

UNIT–III: ENVIRONMENTAL MANAGEMENT PLAN

3.4-Reviewing of EIA Reports*



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a) **Environmental Impact Assessment**

Although it is the responsibility of the proponent of the project in a transparent and logical matter, the review will be based on technical grounds including:

- ❖ Description of Project and base line conditions
- ❖ Methods and models used
- ❖ Risk analysis and disaster management
- ❖ Public review
- ❖ Mitigation measures

Description of project and baseline conditions:

Base line conditions of the project area (site) known as core area and surrounding identified area known as buffer zone (within 10 km radius) are collectively referred as project impact area. The check list of key parameters will be:

Land

1. Landforms including coastal zone
2. Lithology and geomorphology

3. Soil composition and characteristics
4. Slope stability
5. Subsidence and compaction
6. Seismicity / zone
7. Flood plains/swamps
8. Land use
9. Mineral resources
10. Buffer zones (National park, wild life habitat)
11. Soil erosion
12. Catchments area treatment

Surface water

1. Shore line
2. Bottom interface
3. Flow variations
4. Water quality
5. Drainage pattern/water logging
6. Water balance
7. Flooding
8. Existing and planned future use

9. Siltation

Atmosphere

1. **Air** quality
2. Visibility
3. Meteorology

Noise and vibration

1. Intensity
2. Duration

Ground water potential

1. Water table
2. Flow regime
3. Water quality
4. Recharge rate
5. Aquifer characteristics
6. Existing use and proposed plans

Species and population

1. Terrestrial flora/fauna
2. Other terrestrial vegetation
3. Aquatic flora/fauna

4. Fish
5. Other aquatic flora/fauna

Habitat and communities

1. Terrestrial
2. Aquatic communities
3. Migratory path
4. Benthic flora and fauna

Health and safety

1. Physical
2. Psychological
3. Occupational
4. Parasitic diseases
5. Communicable diseases
6. Water born diseases
7. Disease vectors

Socio- Economic

1. Agricultural land
2. Employment/Training
3. Housing

4. Education
5. Utilities
6. Amenities (water, sanitation, electricity, transportation)
7. Community health

Aesthetic/Cultural

1. Landscape
2. Wilderness
3. Climate
4. Tranquility
5. Community structure
6. Religious places
7. Historical/Archaeological structures

When describing project base line conditions a good practice is mapping the impacted region on a 1:25000 scale. Mapping for critical themes of relevant environmental components may also be presented.

Site and process alternatives

Project description will need to address the main attributes during phase of the implementation process

- ❖ General siting, layout map, showing water resources, roads, sewage, storm drains, land use

- ❖ Project construction - Direct employment, water, power lines usage, earth work, dredging drilling, schedule of activity
- ❖ Operation – Direct employment, raw materials, transport, pollution control, utilities, stacks, vents, noise control, quantities of solid. Liquid and gaseous waste.

Risk Analysis and Disaster Management

Hazard identification, inventory analysis, natural hazards. Maximum credible accident analysis to identify hazardous scenarios, fire.

Preparation on site and offsite, disaster management plan.

Public Review

The state Pollution Control Boards provide the details of Public Hearing. The proponent is obliged to respond to the issues raised by stake holders. It is imperative to identify stake holders representing the sections as given in Schedule IV of the Notification.

Stake holders identification	Is the project proponent aware of all groups who will be directly affected by social/ environmental impacts of the project.
Impact identification	Has the project proponent addressed to mitigation options on all social / environmental impacts of significance to local population.
Mitigation options	Has the project proponent addressed the

	issues of project compensation and rehabilitation as per procedure.
Monitoring	Has the project proponent involved the affected groups in monitoring the effectiveness of social/environmental impact mitigation.
Community development	Is the proponent working to promote local development within community.

