ENVIRONMENTAL IMPACT ASSESSMENT



EIA NOTIFICATION

ENVIRONMENTL CLEARANCE PROCESS

FORM 1

GENERIC STRUCTURE OF EIA REPORT

TYPES OF EIA

IEE

EIANOTIFICATION 2006

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



• Includes 4 schedules schedule 1 schedule 2

schedule 3

schedule 4

Schedule 1:List of projects requiring environmental clearance from central government **Schedule 2**:(Application form) industry should submit application form for the Environmental clearance t to Union Ministry of Environment and Forests.

Schedule3:(composition of expert committee for giving environmental clearance). Expertsfrom various disciplines including air pollution risk analysis, social service, NGOs, economics, water pollution, etc constitute this committee

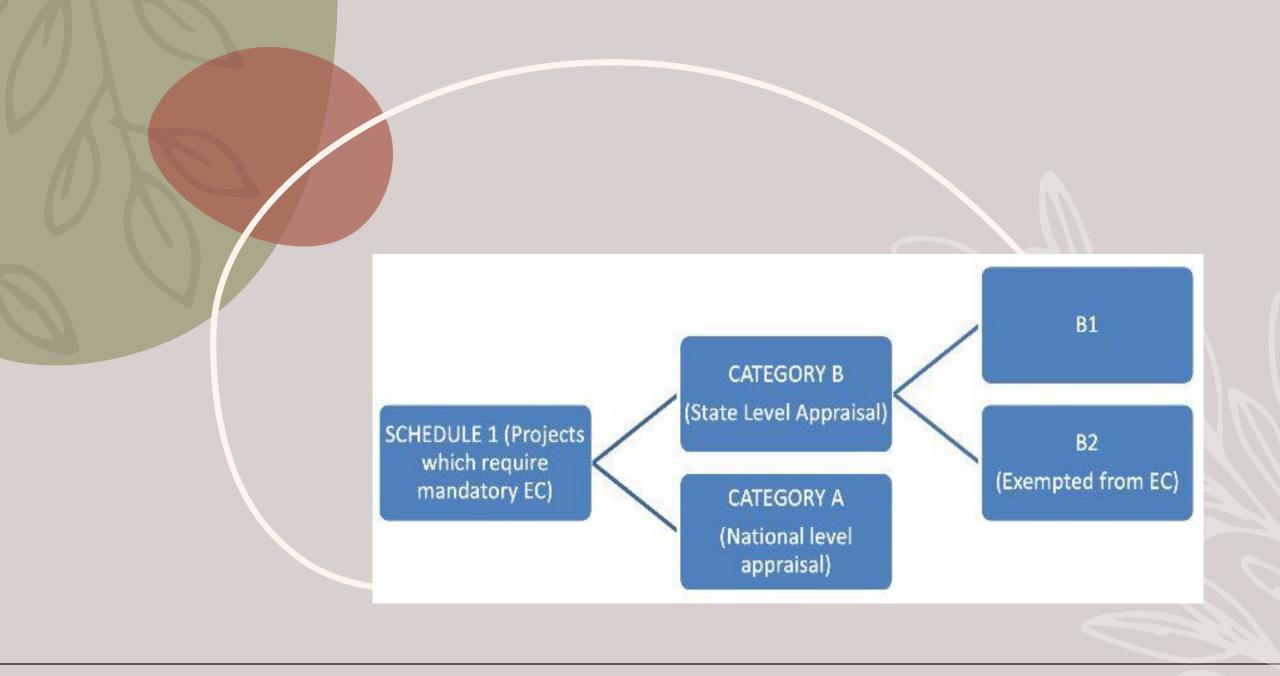
Schedule4: Procedure for public hearing

EIA NOTIFICATION 2006

- As per EIA notification Sep 14, 2006, a schedule is provided for list of Projects or Activities requiring prior Environmental Clearance
- All new projects listed in the schedule including expansion, modernization of the existing projects or activities and change in product mix shall require prior Environmental Clearance
- Only land can be secured before the Environmental Clearance, no construction work can be done before obtaining EC

CATEGORY A AND B

- All projects and activities are broadly categorized into two categories-category A and category B based on
- Spatial extent of impacts
- Impacts on natural and man-made resources
- Impacts on human health
- Projects listed in the schedule to notification (as category a and b projects) require EIA



- Category A projects :EC is done by Central Government in the Ministry of Environment and Forests(MoEF) Based on the decisions on the recommendation by Expert Appraisal Committee(EAC)
- Category B projects::EC is done by state level the State 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

Application for prior environmental clearance

APPLICATION FOR PRIOR ENVIRONMENTAL CLEARANCE

- An application seeking prior environmental clearance in all cases shall be made
 - In the prescribed Form 1 and Supplementary Form 1A
 - Supporting document for Form 1: Pre feasibility report.
 - Form 1 to be submitted:
 - O After identification of the prospective site for the project
 - O Before commencing any construction activity
 - O Before preparation of land at the site
 - Submit pre-feasibility report for all and conceptual plan for construction activities

FORM-1 (APPLICATION FOR THE PROJECT CONSIDERATION)

Contents:

- Size of the Project (Capacity)
- Expected cost of the Project
- Activities involved in the Project

Demolition work

Dredging

New road, rail or traffic during construction or operation

- Use of natural resources
- Production of solid waste
- Release of pollutants, toxic or noxious substances to air
- Effluent generation
- Generation of noise and vibration

Stages in Environmental Clearance process (EC)

- Stage1: Screening (Only for Category'B 'projects and activities)
- Stage2: Scoping
- Stage3: Public Consultation
- Stage4: Appraisal

SCREENING

- The First stage of EIA, determines whether the proposed project requires an EIA, and if it requires EIA, then the level of assessment is required.
- Screening criteria for determining the level of review required are relatively well defined. Screening criteria are based upon:
 - Scales of investment
 - Type of development.
 - Location of development

Project Category 'A':

- Projects in this category typically require an EIA. The project type, scale and location determine this designation.
- The potentially significant environmental issues for these projects may lead to changes in land use, as well as changes to social, physical, and biological environment

. Project Category 'B'

- Only difference between projects in this category and those in Category 'A' is the scale.
- Larger Power plants fall under category 'A', Medium Sized Power Plants projects are in category B

- Screening is done only for Category B projects and activities to determine if they need EIA
- Category A projects compulsorily need EIA
- Scrutiny of an application seeking EC by SEAC for determining whether or not the project or activity requires further environmental studies
- Classify projects asB1(require EIA)and B2(don't require EIA)
- For categorization of projects into B1or B2, the MoEF shall issue appropriate guidelines from time to time

SCOPING

- This stage identifies key issues and impacts that should be further investigated. This stage also defines the boundary and the time limit of the study.
- Quantifiable impacts are to be assessed on the basis of magnitude, prevalence frequency and duration, and nonquantifiable impact (aesthetic or recreational value). Significance is usually determined through socioeconomic criteria.
- After the areas, where the project could have a significant impact, are identified, the Baseline status of these should be monitored and then the likely changes in these on account of the construction and operation of the proposed project should be predicted.

Who does the scoping?

- Expert Appraisal Committee(EAC) in the case of Category'A' projects or activities
- Determine comprehensive Terms Of Reference (TOR)addressing all relevant environmental concerns for preparation of an EnvironmentImpactAssessment(EIA) Reportbasedon
- on the basis of the information furnished by applicant in the prescribed application Form1/Form1A including
 - proposed by theapplicant
 - o a site visit by a sub-group of EAC or SEAC only if considered necessary

PUBLIC CONSULTATION

Public Consultation shall ordinarily have two components

1.public hearing at the site or in its close proximity-districtwise, to be carried out in the manner prescribed in AppendixIV, for determining concerns of local affected persons 2.Obtain responses in writing from other concerned persons having a Reasonable stake in the environmental aspects of the project



Component 1-public hearing

- Public hearing shall be conducted by the State Pollution Control Board (SPCB)
- Forward proceedings to the regulatory authority concerned within 45days
- If not appoint another independent organization to do the same within another 45days
- If the public agency nominated reports that 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
- After due consideration of the report shall rule that the public consultation in

The case need not include the public hearing

Component 2: Responses from other concerned persons

- Invite replies from such concerned persons by placing on their website the Summary EIA report
- Use other appropriate media for ensuring wide publicity about the project
- 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 shall not be placed on the website

- Make available on 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 mean

After public consultation...

- Applicant shall address all environmental concerns expressed during this process
- Make appropriate changes in the draft EIA
- Final EIA report shall be submitted by the applicant to the concerned regulatory authority for appraisal.

Appraisal

- Detailed scrutiny by the EAC or SEAC of
- o documents like the Final EIAreport
- o outcome of the public consultations including public hearing proceedings
- o submitted by the applicant to the regulatory authority concerned for grant of environmental clearance
- Appraisal of all projects or activities which are not required to undergo public consultation, or submit an
 Environment Impact Assessment report (Category) shall be carried out on the basis
- Prescribed application Form1
- Form1A
- Any other relevant information

- EAC or SEAC shall recommend 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.
- Prescribed procedure for appraisal is given in Appendix V

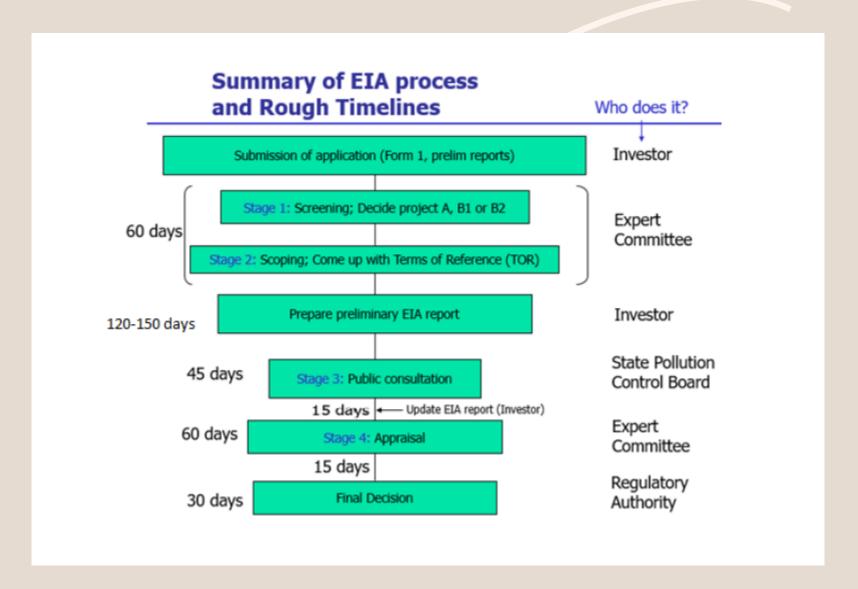
Grant or Rejection of EC

- The regulatory authority shall consider the recommendations of the EAC or SEAC Concerned and convey its decision to the applicant
- In cases where it disagrees with the recommendations of the Expert Committee (Central or State), the regulatory authority shall request reconsideration by the Central Or State Expert Appraisal Committee
- After reconsideration, irrespective of views of Expert Committee, decision of the Regulatory authority concerned shall be final
- If decision not granted within stipulated time, 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 Committee concerned

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- Careful 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
- Rejection of an application or cancellation of a prior environmental clearance already granted shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice

Summary of EIA process and rough timelines



Terms of reference (TOR)

Once a project or development has gone through the screening and scoping phases, the
authority responsible for processing the EIA provides the client with a Terms of Reference
(TOR) document. The TOR provides details of all the information required for the EIA review
committee to make an informed decision about awarding the Environmental Licence.
Depending on the country, TORs may be developed specifically for the project, or they may be
a general set of guidelines that apply to all projects in a sector

The TOR should require the consultants to cover the following points:

 Whether a range of proposals should be considered and if so whether they would be less environmentally damaging; The main environmental effects of the proposed project, both in the project area and in the surrounding area and the timescale of the impacts;

- The size and extent of the impacts based as much as possible on quantitative data rather than qualitative assessment. In some cases it may be necessary to highlight certain topics (such as waterlogging, resettlement etc. when a particular issue is known to be of concern. In most cases, however, it may be preferable not to mention any specific topic and make the consultant responsible for a complete review of all topics;
- Those groups that will benefit and those disadvantaged by the project;
- The impact on any rare species of plant or animal in the area;
- The impact on human health;
- The control and management aspects of the project to determine if they will be effective;

- The need for further baseline data collection or other specialist studies;
- The present policy, institutional and legislative situation and future needs;
- The mitigating measures needed and how they should be incorporated into the project design;
- The monitoring and evaluation activities that are required to ensure that mitigating measures are implemented and future problems are avoided
- The TOR should give an indication of the team considered necessary for the study.
- Depending on the scope of the study this may include one or several of the following: an irrigation specialist, drainage specialist, rural sociologist, terrestrial ecologist (of various specializations), aquatic ecologist/fisheries expert, hydrologist, agronomist, soil chemist or physicist, economist and epidemiologist.
- However, as mentioned earlier the team should not be rigidly imposed on the consultant.

GENERIC STRUCTURE OF ENVIRONMENTAL IMPACT ASSESSENT DOCUMENT

| S.NO | EIA STRUCTURE | CONTENTS | | |
|------|---------------------|--|--|--|
| 1. | Introduction | 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 | 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: 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 | Study area, period, components & methodology | | | |
|----|----|--------------------------|--|--|--|--|
| | | Environment | 7 /1 / 1 | | | |
| | | Environment | Dalling of the state of | | | |
| | | | Establishment of baseline for valued environmental | | | |
| | | | components, as identified in the scope | | | |
| | | | | | | |
| | | | Base maps of all environmental components | | | |
| | | | Base maps of an environmental components | | | |
| | | | | | | |
| | 4. | Anticipated | Details of Investigated Environmental impacts due to | | | |
| | | Environmental Impacts | project location, possible accidents, project design, project | | | |
| | | & | construction, regular operations, final decommissioning or | | | |
| | | | | | | |
| | | Mitigation Measures | rehabilitation of a completed project | | | |
| | | | | | | |
| | | | Measures for minimizing and / or offsetting adverse | | | |
| | | | impacts identified | | | |
| | | | impacts identified | | | |
| | | | T 71 1 T 4 1 1 1 2 4 6 | | | |
| | | | Irreversible and Irretrievable commitments of | | | |
| | | | environmental components | | | |
| | | | • | | | |
| | | | Assessment of significance of impacts (Criteria for | | | |
| | | | | | | |
| | | | determining significance, Assigning significance) | | | |
| | | | | | | |
| | | | Mitigation measures | | | |
| li | 5. | Analysis of Alternatives | In case, the scoping exercise results in need for | | | |
| | | (Technology | alternatives: | | | |
| | | | ancinatives. | | | |
| | | & Site) | | | | |
| | | | Description of each alternative | | | |
| | | | | | | |
| | | | Summary of adverse impacts of each alternative | | | |
| | | | Summary of adverse impacts of each anternative | | | |
| | | | 10 11 1 | | | |
| | | | Mitigation measures proposed for each alternative and | | | |
| | | | | | | |
| | | | Selection of alternative | | | |
| | | | | | | |

TYPES OF EIA

- STRATEGIC
- REGIONAL
- SECTORAL
- PROJECT LEVEL



Strategic EIA

• Strategic EIA refers to systematic analysis of the environmental effects of development policies, plans, programs and other proposed strategic actions. This process extends the aims and principles of EIA upstream in the decision- making process, beyond the project level and when major alternatives are still open. Strategic EIA represents a proactive approach to integrate environmental considerations into the higher level of decision-making.

REGIONAL EIA

- EIA in the context of regional planning integrates environmental concerns into development planning for a geographic region, normally at the sub- country level.
- Such an approach is referred to as the economic-cumenvironmental (EcE) development planning.
- This approach facilitates adequate integration of economic development with management of renewable natural resources within the carrying capacity limitation to achieve sustainable development.

SECTORAL EIA

- instead of project-level-EIA, an EIA should take place in the context of regional and sectoral level planning.
- Once sectoral level development plans have the integrated sectoral environmental concerns addressed, the scope of project-level EIA will be quite narrow.
- Sectoral EIA will help to address specific environmental problems that may be encountered in planning and implementing sectoral development projects

Project level EIA

• Project level EIA refers to the developmental activity in isolation and the impacts that it exerts on the receiving environment. Thus, it may not effectively integrate the cumulative effects of the development in a region.

RAPID ENVIRONMENTAL IMPACT ASSESSMENT(REIA):

Rapid Environmental Impact Assessment can be defined as the study, which is done for quick assessment of likely adverse impacts.

Rapid Environmental Impact Assessment studies will be conducted at the initiation of the new activity. In some cases this study may be required for the expansion of existing unit or change in the current manufacturing process(if the pollution load is to exceed the existing one).

Rapid Environmental Impact Assessment study covers one season baseline data for various environmental components viz. Air , Noise, water, land, Biological and Socio-economic including parameters of human interest.

Comprehensive Environmental Impact Assessment

Comprehensive Environmental Impact Assessment is basically a study which includes collection of data for various components for four seasons i.e. Monsoon, Post-monsoon, Winter and Summer. Comprehensive Environmental Impact Assessment report has to be submitted after the evaluation of Rapid Environmental Impact Assessment report, if so asked by the Impact Assessment Agency.

Initial Environment Examination

Initial environmental examination (IEE) is intended as a low-cost environmental evaluation that makes use of information already available.

It boost up the process of EIA and lead the matter to further assistance.

