UNIT–III: ENVIRONMENTAL MANAGEMENT PLAN

3.5-Procedure for public hearing

3.6-Environmental Clearance

3.5 Procedure for public hearing

1. Process of Public Hearing – Whoever apply for environmental clearance of projects, shall submit to concerned State Pollution Control Board 20 sets of following documents:

   - Executive summary containing salient features of the project both in English and local language
   - Form XII prescribed under Water (prevention and control of pollution)rules, 1975 where discharge of waste water is required
   - Form I prescribed under Air (prevention and control of pollution) underTerritory rules, 1983 where discharge of emissions are involved
   - Any other document, which is necessary in the opinion of the Board forfinal disposal of the application

2. Notice of Public Hearing:

   - The State Pollution Control Board shall cause a notice for Public Hearing which shall be published it at least two newspapers, mentioning date, time and place. Suggestion and views shall be invited within 30 days.
   - All persons including residents, environmental groups, likely to be affected can participate and or make oral/written suggestions

3. Composition of Public Hearing Panel:

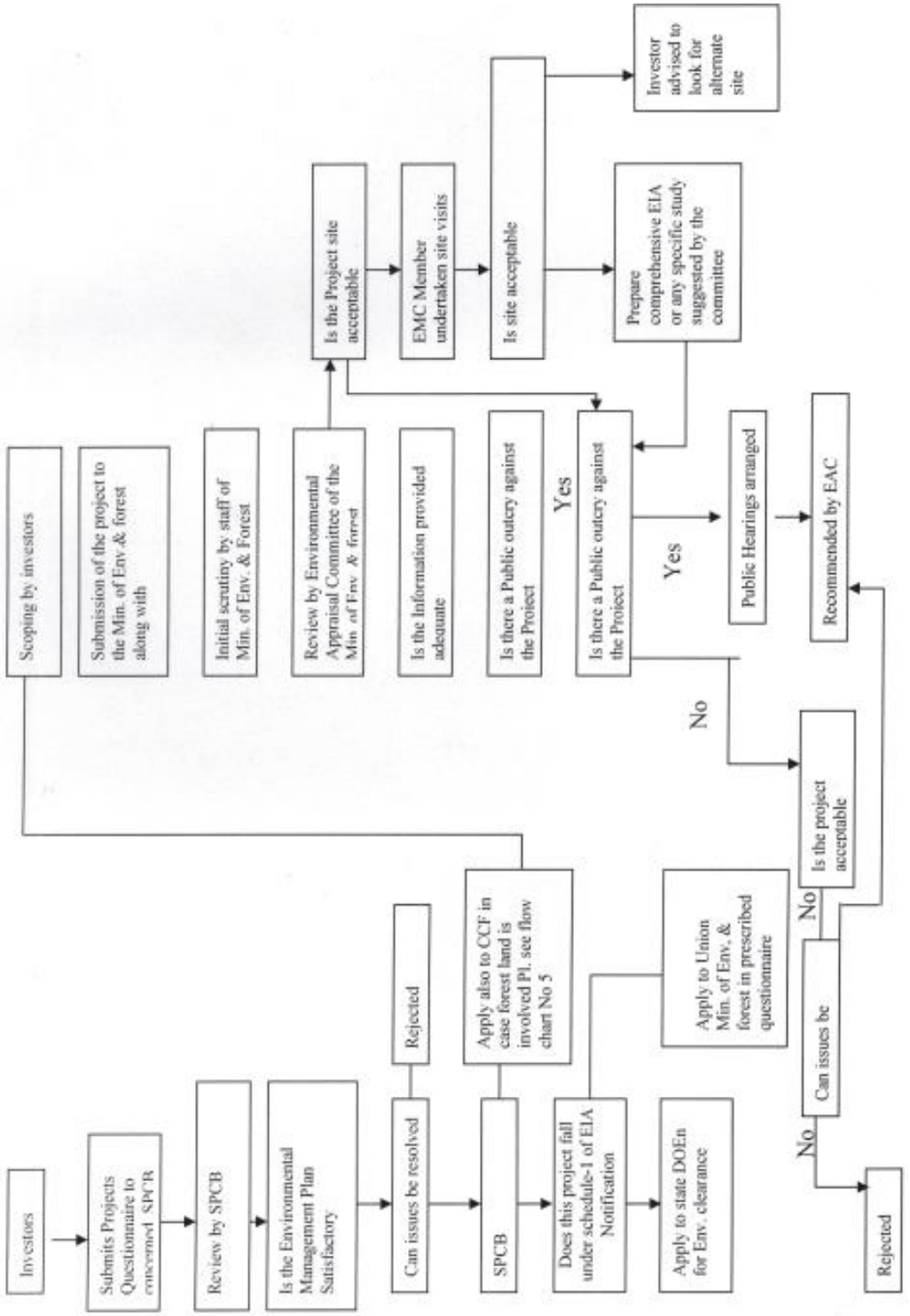
   Panel way consist of the following

   - Representative of Pollution Control Board
   - District collector or his nominee

- Representative of State Government dealing with environment
- Three representatives of local bodies
- Three senior citizens of the area nominated by D.C.

4. Time Period. The Public Hearing shall be completed within 60 days from thedate of receipt of complete documents.

3.6-ENVIRONMENTAL CLEARANCE



The entire EIA process up to obtaining environmental clearance are summarized in the following flow chart.

List of Projects Requiring Environmental Clearance From The Central Government

- Nuclear Power and related projects such as Heavy Water Plants, nuclear fuelcomplex, Rare Earths.

- River valley projects including hydel power, major irrigation and their combination including flood control.

- Ports, Harbours, Air Ports (except minor ports and harbours)

- Petroleum Refineries include crude and product pipelines.

- Chemical Fertilisers (Nitrogenous and Phosphatic other than single superphosphate)

    - Pesticides (technical)

    - Petrochemical complexes (both olefinic and aromatic) and petrochemical intermediates such as DMT, caprolactum, LAB etc. and production of basic plastics such as LLDPE, HDPE, PP, PVC.

- Bulk drugs and pharmaceuticals

- Exploration for oil and gas and their production, transportation and storage.
- Synthetic Rubber
- Asbestos and asbestos products.
- Hydrocyanic acid and its derivatives.

Primary metallurgical industries (production of iron and steel, aluminum,copper, zinc, lead and ferroalloys)
Electric arc furnaces (mini steel plates)

- Chlor-alkali industry
- Integrated paint complexes including manufacture of resins and basic rawmaterials required in manufacture of paints.
- Viscose staple fibres and filament yarn.
- All tourism projects between 200 m – 500 m of High Water line and at locationswith an elevation of

> 1000 m with investment of > Rs. 5.0 crores

*10. Storage batteries integrated with manufacture of oxides of lead and lead antimony alloys

- Thermal Power plants
- Mining projects (major minerals)* with leases > 5 Ha.

- Highway projects, **except projects related to improvement works include widening and strengthening of roads with marginal land acquisition along the existing alignments provided it does not pass through ecologically sensitive areas such as National Parks, Sanctuaries, Tiger Reserves, Reserve Forests**
- Tarred roads in Himalyas and forest areas
- Distilleries
- Raw skin and hides
- Pulp, paper and newsprint
- Dyes
- Cement
- Foundries (individual)
- Electroplating
- Meta aminophenol

    - The MOEF vide notification dated 7th July 2004, included the new construction at Sl. No. 12 in the above notification of 1994. With this notification it is mandatory for construction fulfilling any one of the following requirements to get the environmental clearance from MOEF.

Any construction project including new township, settlement colonies, commercial complexes, hotel complexes, hospitals and office

complexes for 1000 (one thousand) persons or more or discharging sewage of 50,000 (fifty thousand) liters per day or more or with an investment of Rs. 50,00,00,000 (Rupees fifty crors) or above.

Any industrial estate falling entry 32 of Schedule – I including industrial estate accommodating industrial units in an area of 50 hectares or below but excluding the industrial estates irrespective of area if their pollution potential is high.

Procedure for EIA clearance

Every human activity produces some effect on environment. The Consequential effect are more negative than positive. Ministry of Environment and Forests have outlined the procedure as below:

EIA Cycle and Procedures

The EIA processes in India is made up of eight phases

Phase I Screening

Screening is done to visualize whether a project requires Environmental Clearance or not as per the statutory notifications (as per Environment Protection Act (1986) MOEF Notification on EIA dated January 27, 1994 and July 7, 2004).

Screening is needed on the part of proponents and regulating agencies vis-a vis scales of investment, type of development and location of development. A project requires statutory environmental

clearance only if the provisions of EIA notificationcover it in as much as:

- Prohibiting locations of industries except those related to tourism in a belt of

  1.0 km from high tide mark from the Revdanda Creek upto Devgarh point (near Shrivardhan) as well as in 1.0 km belt along the banks of Rajpure Creek in Murud Janjira area in the Raigarh district of Maharastra (6th January 1989)
- Restricting locations of industries, mining operations and other activities in Doon Valley (Uttaranchal) (1st February 1989)
- Regulating activities in the coastal stretches of the country by classifying them as coastal regulation zone and prohibiting certain activities (19th February 1991)
- Restricting location of industries and regulating other activities in DhonuTaluka in Maharashtra (6th January 1991)
- Restricting certain activities in specified areas of Aravalle Range in the Gurgaon district of Hayana and Alwar district of Rajasthan (7th May 1992)
- Regulating industrial and other activities, which could lead to pollution and congestion in an area north west of Numaligarh in Assam (5th July 1992)

Phase II Scoping and consideration of Alternatives

Scoping is an important consideration of detailing terms of reference of EIA. The project proponent either by a team of experts (scientist and engineers) or consultants so appointed should work it out or may also be referred to the Environment Impact Agency.

The MOEF has published guidelines for different sectors signifying issues to be addressed in EIA studies. Quantifiable impacts are to be assessed on the basis of magnitude, prevalence, frequency and duration and non quantifiable impacts (such as aesthetic or recreational value). Significance is determined by socio-economic criteria.

After the area is identified, the base line data should be obtained and likely changes predicted for important attributes during construction and operation.

Phase III Base line data

Base line data denotes the existing conditions and environmental status of the identified area. The site specific primary data should be collected for identified attributes and supplemented by secondary data if available.

Phase IV Impact Prediction

Impact prediction is a way of mapping the environmental consequences of selected significant attributes of the project and its alternatives. The prediction can not be absolute and therefore it would

be prudent to consider all the possible factors and take all precautions for reducing the degree of uncertainty.

The following impacts of the project should be assessed:

- Air – Changes in ambient levels and ground level conc. from point, line and area sources. Effects on soil, materials, vegetation and human health.
- Noise – Changes in ambient levels due to noise produced from equipment, DGsets and movement of vehicles.
- Water – availability to competing users, changes in quality, sediment transportand ingress of saline water.
- Land – Changes in land use, drainage pattern, changes in land quality including effects of waste disposal.
- Biological – Deforestation, tree felling and shrinkage in animal habitat. Impact onflora and fauna (including aquatic), impact on rare, threatened or endangered species endemic sp. or migratory animals. Impact on breeding on nesting sites.
- Socio-economic – Impact on local community including demographic changes, economic status, human health and increase traffic.

Phase V Assessment of alternatives, delineation of mitigation measures and Environmental Impact

For every project, alternatives should be identified and environmental attributes compared. This should include location, and

technologies. One of the alternative could beno project. Alternatives should than be ranked in terms of predicted impacts, mitigation and socio-economic costs.

Once the alternative has been chosen, a mitigation plan be drawn with Environmental Management Plan (EMP). Risk factor should also be discussed.

Phase VI Public Hearing

The law requires that public must be informed and consulted in the proposed development after the completion of EIA report.

The stake holders are entitled to have access to executive summary of EIA. They may include:

- bonafide local residents
- local associations
- environmental groups
- any other person located at the site/site of displacement

The State Pollution Control Board shall cause a notice for environmental public hearing (published in at least two news papers, one of them should be in local language) mentioning date, time and place. Suggestions, views, comments shall be invited within 30 days from the date of publication. Details are given in Schedule IV of notification (page 97).

Phase VIII Decision making

Decision making process involve consultation between the project proponents (assisted by Technical experts/consultants/and the impact assessment authority (assisted by an expert group/committee if necessary). The decision is arrived at through evaluation of EIA and EMP.

Phase VI Monitoring the Clearance conditions

Monitoring should be done during construction and operation phases of a project.

This is to ensure that:

a) Commitments made are complied,

b) observe that whether the predictions made in the EIA reports were correct ornot,

c) corrective measures have been made or not,

d) Environmental Management Plan is in place or not.

Post Project Monitoring

Environment Impact Assessment (Statement) delineates all aspects of the project and predictable impacts of activities on environment. It provides detail of mitigation measures along with a detailed

Environment Management Plan (EMP).

Post project monitoring is aimed at evaluating the progress of project implementation. Each project is Unique in terms of activities involved. The projectproponents while submitting the projects claim to achieve and ameliorate the impacts of diverse environmental attributes. The regulatory agency also suggests additional measures for the protection of environment. The objectives of monitoring thus is to ascertain whether expressed and suggested measures have been incorporated in the project and to confirm that they satisfy all legal provisions vis. a vis. Environment (Protection) Rules 1986 (National Ambient Air Quality Standards; Environment Protection Act (CPCB) No 29 of 23.5.1986; Classification of Inland Surface Water(Central Pollution Control Board Standards, IS 10500 – 1983); Indian Standard / Specifications for Drinking Water (152490 – 1982); Environment (Protection) Rules, 1986, Schedule VI/Standard Prescribed by SPCB's (Indian Standards for Industrial and Sewage Discharge, General Standards for discharge of Environment Pollutants) andGovt. Policies (National Water Policy, 1987; National land use Policy, 1988; National Forest Policy, 1988, Policy Statement for Abatement of Pollution, 1991; Industrial Policy, 1991; National Conservation Strategy and Policy Statement on Environment and Development, 1992; National Rehabilitation and Resettlement Policy and National Mineral Policy 1993).

Every project has three defined phases

Phase I – Preconstruction phase, planning and development. It includes land procurement, Clearing and grubbing, removal of existing structures, top soil stripping excavation and back fill and removal of extra material. Procurement of all supportfacilities for the next phase.

Phase II – Construction phase. It involves plethora of jobs including excavation, foundations, bituminous construction. Concrete construction, masonry, timber and steel construction and furnishing.

The activities during these phases are transient and continue till the project is completed. They may be operated separately or jointly. The quantum would however, depend on the magnitude of the project. A close watch during the period is helpful. The construction phase can lead to significant impacts through high intensity pressures on the physico chemical environment in relation to air, ground and, surface water, soil and land. Risks to the sensitive systems are of particular importance.

Phase III – Operation and maintenance is very critical in monitoring. The agency identified for post project monitoring has to verify all significant impacts specially.

(a) Impacts on Public utilities:

Stress on distributive resources, water, transportation, traffic, loss of open space, visual impairment, sewage and drainage, solid wastes, noise and health.

(b) **Impacts on Resources***:*

Downstream pollution arising out of use of water extraction of ground water, lowering of water table and on use of by population in the vicinity. Changes in land topography top soil and decrease in drainage.

(c) Ecological impacts:

Effect on plant and animal life changes in habitat requirements changes in biodiversity and occupational health.

The most critical parameters for monitoring would require

i) **Water: -** Changes in flow patterns, aquifer yield changes in the quality of waterdownstream of project progress of rainwater harvesting.

ii) **Waste Water: -** Collection, carriage, treatment and disposal. The use of treatedwaste water in green area development and or other indicated disposal methods.

iii) **Solid Waste: -** Collection, haulage and disposal as included in the project proposals of special consideration is changes in aesthetic environment.

iv) **Air: -** Quality of stack emissions and changes in the ambient air.

v) **Land: -** Subsistenance and noise.

vi) **Plantation: -** Green cover as envisaged.

vii) **Socio economic: -** Employment / Placement of stake holders, rehabilitation of displaced persons, provisions and facilities promised by the promoters of the affected population changes

if any an economic conditions.

The monitoring programme be so drawn as to achieve the basic objectives and critical parameters.