shall be accompanied by the consent fee in the form of Demand Draft in favour of **Maharashtra Pollution Control Board**. Fee paid is Not refundable
4. For the items marked * strike out which is not relevant
5. If any of the items is not relevant to the activity of the applicant, please state Not Applicable.
6. If the space for reply provided for any item is inadequate, use additional sheets, duly referenced.
7. Item 1 : Give the name of the person who is authorised by the applicant to transact their business.
8. Item 2 : Also state the concerned instructions under whose administrative area the unit falls.
9. The form shall be accompanied by the relevant documents specified on the last page of the application.

10. Capital Investment -Consent fee is to be paid based on gross block investment of the unit without depreciation till the date of application. The gross block capital investment shall include cost of land, building, plant and machinery without depreciation same shall be certified by Chartered Accountant. In case of proposed unit total project cost shall be considered.

PAYMENT OF CONSENT FEES.

The Schedule of revised fees/charges payable to State Government for issue of Consent and or Authorization under Environmental Clearance from Maharashtra Pollution Control Board is reproduced here as under :-

Sr. No.	Capital / Investment of Industry / Project in Rs.	Charges for Consent to Establish in Rs.	Charges for Consent to Operate in Rs.
1	Above 100 Crores	0.02% of Capital investment	0.02% of Capital investment
2	75 to 100 Crores	1,25,000/-	1,25,000/-
3	50 to 75 Crores	1,00,000/-	1,00,000/-
4	25 to 50 Crores	75,000/-	75,000/-
5	10 to 25 Crores	50,000/-	50,000/-
6	5 to 10 Crores	25,000/-	25,000/-
7	1 to 5 Crores	15,000/-	15,000/-
8	60 Lacs to One Crores	5,000/-	5,000/-
9	10 Lacs to 60 Lacs	1,500/-	1,500/-
10	Less than 10 Lacs	500/-	500/-

Note : Consent fees should be paid by way of Demand Draft in favour of "Maharashtra Pollution Control Board", and payable at the HQ of the concerned Sub-Regional Officer.

The industries have been classified in different categories such as –

RED, ORANGE, GREEN depending on pollution potential. The above referred consent fee for Combined Consent to Operate is for a period of 1, 2, 3 years for industries in **RED, ORANGE & GREEN** category respectively. The industries can opt for multiple period of consent (maximum upto five times) by paying corresponding higher fee, subject to their complying with requirement of installation of pollution control facilities.

Fees for Local Bodies (under Water (P.&.C. P.) Act,1974 only.

Municipal Corporation	Rs. 20,000/-
A Grade Municipal Corporation	Rs. 10,000/-
B Grade Municipal Corporation	Rs. 5,000/-
C Grade Municipal Corporation	Rs. 2,000/-

Consent fees should be paid by way of Demand Draft drawn in favour of **MAHARASHTRA POLLUTION CONTROL BOARD** only. Payable at the HQ of the concerned Sub-Regional Officer.

Application for Consent / Authorization

Date :

From

.....

.....

.....

To,

The

Maharashtra Pollution Control Board,

.....

.....

Sir,

I/We hereby apply for*

1. Consent to Establish/Operate/Renewal of consent under section 25 and 26 of the Water (Prevention & Control of Pollution) Act, 1974 as amended.
2. Consent to Establish/Operate/Renewal of consent under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended.
3. Authorization/renewal of authorization under rule 5 of the Hazardous Wastes (Management and Handling) Rules, 1989, as amended in January,2000, in connection with my / our / existing / proposed / altered / additional manufacturing / processing activity from the premises as per the details given below.

Part A: General

1. Name, designation, office address with Telephone :
/Fax numbers, e-mail of the Applicant
Occupier/Industry/Institution / Local Body.
2. (a)- Name and location of the industrial unit/premises :
for which the application is made
(Give revenue Survey Number/Plot number name
of Taluka and District, also telephone and fax number)

(b)- Details of the planning permission obtained from :
the local body/Town and Country Planning
authority/Metropolitan Development authority/
designated Authority.

(c)- Name of the local body under whose jurisdiction :
the unit is located and Name of the licence issuing
authority
3. Names, addresses with Telephone and Fax :
Number of Managing Director / Managing Partner
and officer responsible for matters connected with
pollution control and/or Hazardous waste disposal.
4. (a)- Are you registered Industrial unit ? :

(b)- If yes, give the number and date of registration :
5. Gross capital investment of the unit without :
depreciation till the date of application
(Cost of building, land, plant and machinery).
(To be supported by an affidavit/undertaking on
Rs.20/- stamp paper, annual report or certificate
from a Chartered Accountant for proposed unit(s),
give estimated figure)
6. If the site is located near sea-shore/river bank/ :
other water bodies/Highway, Indicate the crow fly
distance and the name of the water body, if any.

7. Does the location satisfy the Requirements Under :
 relevant Central/State Govt. Notification such as
 Coastal Regulation Zone. Notification on
 Ecologically Fragile Area, Industrial
 Location policy, etc. If so, give details.
8. If the site is situated in notified industrial estate, :
 (a)- whether effluent collection, treatment and disposal
 system has been provided by the authority.
 (b)- Will the applicant utilise the system, if provided. :
 (c)- If not provided, details of proposed arrangement.:
9. (a)- Total plot area, :
 (b)- Built up area and :
 (c)- Area available for the use of treated sewage :
 / trade effluent for gardening/irrigation.
10. Month and year of commissioning of the Unit. :
11. Number of workers and office staff. :
 Workers Staff Hrs. Of shifts Weekly off :
-
12. (a)- Do you have a residential colony Within the :
 premises in respect of Which the present
 application is Made ?
 (b)- If yes, please state population staying :
 (c)- Indicate its location and distance with :
 reference to plant site.
13. List of products and by-products Manufactured in :
 tonnes/month, Kl/month or numbers/month with
 their types i.e. Dyes, drugs etc.
 (Give figures corresponding to maximum installed
 production capacity

14. List of raw materials and process chemicals with annual consumption corresponding to above stated production figures, in tonnes/month or kl/month or numbers/month. :
15. Description of process of manufacture for each of the products showing input, output, quality and quantity of solid, liquid and gaseous wastes, if any from each unit process. :
(To be supported by flow sheet and/or material balance and water balance sheet).

Part B : Waste Water aspects.

16. Water consumption for different uses m³/day) :
- (i)- Industrial cooling, spraying in mine Pits or boiler feed, propulsion of hydro generation sets.
- (ii)- Domestic purpose :
- (iii)- Processing whereby water gets Polluted and the pollutants are Easily Bio-degradable.
- (iv)- Processing whereby water gets polluted and the pollutants are not easily Bio-degradable and are toxic. :
- (v)- Other such as agriculture, gardening etc.(specify) :**Total :-**
17. Source of water supply, Name of authority granting permission if applicable and quantity permitted. :
18. Quantity of waste water (effluent) generated (m³/day) :
- (i) Domestic : (vi) Cooling water blow down :
- (ii) Industrial : (vii) DM Plant/Softening :
- (iii) Process : Plant washings. :
- (iv) Washings : (viii) Tail race discharge from :
- (v) Boiler Blow down : Hydro power station. :

19. Water budget calculations accounting for difference between water consumption and effluent generated. :
20. Present treatment of sewage/canteen effluent (Give sizes/capacities of treatment units). :
21. Present treatment of trade effluent (Give sizes/capacities of treatment units) (A schematic diagram of the treatment scheme with inlet/outlet characteristics of each unit operation/process is to be provided. Include details of residue Management system (ETP sledges) :
22. (a)- Are sewage and trade effluents mixed together? :
(b)- If yes, state at which stage -Whether before, intermittently or after treatment.
23. Capacity of treated effluent sump, Guard Pond if any. :
24. Mode of disposal of treated effluent With respective quantity, m³/day :
 - (i) into stream/river (name of river) :
 - (ii) into creek/estuary (name of Creek/estuary) :
 - (iii) into sea :
 - (iv) into drain/sewer (owner of sewer) :
 - (v) On land for irrigation on owned land/ase land. :
Specify cropped area.
(To be supported by relevant documents)
 - (vi) Quantity of treated effluent reused/ recycled, m³/day Provide a location map of disposal arrangement indicating the outler(s) for sampling. :
25. (a)- Quality of untreated/treated effluents (Specify pH and concentration of SS, BOD,COD and specific pollutants relevant to the industry. TDS to be reported for disposal on land or into stream/river. :

(b)- Enclose a copy of the latest report of analysis :
 from the laboratory approved by State Board/
 Committee/Central Board/Central Government in
 the Ministry of Environment expected
 characteristics of the untreated/treated effluent

Part - C : Air emission aspects

- | | | | | | | | |
|------------|--|---|------|------|---------|---------|-----------|
| 26. | Fuel consumption | : | Coal | LSHS | Furnace | Natural | Other |
| | | | | | Oil | Gas | (Specify) |
| | (a) Fuel consumption (TPD/KLD) | : | | | | | |
| | (b) Calorific value | : | | | | | |
| | (c) Ash content % | : | | | | | |
| | (d) Sulphur content % | : | | | | | |
| | (e) Other (specify) | : | | | | | |
| 27. | (A) Details of stack | : | | | | | |
| | (process & fuel stacks: D. G. Set | | | | | | |
| | (a) Stack number(s) : | : | 1 | 2 | 3 | 4 | |
| | (b) Attached to | : | | | | | |
| | (c) Capacity - | : | | | | | |
| | (d) Fuel type | : | | | | | |
| | (e) Fuel quantity (Kg/hr.) | : | | | | | |
| | (f) Material of construction | : | | | | | |
| | (g) Shape (round/rectangular) | : | | | | | |
| | (h) Height, m (above ground level) | : | | | | | |
| | (i) Diameter/size, in meters | : | | | | | |
| | (j) Gas quantity, Nm ³ /hr. | : | | | | | |

- (k) Gas temperature oC :
 - (l) Exit gas velocity, m/sec. :
 - (m) Control equipment preceding the stack :
 - (n) Nature of pollutants likely to present in the :
stack gases such as Cl₂, Nox, Sox, TPM etc.
 - (o) Emissions control system provided
 - (p) In case of D.G. Set power generation :
capacity in KVA
(Attach specifications including residue
management systems of each of the
Control equipment indicating inlet/outlet
concentration of relevant pollutants)
- 27. (B) Whether any release of odoriferous
Compounds such as Mercaptans, Phorate
etc. Are coming out from any storages or
process house. :**
- 28. Do you have adequate facility for collection of:
samples of emissions in the form of port holes,
platform, ladder\etc. As per Central Board
Publication Emission regulations Part-III
(December, 1985)**
- 29. Quality of treated flue gas emissions and process:
emissions. Quantity of treated flue gas emissions
and process emissions.
*(Specify concentration of criteria pollutants and
industry/process-specific pollutants stack-wise.
Enclose a copy of the latest report of analysis
from the laboratory approved by State Board/
Central Board/ Central Government in the Ministry
of Environment & Forests. For proposed unit furnish
expected characteristics of the emissions..***

Part - D: Hazardous Waste aspect

- 30.** Information about Hazardous Waste Management as defined in: Hazardous Waste (Management & Handling) Rules, 1989 as amended in Jan., 2000.

Type/Category of Waste as per

Schedule-I Cat. No.	Schedule-II kg/day Type Class	Qty.	Method of Type Collection Reception Storage Transport Treatment Disposal
------------------------	----------------------------------	------	--

Please refer copy of Schedule-I & II attached

- 31.** Details about use of hazardous waste :
- i)-** Name of hazardous waste/Spent chemical :
 - ii)-** Quantity used/month :
 - iii)-** Party from whom purchased :
 - iv)-** Party to whom sold :
- 32.** (a)- Details about technical capability and equipments available with the applicant to handle the Hazardous Waste.
- (b)-Characteristics of hazardous waste(s) Specify concentration of relevant pollutants. Enclose a copy of the latest report of analysis of from the laboratory approved by State Board/Central Board/Central Govt. in the ministry of Environment & Forests. For proposed units furnish expected characteristics
- 33.** Copy of format of manifest/record Keeping practiced by the applicant.
- 34.** Details of self-monitoring (source and environment system)
- 35.** Are you using any imported hazardous waste. If yes, give details.

36. Copy of actual user Registration/certificate obtained from Ministry of Environment & Forests, Government of India, for use of hazardous waste.
37. Present treatment of hazardous waste, if any (give type and capacity of treatment units)
38. Quantity of hazardous waste disposal :
 - i) Within factory :
 - ii) Outside the factory (specify location and enclose copies of agreement.)
 - iii) Through sale (enclosed documentary proof and copies of agreement.)
 - iv) Outside state/Union Territory, if yes particulars of (1 & 3) above.
 - v) Other (Specify) :

Part - E:- Additional information :

39. (a) Do you have any proposals to upgrade the present system for treatment and disposal of effluent/emissions and/or hazardous waste.

(b) If yes, give the details with time- schedule for the implementation and approximate expenditure to be incurred on it.
40. Capital and recurring (O&M) expenditure on various aspect of environment protection such as effluent, emission, hazardous waste, solid waste, tree-plantation, monitoring, data acquisition etc. (give figures separately for items implemented/to be implemented).
41. To which of the pollution control equipment, separate meters for recording consumption of electric energy are installed ?

- 42.** Which of the pollution control items are connected to D.G. Set (captive power source) to ensure their running in the event of normal power failure.
- 43.** Nature, quantity and method of disposal of nonhazardous solid waste generated separately from the process of manufacture and waste treatment.
(Give details of area/capacity available in applicant s land)
- 44.** Hazardous Chemicals - Give details of Chemicals and quantities handled and Stored.
- (i)-** Is the unit a Major Accident Hazard unit as per Mfg. Storage Import Hazardous Chemicals Rules ?
- (ii)-** Is the unit an isolated storage as defined under the MSIHC Rules ?
- (iii)-** Indicate status of compliance of Rules 5,7,10,11, 12,13 and 18 of the MSIHC Rules.
- (iv)-** Has approval of site been obtained from the concerned authority?
- (v)-** Has the unit prepared an off-site Emergency Plan? Is it updated ?
- (vi)-** Has information on imports of Chemicals been provided to the concerned authority?
- (vii)-** Does the unit possess a policy under the PLI Act?
- 45.** Brief details of tree plantation/green belt development within applicant s premises (in hectares)
- 46.** Information of schemes for waste Minimization, resource recovery and recycling - implemented and to be implemented, separately.
- 47. (a)-** The applicant shall indicate whether Industry comes under Public Hearing, if so, the relevant documents such as EIA, EMP, Risk Analysis etc. shall be submitted, if so, the relevant documents enclosed shall be indicated accordingly.

(b)- Any other additional information that the applicants desires to give

(c)- Whether Environmental Statement submitted ? If submitted, give date of submission.

: Yes/No

48. I/We further declare that the information furnished above is correct to the best of my/our knowledge
49. I/We hereby submit that in case of any change from what is stated in this application in respect of raw materials, products, process of manufacture and treatment and/or disposal of effluent, emissions, hazardous wastes etc. In quality and quantity; a fresh application for Consent/Authorization shall be made and until the grant of fresh Consent/Authorization no change shall be made.
50. I/We undertake to furnish any other information within one month of its being called by the Board.
51. I / We enclosed herewith a Demand draft for Rs _____
Drawn in favour of Maharashtra Pollution Control Board as the fee for consent/authorization for a period up to _____

Yours faithfully,

Signature : _____

Name : _____

Designation : _____

Accompaniments :-

1. Index /Site Plan showing the surrounding such as village, town, river, sea shore, Transport Routes etc.
2. Detailed layout plan of the factory premises showing structures, water supply line, storm drain, sewers for domestic effluents, for trade effluents, location of effluent treatment and its disposal and any other useful information, drawing, tables etc.
3. Manufacturing process of each product with flow diagram & material balance.
4. Latest Joint Vigilance sample analysis report.

5. Details of air pollution control devices provided or proposed to be provided.
 6. Ambient air quality report, if available.
 7. Small Scale Industry s Certificate/No Objection Certificate from Directorate of Industries, Govt. of Maharashtra/D.G.T.D. Licence.
 8. Xerox copy of consent granted under Air & Water (P.&C.P.)Acts.
 9. TLV of raw materials.
 10. Gross block investment certificate from C.A./audited balance sheet.
 11. Process flow sheet.
 12. Chemical reactions involved in each process.
 13. NOC from local body for proposed industry.
 14. Water budget calculations.
- **Documents and Information to be submitted with the Application for Consent to Establish**
 1. Site plan/index
 2. Topographical Map
 3. Detailed layout plant of different processes and point sources of effluent discharge/emissions and position of stack and documents including D.G. set capacity in KVA.
 4. Process flow sheet.
 5. Details of Water Pollution Control/Air Pollution Control devices proposed to be provided.
 6. Ambient Air Quality Report (if available)
 7. SSI Certificate/NOC from Directorate of Industries Government of Maharashtra.
 8. D.G.T.D. Registration. (if applicable)
 9. Details of chemical reactions with mass balance.
 10. Consent fees in the form of D.D. drawn on favour of MPCB.
 11. Local body NOC.
 12. Under taking on Rs. 20 stamp paper or Chartered Accountant certificate about proposed Capital Investment (Land, building, and machineries.

- **Documents and Information to be submitted with the Application for Consent to Operate**

1. Detailed layout plant of different processes and point sources of effluent discharge/emissions and position of stack and documents including D.G. set capacity in KVA.
2. Process flow sheet.
3. Latest analysis report of effluent, fuel gases, solid waste & hazardous wastes.
4. Details of Water Pollution Control/Air Pollution Control devices provided.
5. Ambient Air Quality Report (if available)
6. SSI Certificate/NOC from Directorate of Industries Government of Maharashtra.
7. D.G.T.D. Registration. (if applicable)
8. Details of chemical reactions with mass balance.
9. Consent fees in the form of D.D. drawn on favour of MPCB.
10. Xerox copy of previous consent (for renewal only).
11. Xerox copy of Environmental Clearance of Government of Maharashtra or Government of India in case of 1st consent to operate in case of industries/process requiring environmental clearance.

GUIDELINES FOR PREPARATION OF PRE FEASIBILITY REPORT FOR ENVIRONMENTAL CLEARANCE

(This text is reproduced from MoEF's directives under No. J-11013/41/2006-IA.II(I) dt. 30-12-2010).

The EIA Notification of 2006 stipulates that the application seeking prior environmental clearance, amongst other things, must provide a copy of the pre-feasibility report alongwith application in prescribed format (Form I).

The contents of the pre-feasibility report though are generally understood; however, in order to ensure that the contents of pre-feasibility report are comprehensive enough and provide necessary information required for scoping the project, following guidelines are provided.

The pre-feasibility report should invariably provide a broad outline of the following aspects; however, should details of some of the aspects listed hereunder are not available, project proponent should clearly indicate so and provide an indicative/representative information on such aspects. While the pre-feasibility report should be brief, the minimum information required for scoping and prescribing TOR's should be made available therein.

- **EXECUTIVE SUMMARY**
- **INTRODUCTION OF THE PROJECT/BACKGROUND INFORMATION :-**
 - i) Identification of project and project proponent. In case of mining project, a copy of mining lease/letter of intent should be given.
 - ii) Brief description of nature of the project.
 - iii) Need for the project and its importance to the country and or region.
 - iv) Demand – supply Gap
 - v) Imports vs. Indigenous production
 - vi) Export Possibility
 - vii) Domestic / export Markets.
 - viii) Employment Generation (Direct and Indirect) due to the project.

- **PROJECT DESCRIPTION :-**

- i) Type of project including interlinked and interdependent projects, if any.
- ii) Location (map showing general location, specific location, and project boundary and project site layout) with co-ordinates.
- iii) Details of alternate sites considered and the basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.
- iv) Size or magnitude of operation.
- v) Project description with process details (a schematic diagram/flow chart showing the project layout, components of the project etc. should be given)
- vi) Raw material required alongwith estimated quantity, likely source, marketing area of final product/s, mode of transport of raw material and finished products.
- vii) Resource optimization / recycling and reuse envisaged in the project, if any, should be briefly outlined.
- viii) Availability of water its source, energy/power requirement and source should be given.
- ix) Quantity of wastes to be generated (liquid and solid) and scheme for their management/disposal.
- x) Schematic representations of the feasibility drawing which give information of EIA purpose.

- **SITE ANALYSIS :-**

- i) Connectivity
- ii) Land Form, Land use and Land ownership
- iii) Topography (alongwith map)
- iv) Existing land use pattern (agriculture, non-agriculture, forest, water bodies (including area under CRZ)), shortest distances from the periphery of the project to periphery of the forests, national park, wild life sanctuary, eco sensitive areas, water bodies (distance from the HFL of the river), CRZ. In case of notified industrial area, a copy of the Gazette Notification should be given.
- v) Existing Infrastructure
- vi) Soil classification
- vii) Climatic data from secondary sources.
- viii) Social Infrastructure available.

- **PLANNING BRIEF :-**

- i) Planning Concepts (type of industries, facilities, transportation etc) Town and Country Planning/Development authority classification.
- ii) Population Projection
- iii) Land use planning (breakup alongwith green belt etc.)
- iv) Assessment of Infrastructure Demand (Physical & Social)
- v) Amenities/Facilities.

- **PROPOSED INFRASTRUCTURE :-**

- i) Industrial Area (Processing Area)
- ii) Residential Area (Non Processing Area)
- iii) Green Belt
- iv) Social Infrastructure.
- v) Connectivity (Traffic and Transportation Road/Rail/Metro/Water Ways etc)
- vi) Drinking Water Management (Source and supply of water)
- vii) Sewerage System
- viii) Industrial Waste Management
- ix) Solid Waste Management
- x) Power Requirement & Supply / Source.

- **REHABILITATION AND RESETTLEMENT (R & R) PLAN :-**

- i) Policy to be adopted (Central/State) in respect of the project affected persons including home oustees, land oustees and landless laborers (a brief outline to be given)

- **PROJECT SCHEDULE AND COST ESTIMATES :-**

- i) Likely date of start of construction and likely date of completion (Time schedule for the project to be given)
- ii) Estimated project cost alongwith analysis in terms of economic viability of the project.

- **ANALYSIS OF PROPOSED (FINAL RECOMMENDATIONS) :-**

- i) Financial and social benefits with special emphasis on the benefit to the local people including tribal population, if any, in the area.

HUE AND CRY ABOUT ECO-SENSITIVE AREA OF WESTERN GHATS (New Draft Notification of MoEF)

- **BRIEF SUMMARY :-**

In the first instant, the Committee under Chairmanship of Dr. Madhavrao Gadgil, a well known Environmental Expert, was constituted by the Ministry of Environment and Forests to give its report on delineation and demarcation of ecological sensitive areas in Western Ghats region of India.

Dr. Gadgil, with physical inspection and detailed study of Western Ghats region submitted report of his committee to the Ministry of Environment and Forests, suggesting measures to be taken for development, conservation and protection of environment of the region, which was mainly based on requirements and development demands of actual residents of the region. In other words, the participation of people at large in this endeavour was main focus of the Report. Due to enormous political pressure Report of Dr. Madhav Gadgil as usual was shelved by the Government. When PIL was filed, the Ministry published distorted translation of Dr. Gadgil's Report, on Governments' Web-site, thus the report was automatically made invisible and was neither accepted nor implemented.

The MoEF, then appointed fresh Committee under the Chairmanship of former Isro Chief Dr. K. Kasturirangan, who has submitted its report and recommendations to the Government in April 2013, probably may be more convenient to politicians.

However, Kerala was the first state to object the Report of Dr. K. R. Kasturirangan and made enormous hue and cry, which has made sufficient dent to the said report. Ultimately MoEF succumbed to the Kerala state politics and issued Draft Notification on Tuesday 18-3-2014, deleting 3115 Sq. Kms area specifically from originally declared area from eco-sensitive area/zone of Kerala. Now other states has to submit its suggestions and objections to the said new Draft Notification within 60 days from the date of its publication. On the above backdrop it is essential for the readers to understand the seriousness of this exercise.

- **FACTS AND FIGURES :-**

As per original Notification of MoEF the Eco-Sensitive Area (ESA) of Western Ghats was identified which is spread over 6 States of India including Maharashtra,

Gujrat, Goa, Karnataka, Tamil Nadu and Kerala covering large stretch of land to the tune of 59,940.00 sq. kms. The State wise ESA zone area details are as under:-

State	ESA Area in Sq. Kms.
i) Maharashtra	= 17,340.00 Sq. Kms.
ii) Gujarat	= 449.00 Sq. Kms.
iii) Goa	= 1,461.00 Sq. Kms.
iv) Karnataka	= 20,668.00 Sq. Kms.
v) Tamil Nadu	= 6,914.00 Sq. Kms.
vi) Kerala	= 13,108.00 Sq. Kms. (Original) = 9,993.00 Sq. Kms. (Revised)

Notes :

i) Original ESA spreading over 6 States	= 59,940.00 Sq. Kms.
ii) Revised ESA under fresh Draft Notification	= 56,825.00 Sq. Kms.
iii) Reduction in ESA from Kerala	= 3,115.00 Sq. Kms.

• **Maharashtra Details :-**

According to the said Draft Notification the total Eco-Sensitive Area declared in Maharashtra is 17,340.00 Sq. Kms. which includes around 2133 Villages falling under Western Ghats. The District wise Villages affected by ESA are as under:-

District	No. of Villages
i) Ahmad Nagar	42
ii) Dhule	5
iii) Kolhapur	183
iv) Nandurbar	2
v) Nashik	156
vi) Pune	337
vii) Raigad	356
viii) Ratnagiri	292
ix) Sangli	12
x) Satara	294
xi) Sindhudurg	192
xii) Thane	262

• **DEVELOPMENT RESTRICTIONS IN PROPOSED ESA OF WESTERN GHATS :-**

The High Level Working Group (HLWG) under the Chairmanship of Dr. K. Kasturirangan has recommended a prohibitory and regulatory regime in ESA for those

activities which will have maximum destructive impact on the Eco-system. It has further recommended that there should be a complete ban on mining, quarrying and sand mining in identified ESA, and current mining activities/areas should be phased out within next 5 years.

The Kasturirangan Committee further bans building and construction projects of 20,000.00 Sq. mtrs. and above, whereas Townships and Area Development Projects are completely prohibited in ESA of the region.

The other infrastructure and development projects could be considered subject to Environmental Clearance under Category 'A' Projects under EIA Notification 2006.

In the present Draft Notification, it has been made clear that it does not prohibit agriculture, plantation and human settlement in the earmarked villages in Western Ghats. It has also stated that the Red Category industries and mega constructions as listed in Annexure are completely prohibited within the protected zones. Such banned Red Category industries and Constructions includes 85 types of high polluting activities including setting up of, aluminum smelter, cement plant, fertilizer factory, glass manufacturing units, zinc smelter, automobile manufacturing units, airports and hotels having 100 rooms or above.

However the setting up of Hydro Power Plant in ESA zone could be allowed.

• **CRITISISM ON DRAFT NOTIFICATION FROM MAHARASHTRA :-**

A very strong objection is raised by the Maharashtra Cabinet Minister Shri. Narayan Rane to the present Draft Notification of MoEF. He publically criticized that the State of Maharashtra should reject the new Draft Notification of MoEF on Western Ghats.

At the Cabinet meeting Shri. Rane said that "the State Government needs to plead its case strongly before the Central Government. The State Governments' Lackadaisical to the Draft Report will be badly hamper the development of Konkan Region. If the Kerala Government can formulate its own guidelines why shouldn't Maharashtra?" Mr. Rane said.

The senior Environmentalist Dr. Madhav Gadgil who had submitted his earlier detailed studied report on identification of Eco-Sensitive Area/zone in Western Ghats, (which was subsequently shelved by the Government) strongly criticized the Government and findings of Kasturirangan Committee, and stated that "this new Draft Notification is nothing but a murder of democracy, where the rights of affected people of land are mercilessly denied, which is against the Constitution of India".

Mr. Girish Raut, in a newspaper article (Mahanagar – 26-3-2014) sternly criticized, the decision of Union Government declaring 37% of total area of Western Ghats, as “Eco-Sensitive Zone”, thereby banning all types of industrial and infrastructural developments in the said reserved region. Mr. Raut stated that this is nothing but total disregard to the nature and it is against scientific concept and natural geological functions. Once any portion of any region is reserved as Eco-sensitive zone, remaining region automatically becomes non-sensitive zone and ultimately it becomes centre of new industrial developments, which results in to excessive mining and deforestation activities, thereby becoming injurious to the Environment.

NASA Scientist Mr. James Hanson in his book (2009) has warned all Nations that these decades are very important from the environmental point of view. If we will continue industrial growth in the same manner and in the same speed, a day is not far away, when global warming will be beyond human control due to which the natural climatic cycles will be fractured completely.

Europe and America in past had made same experiments of declaring eco-sensitive zones, in their country but could not achieve any fruitful results. Today in America there is hardly 5% forest left over beyond human touch.

In long run declaring some regions as “Eco-sensitive Zone” will not solve basic problems and may not make any significant improvement and protection of Eco-system and human environment. Since excessive industrial development ultimately leads to devastation, it is high time that the Government should emphasize on self-sufficient towns and villages which should be made dependent on organic farming.

Surprising Article

• BOMBAY HIGH COURT BANS RECLAMATION AND DEVELOPMENT ACROSS STATE WETLANDS :-

As per article published in the Times of India on Thursday, March 20, 2014, The Bombay High Court, ordered a total ban on reclamation and construction on wetlands in Maharashtra and called for prompt action against the violations. It has stated that any land adjoining to a water body which gives a distinct eco-system, is a wetland – which either could be coastal or inland and also includes mangroves, marshes and swamps.

The Hon’ble Judges directed that no permission should be granted for construction and reclamation on wetlands identified shown on the Wetland Atlas, and that a prompt action should be taken by the Collector and relevant authorities designated under the Environment Protection Act against violations.

FREQUENTLY ASKED QUESTIONS (FAQ)

While preparing proposal for Environmental Clearance (EC) related to EC Clearance for Buildings, Construction, Town planning and Area development proposals are required to be understood correctly. Following are some of the important questions and answers :-

- **CLARIFICATIONS:-**

The ministry of Environment and Forest has given clarification on calculating activities as under :-

- **HOW TO CALCULATE BUILT-UP AREA?**

- i) **Built-up Area** (covered area) defined in the amendment to EIA Notification dt. 4th April 2011 shall be :-

“The Built-up area or covered area on all the floors put together including basement(s) and other service areas, which are proposed in the building/construction projects”.

- ii) **Non-covered Area :-**

“Area which is not covered or any area which is open to sky/cut out / duct, should not be counted in the calculations of built-up area. (Since the open to sky/cut out / ducts are required for light and ventilation of building”).

- iii) **Atrium Area :-**

“Atrium area i.e. open portion of building which is not covered at intermediate floor levels but covered at the top level like any shopping malls, or hotels can be taken into account for calculation of built-up area of only top floor and should not be calculated or counted for each floor”.

- **WHEN SCOPING IS NOT REQUIRED?**

- (i) That is all projects and (construction) activities listed as category ‘B’ in Item No. 8 of Schedule (Construction or Townships or Commercial Complex or Housing), shall not require scoping.

Provided further that

- (A) The projects and activities referred in above Clause No. (i), shall be appraised on the basis of Form No. -1 and Form No. – 1A, and conceptual plans of the project.

- **WHERE ENVIRONMENTAL CLEARANCE IS NOT REQUIRED?**

Following proposals covered under item No. 8 (a) of Schedule of the MoEF Notification do not require Environmental Clearance :-

- 1) Any building/s or construction project where built-up area (covered area) proposed is less than 20000.00 M² (2,15,280.00 Sft.)
- 2) Any redevelopment project wherein SRA/Dilapidated/Cessed buildings are involved, the construction quantum of rehab component is less than 20000.00 M².

- **WHERE ENVIRONMENTAL CLEARANCE IS REQUIRED?**

Following proposals which falls under item No. 8(b) of Schedule, of MoEF Notification, shall require Environmental Clearance :-

- i) **Building / Construction Projects :-**

Any building/construction project where built-up area (covered area) proposed is 20000.00 M² or above but Less than 1,50,000.00 M².

- ii) **Townships And Area Development Projects :-**

Any Project covering land area of 50 ha. or above, and or where built-up area proposed is 1,50,000.00 M² or above.

- **WHEN PUBLIC CONSULTATION IS NOT REQUIRED?**

All the proposals covered in item No. 8(a) of the schedule i.e. all Building/Construction Projects, Townships and Area Development Projects the public consultation is not mandatory.

- **WHEN PUBLIC CONSULTATION IS REQUIRED?**

All Category "A" and Category "B-1" projects or activities shall undertake public consultation, except those projects or activities exempted as stated in Item No. 7 (III-Stage(3) – Public Consultation) of the Notification of MoEF dt. 14-09-2006.

- **WHEN ENVIRONMENTAL CLEARANCE IS INSISTED BY MCGM?**

Environmental clearance is a pre-requisite of Municipal Corporation of Gr. Mumbai (MCGM) for issuing Commencement Certificate (CC) for any project which requires Environmental Clearance under MoEF Notification dt. 14-09-2006. Which means that the Municipal Corporation of Gr. Mumbai may issue I.O.D. and Approved Plans of construction Project but will not issue C.C. without Environmental Clearance.

It is upto proponent to decide as to whether Environmental Clearance be obtained in advance before submission of project proposal to MCGM for approval.

In rest of Maharashtra Environmental Clearance is a pre-requisite for issuing Development Permission from planning authority wherever is applicable. It is to be mentioned here that other than MCGM (Mumbai) approved plans and development permission is a part and parcel of the approval of the project.

- **WHAT IS TIME LIMIT FOR ISSUE OF ENVIRONMENTAL CLEARANCE?**

A provision of Time Limit for stage wise clearance is incorporated in the Notification. However in reality, the time period is somewhere between 12 to 24 months from the date of application depending upon number of presentations on project required by the regulatory authority from the proponent.

- **WHERE TERMS OF REFERENCE (TOR) ARE INSISTED?**

Township and Area Development Projects i.e. construction projects covering land area 50 Ha. or above, and or where total constructed area (covered area) proposed is 1,50,000.00 M² or more, the Terms of Reference are insisted.

- **WHAT IS THE ENVIRONMENTAL IMPACT ASSESSMENT?**

The Environmental Impact Assessment is a technical evaluation of the proposed project or activities intended to contribute more objective decision making in the light of detailed environmental studies on potential environmental impacts thereof.

- **WHAT IS THE PRE-FEASIBILITY REPORT?**

The pre-feasibility report consists of comprehensive information required for scoping of the application and has to cover aspects on which information is required shall be as per guidelines issued by MoEF dt. 30-12-2010. The text of said guidelines are reproduced in this handbook separately, for ready reference of the concerned.

- **WHERE LIST OF ACCREDITED ENVIRONMENTAL EXPERT CONSULTANTS IS AVAILABLE?**

The list of all India level Government accredited, Environment Expert Consultants is available on following website of Govt. of Maharashtra:-
[https://ec.maharashtra.gov.in/files/Accredited consultants Feb13.pdf](https://ec.maharashtra.gov.in/files/Accredited_consultants_Feb13.pdf).

- **WHAT IS "CONSOLIDATED STATEMENT?"**

This is a collectively blended statement of the project including technical summary of the project explaining various environmental aspects in connection with construction projects or activities.

HARDSHIPS IN OBTAINING ENVIRONMENTAL VIS-À-VIS CRZ CLEARANCE

The Ministry of Environment and Forests, Government of India, is an apex body as regards notifications, regulations, policy decisions, and implementations of the issues related to Environmental as well as Coastal Regulation Zone clearances.

- **Environmental Clearance**

The Ministry of Environment and Forests (MoEF) made it mandatory for project proponents to obtain advance Environmental Clearance for their projects and or activities which has been listed and more particularly described in Schedule of the Notification (S.O.1533) dt. 14th September 2006. It can be seen from the said Schedule that out of total 39 categories, 9 categories (Sr. No. 7(a) 7(i) are related to physical infrastructure including Environmental services as specified therein, whereas 2 categories (8(a) & 8(b) are related to building, construction, townships and area development projects. Remaining 28 categories are in reference to hazardous industrial establishments and also activities of mining, extraction of natural resources and power generation etc.

Since this Hand-Book & Guide is mainly aimed to identify the problems, and the hardship being faced by all the component agencies of the construction industry, particularly in obtaining various NOCs/Clearances from the concerned Civic Authorities, State & Central Government, various statutory authorities i.e. Civil Aviation, Disaster Management, Fire Fighting, State Pollution Control Board, Environmental as well as Coastal Regulation Zone Committees, before putting single brick on the site for any project which attracts Environmental Clearance.

As per item No. 8(a) & 8(b) of the Schedule of the Notification any proposal of building, where the built-up area proposed is 20000.00 Sq. Mtrs. or above, and construction project where built-up area proposed is 1,50,000.00 Sq. Mtrs. or above both categories attracts Environmental Clearance.

The Environmental Clearances are issued by the State Level Appraisal Committee appointed by MoEF from respective States within which the project is located /proposed.

- **CRZ Clearance**

Our nation, perhaps, is having one of the longest coastal line which covers almost 9 States i.e. Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Orissa & West Bengal. The Ministry of Environment and Forests, Government of India, vide its first CRZ Notification (S.O. 114 (E)) dt.19th February 1991, and subsequent Notifications thereof has prohibited and or restricted construction activities in the Coastal areas. According to the said Notification the restrictions are also imposed on the construction on properties situate alongwith rivers, lakes, creeks and wetlands.

The Ministry has identified and earmarked the coastal zone which is to be measured 500 Mtrs. from High Tide Line towards landward side throughout the coastal line of our country and the said Coastal region is categorized in 3 Zones i. e. CRZ-I, CRZ-II and CRZ-III.

The Ministry also has framed policies and regulations permitting / restricting the development in all above 3 zones. As per the said Notification any property falling within any of the CRZ category, irrespective of its proposed construction area, it has to obtain CRZ Clearance, which is a mandatory requirement for obtaining development permission for the lands affected by CRZ. By and large the development is permitted on the properties towards landward side falling in CRZ-II Category. The CRZ Clearance is granted by the respective State Level CRZ Committee appointed by MoEF through State Government.

- **General Hardships :-**

As per the feedback received from the fellow brothers and developers, it is revealed that in Maharashtra, there is abnormal delay in granting respective Clearances, which can be understood from the following details :-

- i) Generally the CRZ Clearance can be obtained from the State level CRZ Committee within a period of 3 to 6 months' time, depending on merits of the case as decided by the Committee.
- ii) Whereas it is not possible to obtain the Environmental Clearance in less than 12 to 24 months. In spite of Hon'ble Courts' directive to the State Government to hold EC Committee meetings at every month for granting the Environmental Clearances, there is hardly any relief.
- iii) It is also revealed that invariably new and or additional conditions are being added in while granting clearance, which most of the time are nowhere mentioned in the Notification.

- **Unique Hardship :-**

If any building or construction project falls in CRZ which also attracts the Environmental Clearance, it becomes a case of unique hardship. In such situation, as per the present practice, the project proponent has to obtain separate clearances and or NOCs from Environmental and CRZ Committees. Even if the CRZ NOC is obtained within minimum 3 months' time, the proponent has to wait further for at least one or one and half year for obtaining Environmental Clearance. With the result, the plans of the projects cannot be approved and or the development permission cannot be given by the local planning authority to the project till both the Clearances are obtained and submitted.

Interestingly Municipal Corporation of Greater Mumbai - the local planning authority - also takes anywhere between 8 to 18 months for approving the plans and or granting Development Permission thereof. Naturally due to abnormal delay involved at every regulatory authority, the project gets delayed and delayed and thus automatically becomes costlier day-by-day.

As a matter of fact, there is no clarification in any of the Notification, of the Ministry of Environment and Forests, as to when and which NOC/Clearance (EC or CRZ) is required to be obtained in the first place. I had an opportunity to request the Director of MoEF - New Delhi, as well as Director of Administrative Staff College of India – Hyderabad, who have prepared EIA Guidance Manual for building, construction, townships and area development projects (published in February 2010), for their opinion and or guidance in the matter. However nothing is heard from the said authorities till this date. Therefore it is not possible to predict as to how much time the present stalemate will continue.

It is learnt that many associations related to construction industry are making regular representations to the Ministry of Environment and Forests, explaining their hardships, however there is hardly any relief sofar. There is no provision of "One Window Clearance" with either of the committees or authorities even though the Government is emphasizing and repeatedly promising for single window clearance and E governance in the interest of public at large.

- **Suggestions :-** In the above circumstances, it is suggested that :

- i) There should be provision of Single Window Clearance so that Environmental and CRZ Clearance can be granted simultaneously within specific and minimum time limit, since both the regulatory authorities are the extended arms and are

working under the same Ministry of Environment and Forests who is responsible for making policies in respect to both the aforesaid issues.

- (ii) Building or construction project of 20000.00 M² and 1,50,000.00 Sq. Mtrs. are found executed in and around mega cities of which civic authorities are well equipped with required infrastructure and public services. In view of additional incentive Floor Space Index are being granted in Gr. Mumbai for practically all categories of buildings, it is suggested that the limit of 20000.00 Sq. M² or above should be increased upto 50,000.00 Sq. M² especially for building projects in mega metropolis like Mumbai, Pune, Nagpur and for all capital cities of all the States of our country.

Let us hope that the concerned authorities will consider above suggestions and will come out with better solutions in the matter of Single Window Clearance as well as amending present built-up area limit for building and construction categories.

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- Wikipedia
- Articles in News Papers : Times of India
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