EIA Process in Bangladesh

Steps/Procedures of EIA

as per Bangladesh guideline, a three-tier approach is followed :

- Screening / Scoping
- Initial Environment Examination (IEE)
- Detailed Environmental Impact Assessment (EIA)

Screening

- Screening is the first and the simplest tier of project evaluation
- Screening is done to assess the impact of any proposed industry from the environment view point
- Criteria for Screening based on type of project, its size and location
- As per Environmental Regulation 1997, industries have been divided into four categories: Green, Amber A, Amber B and Red
  - If no such screening lists are available then the process of identifying the boundary of the work is called scoping

Scoping

Definition:

- Scoping is a very early exercise in an EIA, in which an attempt is made to identify the attributes of components of the environment for which, there is public (and professional) concern and upon which, the EIA should be focused.

Importance of Scoping

- Guides to avoid inappropriate methodologies of EIA, thus prevents EIA report to be rejected
- Identifies the direction / duration / extent of the EIA
- Get the necessary information about the project and associated bodies:
  - Why is the project proposed?
  - What will be the final project look like?
  - What is the magnitude of the project?
  - What design options are available?
  - When is the proposal to be implemented?
  - When will the construction phase, operation, decommissioning take place?

Importance of Scoping

  - What are the preferred sites for the proposal?
  - What are possible alternative sites?
  - Who is the project proponent?
  - Who will build and operate it?
  - Which public bodies or communities will be interested or affected by the project?
  - How will the project be implemented?
- Means for defining scope of the work
- Ensure public participation to clarify the ins and outs of the project to the interested / affected groups

Methodologies of Scoping

- Methodology depends on the probable sensitivity of the proposed development and its scale
- Complex methodologies are adopted for larger and potentially contentious development projects
- For projects having significant likely effects (pollution/ geographical), several methodologies are applied in parallel to compare and decide about the EIA
- Methods include: Checklists, Matrices, Networks etc.

Timing of Scoping

- At the beginning of a project, before the commencement of EIA
- should be less than two months ahead of the actual EIA
  - to avoid the variations in the environmental conditions or physical changes

Initial Environment Examination (IEE)

- All industries and projects in Amber B and Red categories have to conduct IEE which helps in understanding the potential extent of environmental changes and in finding ways to mitigate by considering the available information, or past experience or standard operating practices.
- The steps for conducting IEE are:
  - Collection of baseline information in respect of the project and the environmental settling of the project and its site.
  - Setting of boundaries of an IEE by identifying the significant issues.
  - Impact assessment, suggesting mitigation measures, Environmental Management Plan (EMP) or alternative sites or other project modifications.
  - In the event IEE of the project or industry reveals that further investigation is to be carried out then the sponsors will have to carry out a detailed EIA.

The Structure of EIA Report

The Detailed EIA report consists of the followings:

1. Environmental Base Maps
2. Information on Environmental and socio-economic parameters
3. Environmental Impacts and Mitigation
4. Environmental Management Plan

The Structure of EIA Report

1) Environmental Base Maps (covering a minimum of 10 km radius)

2) Description of the following features

i. Land use

ii. Natural Physical Resources (Air, Water, Soil)

iii. Natural Biological Resources (including Forests)

iv. Economic Development

v. Socio-economic Status

vi. Quality of Life Values

vii. Environmentally sensitive areas of special or unique scientific, socio-economic or cultural value

The Structure of EIA Report

3) Environmental Impacts and Mitigation

3.1 Major findings of the Initial Environmental Examination (IEE)

- 3.1.1 Critical Issues (remaining unresolved during IEE Study)
- 3.1.2 Other Issues (Related to Public Perceptions, etc.)

3.2 Detailed Examination of unresolved issues related to

- 3.2.1 Project Location
- 3.2.2 Design Criteria
- 3.2.3 Construction Stage
- 3.2.4 Operation Stage

3.3 Evaluation of Impacts (in the light of)

- 3.3.1 Environmental Laws and Regulations or Applicable National Criteria
- 3.3.2 Mitigation Measures for elimination or reducing significant impacts
- 3.3.3 Benefit Cost Ratio
- 3.3.4 Public Opinion
- 3.3.5 Residual Impacts

3.4 Critical Evaluation

The Structure of EIA Report

4) Environmental Management Plan

4.1 Technical aspects of the Project

- Final design
- Equipment
- Construction methods
- Construction: Contract Document
- Construction and operations of pollution control measures (Air, Liquid, Solid)
- Reuse/ Recycling of wastes
- Schedule of implementation
- Estimates of capital and operational costs

4.2 Management Organization

- Personnel
- Resources (equipment, labs etc.)

The Structure of EIA Report

4.3 Environmental Monitoring Program (for Air, Water, Soil, terrestrial/aquatic biology, whichever is applicable)

4.3.1 Ambient environmental quality monitoring

- Location
- Parameters
- Frequency

4.3.2 Effluent and emissions monitoring

- Air Emissions (stacks, parameters and frequency)
- Effluent (locations, parameters and frequency)
- Solid wastes (Quality and composition of each type of waste and frequency)

4.3.3 Monitoring of environmentally significant parameters of fuels and raw materials (e.g. Sulfur and ash content in fuels, metal contents in mineral ores)

4.3.4 Data presentation and submission reports

4.3.5 Estimate of annual costs

Generalized EIA Process Flowchart

