ENVIRONMENTAL IMPACT ASSESSMENT – A tool for Sustainable Development

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Background

This topic introduces the concept of EIA and outlines its history, placing it within the current framework of sustainable development.

- Concepts of EIA;
- Purpose of EIA
- What are the aims and objectives of EIA?
- Structure of EIA
- Why EIA is important?
- Origin and development of EIA
- Key elements of the EIA process
- Measurement t of impact in EIA
- EIA practice and outcomes
- Costs and benefits of EIA
- Relationship of EIA with sustainable development

Concept of Environmental Impact Assessment (EIA):

Simply defined, EIA is a systematic process to identify, predict and evaluate the environmental effects of proposed actions and projects. This process is applied prior to major decisions and commitments being made. A broad definition of environment is adopted. Whenever appropriate social, cultural and health effects are considered as an integral part of EIA. Particular attention is given in EIA practice to preventing, mitigating and offsetting the significant adverse effects of proposed undertakings.

The purpose of EIA is to:

- provide information for decision-making on the environmental consequences of proposed actions; and
- promote environmentally sound and sustainable development through the identification of appropriate enhancement and mitigation measures.

Immediate objectives of EIA are to:

- improve the environmental design of the proposal;
- ensure that resources are used appropriately and efficiently;
- identify appropriate measures for mitigating the potential impacts of the proposal; and
- facilitate informed decision making, including setting the environmental terms and conditions for implementing the proposal.

Long term objectives of EIA are to:

- protect human health and safety;
- avoid irreversible changes and serious damage to the environment;
- safeguard valued resources, natural areas and ecosystem components; and
- enhance the social aspects of the proposal.

Structure of the EIA

- Law, Policy and Institutional Arrangements : To provide regulatory and legislative governance structures and requirements of EIA processes for project proponents, EIA practitioners and stakeholders.
- Screening : To decide whether or not a proposal should be subject to the EIA process and, if so, at what level of detail.
- Scoping : To identify the key issues and impacts that are likely to require further investigation, and to prepare the terms of reference for the EIA study.
- Impact analysis : To identify and predict the likely environmental and social effects of the proposal and evaluate their significance.
- Mitigation and impact management : To develop measures to avoid, reduce or compensate for impacts, making good any environmental damage.
- Reporting : To describe the results of the EIA for decision-makers and other interested parties.

- Review of EIA quality : To examine the adequacy of the EIA report to see if it meets the terms of reference and provides the information necessary for decision-making.
- Public involvement : To inform the public about the proposal and to gain the inputs of those directly affected by or interested in the proposal. Public involvement in some form may occur throughout the EIA process, although it tends to be focused on scoping and review phases of EIA.
- Decision-making : To approve or reject the proposal and set the terms and conditions under which it can proceed. The decision-maker also has the option to defer approval (e.g. until certain conditions are met or to require a proponent to redesign the project so that the environmental effects are minimised).
- Implementation and follow up : To check on the implementation of the terms and conditions of approval during the construction and operation phases; to monitor the impacts of the project and the effectiveness of mitigation measures; to take any actions necessary to ameliorate problems; and, as required, to undertake audit and evaluation to strengthen future EIA applications.

There are several other processes which are also considered in EIA study. These includes - :

- Social Impact Assessment
- Risk Assessment
- Life Cycle Analysis
- Energy Analysis
- Health Impact Assessment
- Regulatory Impact Assessment
- Species Impact Assessment
- Technology Assessment
- Economic Assessment
- Cumulative Impact Assessment
- Strategic Environmental Assessment
- Integrated Impact Assessment
- Social aspects (such as impacts on employment, community interaction);
- Risks (such as threats to native animals, water supplies);
- Life cycle (such as the impacts at each stage of the project design through to operation and closure); and
- Energy (such as use of non-renewable energy sources, Greenhouse gas emissions), etc

Why EIA is important?

Reducing the burden of environmental impacts is necessary if development is to become sustainable. These impacts are more complex, larger in scale and further reaching in their potential consequences than thirty years ago when EIA was first introduced. As a result, EIA has become of ever increasing importance as a tool for development decision-making.

This role is formally recognized in Principle 17 of the Rio Declaration on Environment and Development:

Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Origin and development of EIA

EIA is one of a number of policy tools that are used to evaluate project proposals. It is also a relatively recent development when compared to use of economic appraisal methods. A number of factors led to the introduction of EIA in the US National Environmental Policy Act (NEPA, 1969), including public concern about the quality of the environment and the increasing effects of new technologies and ever-larger development schemes. In addition, then available economic appraisal techniques, such as benefit cost analysis, did not take account of the environmental and social impacts of major projects.

Major trends in EIA

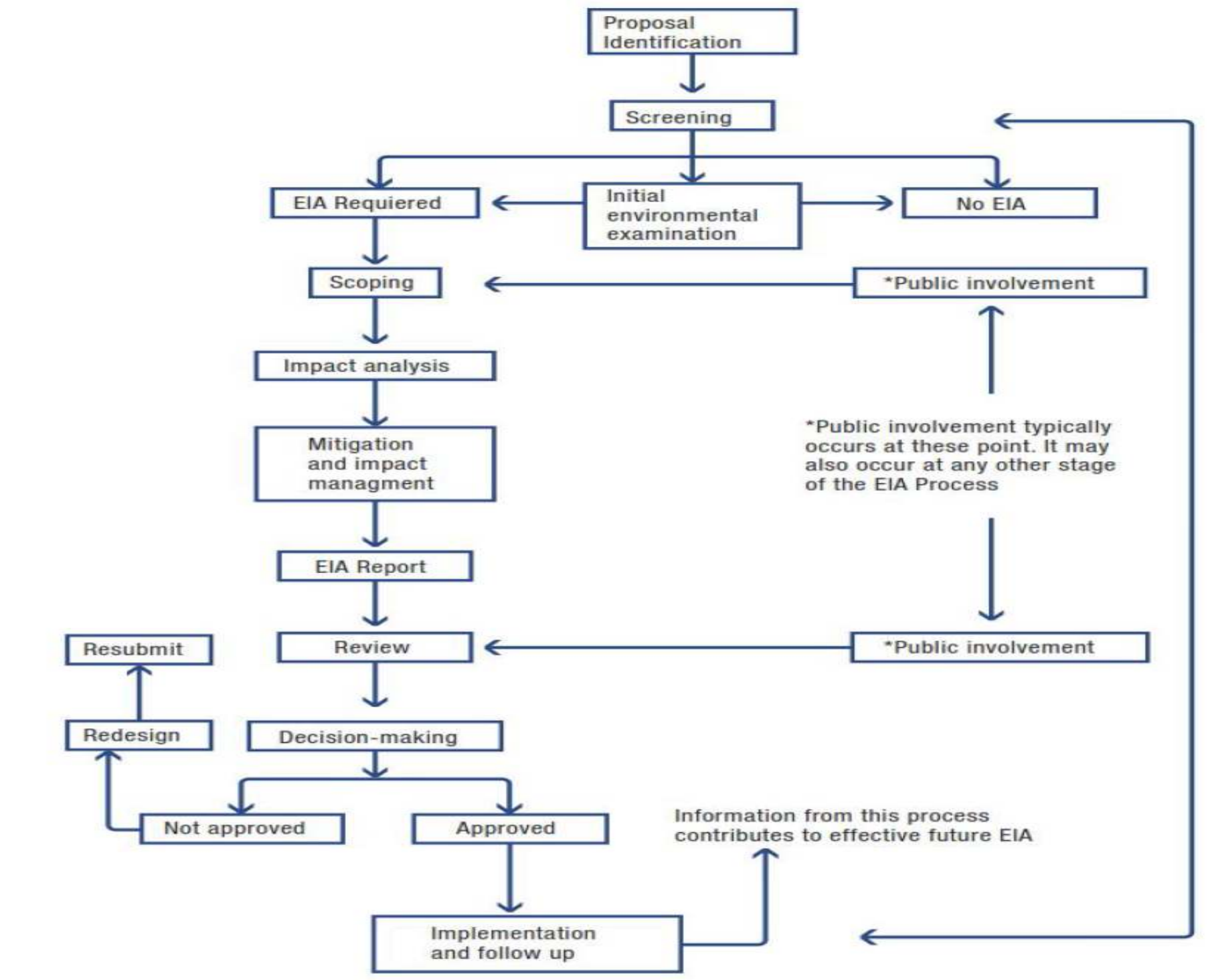
Phase	Time	Key Events
Introduction and early development	1970-1975	Mandate and foundations of EIA established in the USA; then adopted by a few other countries (e.g. Australia, Canada, New Zealand); basic concept, procedure and methodology still apply.
Increasing scope and sophistication	mid 70s to early 80s	More advanced techniques (e.g. risk assessment); guidance on process implementation (e.g. screening and scoping); social impacts considered; public inquiries and reviews drive innovations in leading countries; take up of EIA still limited but includes developing countries (e.g. China, Thailand and the Philippines).
Process strengthening and integration	early 80s to early 90s	Review of EIA practice and experience; scientific and institutional frameworks of EIA updated; coordination of EIA with other processes, (e.g. project appraisal, land use planning); ecosystem- level changes and cumulative effects begin to be addressed; attention given to monitoring and other follow-up mechanisms. Many more countries adopt EIA; the European Community and the World Bank respectively establish supra-national and international lending requirements.
Strategic and sustainability orientation	early 90s to date	EIA aspects enshrined in international agreements (Law, policy and institutional arrangements); marked increase in international training, capacity & building and networking activities; development of strategic environmental assessment (SEA) of policies and plans; inclusion of sustainability concepts and criteria in EIA and SEA practice; EIA applied in all OECD countries and large number of developing and transitional countries.

Source: updated and amended from Sadler, 1996

Guiding principles of EIA good practice

Principles	Practical application
Purposive	EIA should meet its aims of informing decision making and ensuring an appropriate level of environmental protection and human health.
Focused	EIA should concentrate on significant environmental effects, taking into account the issues that matter.
Adaptive	EIA should be adjusted to the realities, issues and circumstances of the proposals under review.
Participative	EIA should provide appropriate opportunities to inform and involve the interested and affected publics, and their inputs and concerns should be addressed explicitly.
Transparent	EIA should be a clear, easily understood and open process, with early notification procedure, access to documentation, and a public record of decisions taken and reasons for them.
Rigorous	EIA should apply the best practicable methodologies to address the impacts and issues being investigated.
Practical	EIA should identify measures for impact mitigation that work and can be implemented.
Credible	EIA should be carried out with professionalism, rigor, fairness, objectivity, impartiality and balance.
Efficient	EIA should impose the minimum cost burden on proponents consistent with meeting process requirements and objectives.

Source: Sadler, 1996; IAIA and IEMA, 1999.



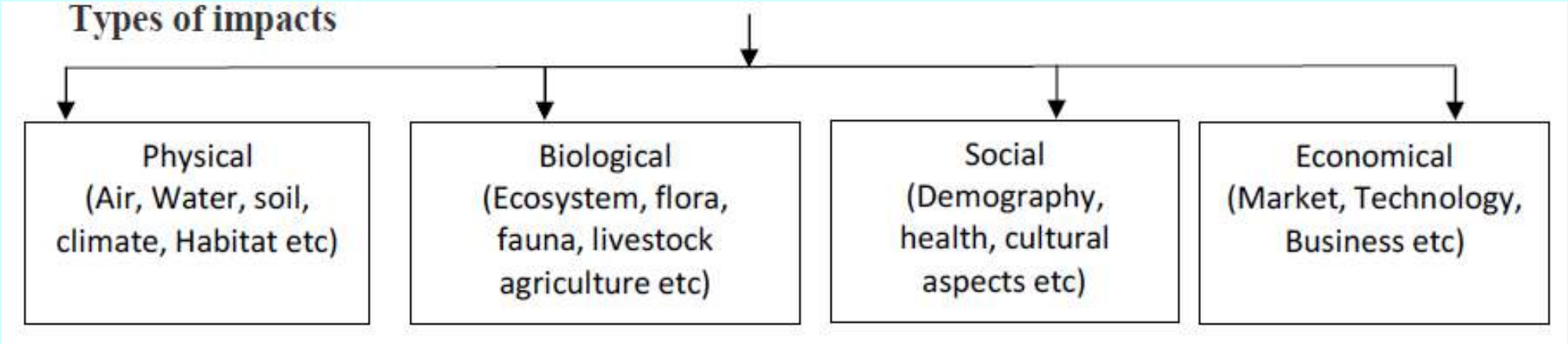
Generalised EIA process flowchart

Measurement of Impacts in EIA:

Environmental impacts resulting from proposed actions can be grouped into following categories:

- Beneficial or detrimental
- Natuarry reversible or irreversible
- Shortterm or longterm
- Temporary or continuous
- Physical, social, biological or economical
- Local, regional, national or global
- Direct (Primary) or Indirect (Secondary)

The category of impact as stated above and its significance will facilitate the expert appraisal committee (EAC/State level EAC (SEAC) to take a look at the TOR for EIA studies, as well as, in decision making process about the developmental activity. The broad outline of impacts are given below:



EIA Terms of Reference (TOR)

In concluding the scoping process, the preparation of Terms of Reference (ToR) for an EIA is an important task. Alternatively, or as a supplement to ToR, a formal scoping report may be issued (especially useful if the issues and/or process are controversial). In some EIA systems, the proponent prepares a more informal document to summarise the conclusions of scoping and the approach to be taken by an EIA study. The test for Terms of Reference (or its equivalent) lies in its usefulness to and robustness in successive stages of the EIA process.

A number of international agencies have issued sample or framework Terms of Reference. When reviewing these, it is important to remember that Terms of Reference provide guidance and direction to the proponent. The document should be comprehensive yet as concise as possible. Many of the components listed below will occupy a paragraph or less.

Terms of Reference for a full EIA can refer to some or all of the following items:

- purpose and application of the Terms of Reference;
- statement of need for and objectives of the proposal;
- project background and description;
- study area or impact zone(s) (e.g. the affected environment and community);
- applicable policy and institutional considerations;
- EIA requirements and decision-making particulars;
- provisions for public involvement;
- alternatives to be examined;
- the impacts and issues to be studied;
- the studies to be carried out (e.g. approach, time & space boundaries);
- the requirements for mitigation and monitoring;
- the information and data to be included in the EIA report;
- the timeframe for completion of the EIA process; and
- the means for making changes to the ToR if necessary.

The Terms of Reference can also contain various matters relating to EIA project management. Alternatively, these may be contained in a separate brief or specification drawn up by the proponent for the study team. The following particulars might be included:

- the proposed study schedule;
- the resources and estimated budget for the study;
- the activities and responsibilities of the study team;
- the expected outputs or deliverables from the study team; and
- the basis on which variations to the working brief will be negotiated.

EIA activity:

Steps

- Base line environmental Data generation
- Impact identification
- Impact evaluation
- Impact mitigation
- Impact management through EMP implementation

DATA GENERATION

GEOMORPHIC MAP
GROUND WATER STATUS SURVEY
TERRAIN FEATURES
SURFACE WATER BODY LOCATION

GROUND SURVEY,
AIR PHOTO & IMEGARY
INTEGRATION

FOREST TYPE ANALYSIS
FLORAL ASSESSMENT (QUALITATIVE & QUANTITATIVE)
FAUNAL ASSESSMENT (QUALITATIVE & QUANTITATIVE)
AGRICULTURAL
LIVESTOCK

PRIMARY DATA SOURCE,
GROUND SURVEY

METERIOLOGICAL
AIR QUALITY
WATER QUALITY
NOISE STATUS
SOIL QUALITY

GROUND MONITORING &
ANALYSIS

SOCIOECONOMIC
CULTURAL ASPECT

PRIMARY DATA SOURCE &
FIELD SURVEY

DATA COMPILATION & INTERPRETATION

ENVIRONMENTAL IMPACT STATUS (EIS)

IMPORTANT INDICATORS OF ENVIRONMENTAL BASELINE MONITORING (EBM)

Environmental Component	Environmental Indicators
Climatic variables	• Rainfall patterns-mean, mode, seasonality • Temperature patterns • Extreme events • Climate change projections • Prevailing wind – direction, speed, anomalies • Relative humidity •Stability conditions and mixing height
Topography	• Slope form • Landform and terrain analysis •Specific landform types
Drainage	• Surface hydrology • Natural drainage pattern and network • Rainfall runoff relationships • Hydrogeology • Groundwater characteristics-springs, etc.

IMPORTANT INDICATORS OF ENVIRONMENTAL BASELINE MONITORING (EBM)

Environmental Component	Environmental Indicators
Soil	• Type and characteristics • Porosity and permeability • Sub-soil permeability / Run-off rate •Infiltration capacity • Effective depth (inches/ centimeters) • Inherent fertility
Geology	• Underlying Rock type, texture / Surgical material • Geologic structures (faults, shear zones, etc.) • Geologic resources (minerals, etc.)
Water	• Raw water availability / Water quality • Surface water (rivers, lakes, ponds, gullies)- quality, water depths, flooding areas, etc. • Ground water- water table, local aquifer storage capacity, specific yield, specific retention, water level depths and fluctuations, etc. • Coastal / Floodplains • Wastewater discharges / Thermal discharges • Waste discharges

IMPORTANT INDICATORS OF ENVIRONMENTAL BASELINE MONITORING (EBM)

Environmental Component	Environmental Indicators
Air	• Ambient • Respirable • Airshed importance • Odour levels
Noise	• Identifying sources of noise • Noise due to traffic/ transportation of vehicles • Noise due to heavy equipment operations • Duration and variations in noise over time
Landuse	• Landuse cover area / pattern
Biological	• Species compostion of flora and fauna • Flora – type density, exploitation, etc. • Fauna – distribution, abundance, rarity, migratory, species diversity, habitat requirements, habitat resilience, economic significance, commercial value, etc. • Fisheries – migratory species, species with commercial / recreational value
Socio-economics	• Population demography, income, education profile, health status, occupation, etc.

ECOLOGICAL STATUS SURVEY

(A) Terrestrial ecology:

Forest & vegetation analysis

I. Forest types & composition

II. Forest stratification

III. Density & cover analysis

IV. Floristic composition

V. Rare & endangered species

VI. Medicinal plant species

VII. Pollution tolerant plant species listing

Faunal survey

I. Checklist
   - Bird
   - Amphibian
   - Reptiles
   - Mammals

II. Population analysis

III. Wildlife status survey

(B) Aquatic ecology

I. Checklist Preparation

- Macrophytes,
- Plankton,
- Benthos,
- Fish,
- Aquatic bird,
- Aquatic mammals.

ENVIROMENTAL IMPACT EVALUATION

Method	Description
Checklists	• Annotate the environmental features that need to be addressed when identifying the impacts of activities in the project
Matrices	• Identify the interaction between project activities (along one axis) and environmental characteristics (along other axis) using a grid like table • Entries are made in the cells which highlights impact severity in the form of symbols or numbers or descriptive comments
Networks	• Illustrate cause effect relationship of project activities and environmental characteristics • Useful in identifying secondary impacts • Useful for establishing impact hypothesis and other structured science based approaches to EIA

ENVIROMENTAL IMPACT MITIGATION AND ENVIRONMENTAL MAGAGEMENT PLAN

Impacts	Mitigation steps
Soil	• Windscreens, maintenance, and installation of ground cover • Installation of drainage ditches • Runoff and retention ponds • Minimize disturbances and scarification of the surface • Usage of appropriate monitoring and control facilities for construction equipments deployed • Methods to reuse earth material generated during excavation
Resources – fuel/ construction material, etc.	• Optimization of resource use • Availing resources with least impact- eco-efficiency options are applicable • Availing the resources which could be replenished by natural systems, etc.
Deforestration	• Plant or create similar areas • Initiate a tree planning program in other areas • Donate land to conservationlist groups

ENVIROMENTAL IMPACT MITIGATION AND ENVIRONMENTAL MAGAGEMENT PLAN

Impacts	Mitigation steps
Water pollution and issues	• Conjunctive use of ground / surface water , to prevent flooding/ water logging / depletion of water resources. Included are land use pattern, land filling, lagoon/reservoir/garland canal construction, and rainwater harvesting and pumping rate. • Stormwater drainage system to collect surface runoff • Minimise flow variation from the mean flow Strong of oil wastes in lagoons should be minimised in order to avoid possible contamination of the ground water system. • All effluents containing acid/alkali/organic/toxic wastes should be properly treated. • Monitoring of ground waters. • Use of biodegradable or otherwise readily treatable additives • Neutraliazation and sedimentation of wastewaters, where applicable • Dewatering of sludg e and appropriate disposal of solids • In case of olil waste, oil separation before treatment and discharge into the environment • By controlling discharge of sanitary sewage and industrial waste into the environment • By avoiding the activities that increases erosion or that contributes nutrients to water (thus stimulating alga growth)

ENVIROMENTAL IMPACT MITIGATION AND ENVIRONMENTAL MAGAGEMENT PLAN

Impacts	Mitigation steps
Water pollution and issues	• For wastes containing high TDS, treatment methods include removal of liquid and disposal of residue by controlled landfilling to avoid any possible leaching of the fills • All surface runoffs around mines or quarries should be collected treated and disposed • Treated wastewater (such as sewage, industrial wastes, or stored surface runoff) can be used as cooling water makeup • Wastewater carrying radioactive elements should be treated separately by means of de-watering procedures, and solids or brine should be disposed of with special care. • Develop spill prevention plans in case of chemical discharges and spills • Develop traps and containment system and chemically treat discharges on site

ENVIROMENTAL IMPACT MITIGATION AND ENVIRONMENTAL MAGAGEMENT PLAN

Impacts	Mitigation steps
Air pollution	• Periodic checking of vehicles and construction machinery to ensure compliance to emission standards • Attenuation of pollution/protection of receptor through green belts/green cover • Dilution of odourant (dilution can change the nature as well as strength of an odour), odour counteraction or neutralize (certain pairs of odours in appopriate conecntrations may neutralise each other), odour masking or blanketing (certain weaker malodours may be suppressed by a considerably stronger good odour). • Regular monitoring of air polluting conecntrations • Adopt sprinkling of water • Wetting of roadways to reduce traffic dust and re- entrained particles • Ensure that vehicles should be covered during transportation • Installation of windscreens to breakup the wind flow • Providing dust collection equipment at all possible points

GREEN BELT DEVELOPMENT

Purpose

Design

Choice of species

Area coverage

Plantation management

Budget proposal

POST PROJECT MONITORING SCHEDULES

To be followed as per environment audit of SPCB guideline or MoEFCC guideline

PUBLIC HEARING

- The public hearing shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site or its close proxmity places organized by state pollution control board (SPCB)
- The developer shall make a request through a simple letter to the member secretary of SPCB for organizing public hearing along with couple of hard copies of project out line and environmental concern (summary).
- The officials of the concerned area should be present in the meeting-

  District Magistrate

  District Collector

  Chairman of Jilla parishad

  Mayor or Panchayat

  District industries official

  SPCB officers
- Public hearing should be notified atleast before 30 days after receipt of request from developer
- Developer will present the details of projects and their benefit and also answer all quaries of the public participated in the meeting
- Videography of whole activity is required along with the proceeding of the meeting will be prepare by SPCB official which required to be submitted to MoEFCC during EAC meeting of the concern project

APPLICATIONS FOR ENVIRONMENTAL CLEARANCE

The following documents is required -

i. Feasibility report,

ii. Site clearance for specific project,

iii. EIA & EMP Report

iv. No objection certificate from SPCBs, & local authorities,

v. Public hearing report

vi. Duly filled in environmental Appraisal questionnaire,

vii. Risk analysis & Emergency preparedness plan

viii. Rehabilitation plan

ix. Clearance for airport authority, port authority, forest dept, defense etc. (if needed)

Environment Clearance Procedure

- All projects and activities are broadly categories as category-A and category-B, based on the spatial extent of potential impacts on environmental component
- All projects / activities included category –A in the schedule of 2006 EIA notification, require prior environmental clearance from MoEFCC – EAC (duely constituted)
- All projects / activities included as category-B in the schedule will be cleared by SEIAA & SEAC
- The tenure of functioning of each committees is only for 3 years
- If any project of category –B lies near sensitive area (within 10Kms) should be treated as category –A project.
- Industrial estate having prior environmental clearance (EC) for homogenous industries may not require fresh EC for individual cases

Environment Clearance Procedure

- Specific expert appraisal committee (EAC) will examined the submitted documents (EIA and EMP report) for environmental clearance along with audio visual presentation made by developer

- On the merit of the project they will make quarries at the time of presentation or sent specific questions for clarification

- The final clearance notification with / without conditions of environmental clearance and then report will be uploaded in the MoEFCC website within 1 month if developer answer all quarries in satisfactory manor

- Usually clearance is valid for 5 years to start the activities for industrial project or about 10 years for mining projects, otherwise special permission is required from MoEFCC for extension of the clearance period

EIA Notification, 2006

A draft notification under sub rule (3) of Rule 5 of the Environment (Protection) Rule, 1986 for imposing certain restrictions and prohibitions on the 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, unless prior environmental clearance has been accorded n accordance with the objectives of National Environment Policy as approved by the Cabinet on 18th may, 2006 and the procedure specified in the notification, by 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 of section 3 of the Environment (Protection) Act., 1986.

Environmental Clearance Process

In terms of the 14th September 2006 notification of the MoEF, ports and harbor projects are divided into two categories as mentioned below:

Project or Activity	Category with Threshold Limit	
	A	B
Ports,Harbors, break waters, dredging	≥ 5 million TPA of cargo handling capacity (excluding fishing harbors)	< 5 Million TPA pf cargo handling capacity and/or ports/ harbors ≥ 10, 000 TPA of fish handling capacity
Authority for approval of TOR & issue/reject of EC	MoEF, GOI on the recommendations of Expert Appraisal Committee (EAC)	State/Union territory Environmental Impact Assessment Authority (SEIAA) on the recommendations of State or Union territory level Expert Appraisal Committee (SEAC)

General condition shall apply*
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 Wildlife (Protection) Act, 1972; (ii) Critically polluted areas as identified by the CPCB from time to time; (iii) Eco-sensitive areas as notified under section 3 of the Environment (Protection) Act, 1986, such as, Mahabaleswar, Panchgani, Matheran, Pachmarhi, Dahanu, Doon Valley and (iv) Inter-state boundaries and international boundaries

The requirement regarding distance of 10km 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 mentioned at item (i), (ii) and (iii) above

Note:

1. Capital dredging inside and outside the ports or harbors and channels are included
2. Maintenance dredging is exempt provided it formed part of the original proposal for which Environment Management Plan was prepared and environmental clearance obtained

Port Activities with Reference to CRZ Notification

Since Ports and harbors are generally located at the intersection of land and sea, they naturally come under the purview of Coastal Regulation Zone Notification 1991 and its amendments thereon. For regulating development activities, the coastal stretches within 500 m of High Tide Line (HTL) on the landward side are classified into four categories, namely: CRZ (I), (II), (III) and (IV), (Please Ref. to the CRZ Notification(s) for details).

Category I (CRZ -I)

i)	Areas that are ecologically sensitive and important, such as national parks/marine parks, sanctuaries, reserve forests, wildlife habitats, mangroves, corals/coral reefs, areas close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty/ historically/heritage areas, areas rich in genetic diversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time
ii)	Area between the Low Tide Line and the High Tide Line

Category II (CRZ-II)

The areas that have already been developed up to or close to the shoreline. For this purpose, "developed area" is referred to as that area within the municipal limits or in other legally designated urban areas which are already substantially built up and which have been provided with drainage and approach roads and other infrastructural facilities, such as water supply and sewerage mains

Category III (CRZ-III)

Areas that are relatively undisturbed and those which do not belong to either Category I or II. These will include coastal zone in the rural areas (developed and undeveloped) and also area within Municipal limits or in other legally designated urban areas, which are not substantially built up

Category IV (CRZ-IV)

Coastal stretches in the Andaman & Nicobar, Lakshadweep and small islands, except those designated as CRZ-I, CRZ-II or CRZ-III

General Guidelines on CRZ and EC requirements for typical marine terminals subject to the requirements as stipulated in the EIA Notification and CRZ Notification:

Type of Marine Terminal/Facility	EC Requirement	CRZ Requirement
Bulk Cargo, Container Cargo, Multi commodity Terminals/Facilities	Required	Required
Roll on - Roll off Terminals	_____	Required
Cruise Terminals	_____	Required
Virtual Ports	Required	_____
SBMs	Required	Pipelines require CRZ Clearance as detailed in crude Terminal Storages (Refer CRZ Notification)
Break waters and dredging	Required Maintenance dredging is exempt provided it formed part of the original proposal for which Environmental Management Plan (EMP) was prepared and environmental clearance obtained	Required Maintenance dredging is exempt provided it formed part of the original proposal for which Environmental Management Plan (EMP) was prepared and CRZ clearance obtained

Ports and harbors project category

Ports, Harbors, break waters & dredging with cargo handling capacity ≥ 5 million TPA of cargo handling capacity (excluding fishing harbors are classified as **category A** projects and with cargo handling capacity < 5 million TPA and/or ≥ 10000 TPA of fish handling capacity are classified as **category B** projects, subject to the applicability of General Conditions as stipulated in the EIA Notification, 2006 and as amended vide 1st December 2009.

Note:

-Capital dredging inside and outside the ports or harbors and channels are included

-Maintenance dredging is exempt provided it formed part of the original proposal for which Environment Management Plan was prepared and environmental clearance obtained

THANK YOU