

# **INFORMATION HANDBOOK ON THERMAL POWER PLANTS**

*- An initiative by Thermal Watch*



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*Thermal Watch is an initiative by Citizen consumer & civic Action Group to empower local communities about the Environmental Impact Assessment Process for Thermal Power Plants across South India*

For more details, visit [www.thermalwatch.org.in](http://www.thermalwatch.org.in)

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<b>ABBREVIATIONS</b>	
1	<i>AA: Appellate Authority</i>
2	<i>CIC: Central Information Commission</i>
3	<i>CRZ: Coastal Regulatory Zone</i>
4	<i>EAC: Expert Appraisal Committee</i>
5	<i>EC: Environmental Clearance</i>
6	<i>EIA: Environmental Impact Assessment</i>
7	<i>FC: Forest Clearance</i>
8	<i>MoEF: Ministry of Environment &amp; Forests</i>
9	<i>NGT: National Green Tribunal</i>
10	<i>PIO: Public Information Officer</i>
11	<i>RE: Renewable Energy</i>
12	<i>RTI: Right To Information</i>
13	<i>SEIAA: State Environment Impact Assessment Authority</i>
14	<i>SEAC: State Expert Appraisal Committee</i>
15	<i>SPCB: State Pollution Control Board</i>
16	<i>SIC: State Information Commission</i>
17	<i>ToR: Terms of Reference</i>
18	<i>TPP: Thermal Power Plant</i>

# 1. THERMAL POWER PLANTS

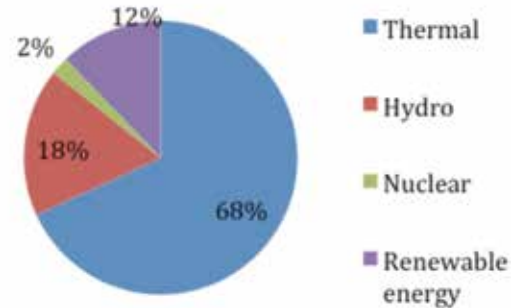
## 1.1 AN INTRODUCTION

Electricity is generated using different sources of energy like coal, oil, hydro, nuclear, solar, biomass, etc. Coal, gas, diesel and naphtha are called thermal resources and the plants that operate on them are known as Thermal Power Plants (TPPs). It is understood that even as Renewable Energy (RE) will gain ground in the coming years and dependence on thermal sources - especially coal - must be reduced, they will play an important role in meeting the energy needs in the near future. How TPPs are set up and operated will have great environmental consequences.

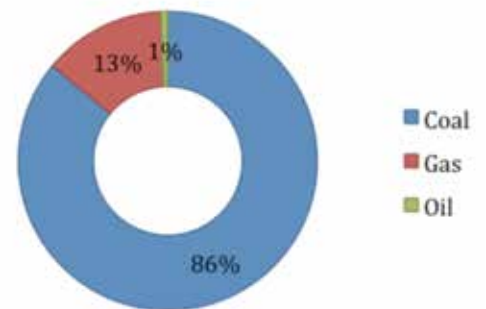
As of 2013, the net power generation capacity in India is 2,25,793.10 MW. A major share in power generation is from thermal sources, with an installed capacity of 153847.99 MW (68%). The installed capacity of hydropower is 39,623.40 MW (18%) and installed nuclear power capacity is 4,780.00 MW (2%). The installed contribution from RE is around 27,541.71 MW.<sup>1</sup>

India's reliance on coal for power is a serious environmental concern because both the mining and usage of coal have serious environmental impacts. Coal-fired power plants are the biggest source of manmade-CO<sub>2</sub>, Sulphur and Mercury emissions. If adequate corrective measures are not taken, coal plants will pollute the water, air and soil, affect biodiversity and livelihoods. An assessment of the death and disease caused by coal-fired power plants in India by Conservation Action Trust, Greenpeace India and Urban Emissions has found that particulate emissions from these plants in 2011-12 resulted in an estimated 80,000 to 115,000 premature deaths and more than 20 million asthma

**Sources of Power Generation in India**



**Break Up of Thermal Power Generation**



1 [http://powermin.nic.in/indian\\_electricity\\_scenario/introduction.html](http://powermin.nic.in/indian_electricity_scenario/introduction.html)

cases, which cost the public and the government an estimated Rs 16,000 – Rs 23,000 crores (\$3500- \$3833 million).

While the Environmental Impact Assessment (EIA) Process is common to power plants fired by all fuels, the impact mitigation measures recommended and inputs for better public participation, in this handbook, will focus on power plants fired by coal, which is considered the dirtiest fuel.

## **1.2 COAL AND COAL-BASED POWER PLANTS**

### **1.2.1 Coal & its Qualities**

### **1.2.2 Power Generation in Coal-based Plants**

### **1.2.3 Environmental & Health Impacts of Coal-based Plants**

#### **1.2.1 Coal & its Qualities**

Coal is categorized into three main types, namely anthracite, bituminous and lignite based on the state or condition of the coal. Anthracite is the most aged state of coal. Bituminous is a soft coal, higher in quality than lignite and inferior in quality than anthracite. Lignite is the least aged coal. While anthracite is a hard coal and has carbon with little volatile content and no moisture, lignite is a soft coal with low carbon high in volatile matter and in moisture content.

#### **Various Constituents in Coal and their implications**

##### **a) Fixed Carbon**

Fixed carbon is the solid combustible residue that remains after a coal particle is heated and the volatile matter is expelled. The fixed carbon content of a coal is determined by subtracting the percentages of moisture, volatile matter and ash from a sample. Fixed carbon is a guesstimate of calorific value of coal after volatile matter is burnt.

##### **b) Volatile Matter**

Volatile Matter in the coal is the combustible gases like methane, hydrocarbons, hydrogen and carbon monoxide, and some incombustible gases like carbon dioxide and nitrogen. More of volatile matter means easier combustion of coal as it increases the flames.

##### **c) Ash**

Ash cannot be burnt and ash reduces the burning capacity and affects the combustion and boiler efficiency. It results in clinker formation in the boiler and also increases the handling cost of coal. Therefore, high ash content in coal is undesirable.

##### **d) Moisture Content**

Moisture present in coal reduces the per kg heat content (Kcal/kg) of coal as it reduces combustible components. Therefore, moisture content should be in an optimum range.

## e) Sulphur

Sulphur in coal causes corrosion of the chimney, air heaters and economisers. This will reduce the life of the equipment and is also undesirable.

### Coal Quality and Availability in India

Based on its calorific value, coal is classified as Coking Coal & Non-coking Coal. Coking coal is mainly used in metallurgy, steel, cement and sponge iron industries. The largest part of the coal resources of the country is non-coking coal. Coal is classified into seven grades from A to G. A, B and C categories are high quality coal and are used in cement, fertilizer and sponge iron industries. Most of the coalfields in India have D, E, F and G grade coal that are inferior in quality and used often in TPPs.

Lignite and bituminous coal are largely used in Indian TPPs due to their availability.<sup>2</sup> Lignite is considered suitable for power generation due to its low ash content. Coal India Ltd., a public sector company, provides coal for TPPs from national mines on a contractual basis.

### Grades of coal used in India based on calorific value

Grade	Calorific Value Range (in Kcal/kg)	Ash content
A	Exceeding 6200	
B	5600 – 6200	19.50% to 24%
C	4940 – 5600	24% to 28.70%
D	4200 – 4940	28.70% to 34%
E	3360 – 4200	34% to 40%.
F	2400 – 3360	40% to 47%
G	1300 – 2400	

Usually grade D, E and F coal are available to the Indian power plants through Coal India ltd.

Indian coal is a low quality coal with low calorific value and high content of ash.

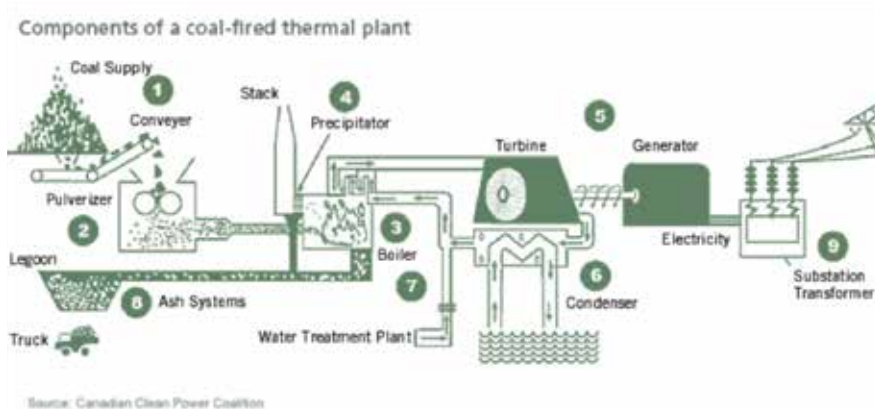
- The ash content ranges from 40 – 50%
- The moisture content ranges from 4 – 20%
- The sulphur content ranges from 0.2 – 0.7%
- The gross calorific value is between 2500 – 5000 kcal/kg
- The volatile matter content between 18 – 25%

The above factors indicate that Indian coal is of inferior quality. The inefficiency of coal

<sup>2</sup> <http://www.productivity.in/knowledgebase/Energy%20Management/c.%20Thermal%20Energy%20systems/4.1%20Fuels%20and%20Combustion/4.1.3%20Properties%20of%20Coals.pdf>

is the reason Indian power plants consume more coal than Australia and US for the same output.<sup>3</sup>

### 1.2.2 Power Generation in Coal-Based Plants



#### Conversion of coal to electricity takes place in three stages:

**Boiler Furnace** -> Coal is burnt in a furnace to produce heat. Due to the presence of carbon in the coal and oxygen in the air, carbon dioxide (CO<sub>2</sub>) is produced

**Boiler** -> Water present in the boiler is turned to steam due to the production of heat. This happens at high pressure and temperature. Converting water to steam in a closed vessel will increase the pressure

**Turbine and Generator** -> Steam is sent to the turbine and rotates the blades in it, producing a mechanical force. The steam is then condensed and sent back to the boiler to start the cycle. Rotation of the turbine rotates the generator rotor to produce electricity.

#### Brief Description of Process

Coal is burnt in a boiler in a coal power plant to generate heat that is used to boil the water present to produce steam. The steam rotates the motor of the turbines that in turn rotates the generation rotor to produce electricity.

This process requires the preparation of coal, ensuring adequate air supply for combustion of coal, steam generation, reusing the cooled steam and the removal of residues (ash and flue gases).

#### Preparation of Coal

Coal yard → coal silo (storage) → coal pulveriser

In the coal pulveriser, coal is ground to a very fine powder for efficient and easy burning.

3 IL & FS manual on TPPs



To dry the moisture present in the coal, hot air is generated by fans in the pulveriser. The generated air also carries the dry coal powder to the boiler furnace, where it is burnt.

### Inside the Boiler

The boiler is one of the main equipment in a coal power plant. It burns coal to generate heat that is used to boil the water present to produce steam.

#### *Process 1 – Combustion:*

In a boiler, combustion of coal takes place with the help of air that comes through an air system. A forced draft fan sucks the air from the atmosphere and blows it into the furnace. Heaters heat the air before it enters the furnace to increase the efficiency of combustion.

Heat, Ash and Flue Gas are generated in the combustion process. The heat converts the water to steam to turn the turbines. The flue gas is a residue and is drawn by an induced draft fan from the furnace and is sent to the electrostatic precipitator that captures the fly ash. The flue gas, without fly ash, is then released into the atmosphere through a stack/ chimney. Stacks are of great height so that the emission does not affect the ground level concentrations. Stack heights for large TPPs are around 250 to 280 meters. Another residue from the combustion is ash that is from inert matter present in the coal. In the furnace, 15 % of ash is collected at the bottom and the rest is captured in the electrostatic precipitator. The former is called Bottom Ash and the latter, Fly Ash.

#### *Process 2 – Steam Generation:*

Water at high pressure is constantly supplied to the boiler through a feed water pump through the use of recirculated and pre-heated feed water. This increases the efficiency of conversion of water to steam and also reduces the requirement of heat through combustion of coal. An economiser is a device to pre-heat the feed water. Therefore, the recovered hot gases, exhausted from the boiler, are taken by the economiser to heat the water. This hot water is sent to the water walls surrounding the furnace where the water is circulated and converted into steam.

The steam is collected in a drum. From here, it is passed through super heater coils. The temperature and pressure of the steam are increased here. This super-heated steam is what finally goes to the turbine.

### 1.2.3 Environmental & Health Impacts of Coal based Plants

#### IMPACT ON

AIR	WATER	SOIL	PEOPLE
Causes respiratory ailments Affects historic structures Causes climate change	Affects water quality and thus reduces quantity available for human consumption  Affects fishing as hot water let into sea kills or causes migration of marine species	Limits crop cultivation due to increase in alkalinity of soil  Limits crop cultivation as land available for agriculture reduced  Affects plant growth	Affects livelihood for farmers and fishermen  Increases risk of accidents due to hazardous working conditions

Water used for washing coal, if directly let into water bodies, will contaminate them. Fly ash from these plants will pollute the soil when it sets down on land. Air emission from these plants that contain pollutants such as sulphur dioxide, nitrogen oxides, particulate matter, carbon monoxide, volatile organic compounds and other metals like mercury, affects health and wellbeing.<sup>4</sup>

There are four types of environment impacts based on the nature and features of the impacts:

- Direct impact- e.g. Impact of untreated wastewater from the power plant discharged into a river or stream impacting marine life.
- Indirect impact –e.g. SO<sub>2</sub> from power plant deposited as SO<sub>4</sub> on the soil affects farming.
- Cumulative impact –e.g. Combined impact of all emissions of existing and upcoming projects in a region
- Induced impact –e.g. Impact of change in land use patterns and population in the area because of the plant on the existing natural resources like water, air.

#### Environmental Impacts

##### 1. Air Pollution

There are several pollutants emitted into the air from a coal power plant. These include Sulphur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Oxides of Nitrogen (NOx) and Ozone (O<sub>3</sub>). Suspended Particulate Matter (SPM), Lead and Non-Methane Hydrocarbons are also released.

Any combustion process is a source for production of NOx. They are formed during combustion of the nitrogen present in the fuel and the oxygen present in the air. The formation of NOx is greater with increase in the combustion temperature.

Further formations of major greenhouse gases Carbon Dioxide (CO<sub>2</sub>) - formed by CO mixing with atmospheric oxygen - and Nitrous Oxide (N<sub>2</sub>O) - formed by NOx combining with atmospheric oxygen – also take place.

4 Performance Review of Thermal Power Stations 2004-05 Section 14 Page no. 14.1 , section-14, Environmental aspects in power sector

Similarly, SO<sub>x</sub> (Oxides of Sulphur) are the combination of sulphur in the fuel and the oxygen from the air. Sulphur Dioxide (SO<sub>2</sub>) is a common pollutant from coal power plants. Sometimes, due to excess oxygen, SO<sub>3</sub> is also formed, which mixes with the water in the atmosphere, causing acid rain.

SPM from coal power plants are mainly soot, smoke and fine dust particles and these cause asthma and respiratory illness.

## 2. Water Pollution

In a coal power plant, water is used for washing coal, circulating in the boiler furnace to produce steam and cooling of equipment. The dust from coal-cleaned water contaminates groundwater. The hot water, if let out into water bodies without cooling, causes a rise in temperature and affects aquatic flora and fauna.

## 3. Land Degradation

Untreated air and water pollutants from coal power plants affect the water and the flora and fauna of adjoining areas making them unfit for living or livelihood activities.

## Health Impacts <sup>5</sup>

Chemical Pollutant	Health Impact
Sulphur Dioxide	<ul style="list-style-type: none"> <li>▪ Affects respiratory system and lung functions</li> <li>▪ Causes asthma and chronic bronchitis</li> <li>▪ Causes eye irritation</li> <li>▪ Causes cardiac disease</li> </ul>
Nitrous Oxides	<ul style="list-style-type: none"> <li>▪ Causes asthma</li> <li>▪ Causes Chronic Obstructive Pulmonary Disease</li> <li>▪ Stunts lung growth</li> <li>▪ Causes cardiac disease</li> </ul>
Particulate Matter (PM): Coarse Particulates (PM10), Fine Particulates (PM2.5)	<ul style="list-style-type: none"> <li>▪ Causes asthma</li> <li>▪ Causes Chronic Obstructive Pulmonary Disease</li> <li>▪ Stunts lung growth</li> <li>▪ Causes lung cancer</li> <li>▪ Causes cardiac disease</li> <li>▪ Causes congestive heart failure</li> </ul>
Ammonia	<ul style="list-style-type: none"> <li>▪ Causes respiratory problems</li> <li>▪ Causes skin and eye burns</li> </ul>
Hydrogen Chloride and Fluoride	<ul style="list-style-type: none"> <li>▪ Causes irritation to skin, eyes, nose, throat, breathing passages</li> </ul>

<sup>5</sup> [http://www.env-health.org/IMG/pdf/heal\\_report\\_the\\_unpaid\\_health\\_bill\\_how\\_coal\\_power\\_plants\\_make\\_us\\_sick\\_final.pdf](http://www.env-health.org/IMG/pdf/heal_report_the_unpaid_health_bill_how_coal_power_plants_make_us_sick_final.pdf)

<b>Chemical Pollutant</b>	<b>Health Impact</b>
Dioxins and Furan	<ul style="list-style-type: none"> <li>▪ Probable cause of stomach cancer</li> <li>▪ Affects reproductive, endocrine and immune systems</li> </ul>
Polycyclic Aromatic Hydrocarbons	<ul style="list-style-type: none"> <li>▪ Adversely affects the liver, kidney and testes</li> <li>▪ May damage sperm cells and impair reproduction</li> <li>▪ May attach to small particulate matter and be deposited in the lungs</li> </ul>
Mercury	<ul style="list-style-type: none"> <li>▪ Damages brain, nervous system, kidneys, liver</li> <li>▪ Causes neurological and birth defects</li> </ul>
Lead	<ul style="list-style-type: none"> <li>▪ Damages nervous system of children</li> <li>▪ Adversely affects learning, memory and behaviour of children</li> <li>▪ Damages kidneys</li> <li>▪ Causes cardiovascular disease</li> <li>▪ Causes anaemia</li> </ul>
Antimony, Arsenic, Beryllium, Cadmium, Chromium, Nickel, Selenium, Manganese	<ul style="list-style-type: none"> <li>▪ Probable effects of carcinogens (lungs, bladder, kidney, skin cancers)</li> <li>▪ Adversely affects nervous, cardiovascular, skin, respiratory and immune systems</li> </ul>
Radium	<ul style="list-style-type: none"> <li>▪ Probable carcinogens (lung and bone cancers)</li> <li>▪ Causes anaemia</li> <li>▪ Causes brain swelling</li> </ul>
Uranium	<ul style="list-style-type: none"> <li>▪ Probable carcinogens (lungs and lymphatic system)</li> <li>▪ Causes kidney disease</li> </ul>

### Noise Pollution

Regular exposure to such high noise levels emanating from power plants from the usage of equipment like boilers, turbines and crushers, affects people working in the plants.

## 1.3 ENVIRONMENTAL CLEARANCE PROCESS

### 1.3.1 Introduction to the EIA Notification, 2006

### 1.3.2 Flowchart: EIA Process for TPPs

### 1.3.3 Obtaining EC for new TPPs

### 1.3.4 Obtaining EC for Existing Projects (Expansion/Modernization/Change of Product Mix)

### 1.3.5 Monitoring of TPPs (Post EC)

### 1.3.6 Transferability of EC

#### 1.3.1 Introduction to the EIA Notification, 2006

**The Ministry of Environment & Forests (MoEF)** is the nodal agency in the Central Government for planning, promotion, coordination and overseeing the implementation of India's environmental and forestry policies and programmes.

**The Environmental Protection Act 1986 (EPA)**, gives powers to the MoEF to restrict areas in which any industry, operation or process cannot be carried out, or can be permitted subject to certain safeguards. [Clause V, Sub-sec (2), Section 3 of the EPA]

**The Environmental Impact Assessment Notification 2006 (EIA Notification)** has been issued under the EPA.

**Environmental Impact Assessment (EIA)** is now mandatory under the EPA for 39 categories of developmental activities involving investments of Rs.50 crores and above.

The EIA Notification makes prior Environmental Clearance compulsory for

- All new projects and activities listed in the Schedule to this Notification
- Expansion/modernisation of existing projects listed in the Schedule to this Notification

TPPs are listed as item 1(d) under the Schedule to the Notification.

- ***When should EC be obtained by a TPP?***

- 1) Before setting up of a new plant
- 2) Before expansion or modernisation of an existing plant
- 3) For changes in the product mix of an existing plant

- ***Which Authorities can issue EC?***

- 1) Ministry of Environment & Forests [MoEF]
- 2) State Environment Impact Assessment Authority [SEIAA]

The EIA Notification calls these two authorities as **Regulatory Authorities**. For bigger projects, which fall under Category A in the Schedule, the MoEF issues the EC. For smaller projects- Category B, the SEIAA- a Central Government authority operating in each state, issues the clearance.

### SEIAA

The SEIAA is a Central Government Authority that is constituted by the State Government but acts on behalf and reports to the MoEF.

#### COMPOSITION & WORKING

*SEIAA has 3 members:*

- (i) Member-Secretary – a serving officer of the respective State Government/ Union territory, who is familiar with environmental laws
- (ii) Chairperson – an expert in EIA process with a term of 3 years
- (iii) Non-officio Member - an expert in EIA process with a term of 3 years

If an SEIAA has not been constituted in a state, then all projects requiring an EC will be considered by the MoEF.

All decisions of the SEIAA should be taken in a meeting and must, as far as possible, be unanimous. If a majority decision is taken, then the details of the opinions for and against it should be clearly recorded and copy of the minutes sent to the MoEF.

Activity	EC issuing Authority	Ministry of Environment & Forests (MoEF) CATEGORY A	State Environment Impact Assessment Authority (SEIAA) CATEGORY B
Coal/lignite/naphtha/gas based power generation		≥500 MW	<500 MW
Power generation using Pet coke diesel and all other fuels including refinery residual oil waste, except biomass		≥50 MW	5 MW- 49 MW
Power generation using Biomass or non-hazardous municipal solid waste as fuel		≥20 MW	16 MW – 19 MW

• **Who recommends issue of EC for a project to the Authorities?**

- 1) Expert Appraisal Committee (EAC)
- 2) State Expert Appraisal Committee (SEAC)

The MoEF will issue EC for projects being evaluated by it based on the recommendations of the EAC. Likewise, the SEIAA will issue EC based on the recommendations of the SEAC.

## **SEAC**

The SEAC is constituted by the Central Government in consultation with the State Government. If the SEAC has not been constituted in a state, then all Category B projects requiring an EC will be considered by the MoEF.

### *COMPOSITION OF EAC & SEAC:*

The EAC & SEAC can have up to 15 members, who should be experts or experienced professionals in the following fields:

- Environmental Quality
- Different Sectors in Project Management
- Environmental Impact Assessment Process
- Risk Assessment
- Floral and faunal management (Life Science expert)
- Forestry and Wildlife
- Environmental Economics (The expert should have experience in project appraisal)

The Chairperson should be an outstanding and experienced environmental policy expert or expert in management or public administration with wide experience in the relevant development sector.

### ***Qualifications for Experienced Professionals:***

The person should have at least

- 5 years of formal University training in the concerned discipline leading to a MA/MSc Degree, or
- 4 years formal training in a professional training course together with prescribed practical training in the field leading to a B.Tech/B.E./B.Arch. Degree, in case of Engineering/Technology/Architecture disciplines, or
- 5 years of formal University training and prescribed practical training put together, in the case of any other professional degree (e.g. Law), or
- Prescribed apprenticeship/articleship and pass examinations conducted by the concerned professional association (e.g. Chartered Accountancy), or

- A University degree, followed by 2 years of formal training in a University or Service Academy (e.g. MBA/IAS/IFS).
- In selecting Experts / Experienced Professionals, experience gained by them in their respective fields will be taken note of.

***Qualifications for Experts:***

A professional fulfilling the above eligibility criteria with:

- At least 15 years of relevant experience in the field, or
- An advanced degree (e.g. PhD) in a concerned field and at least 10 years of relevant experience
- The Expert has to be less than 70 years of age. However, in the event of the non-availability of experts in a given field, the maximum age of a member of the Expert Appraisal Committee can be 75 years.

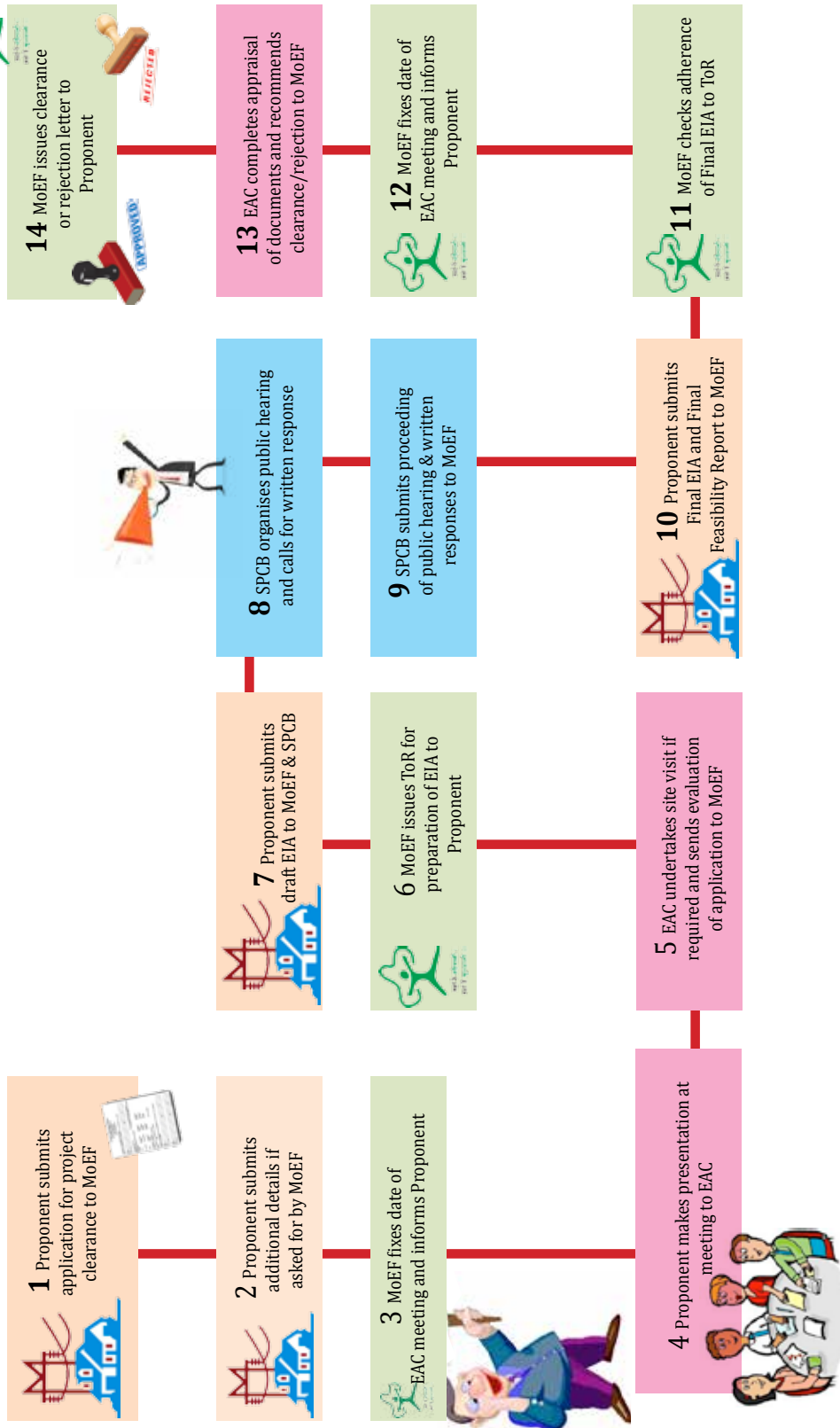
***Working of SEAC & EAC:***

- Each member, including the Chairperson, has a maximum tenure of 2 terms of 3 years each.
- Monthly Meetings should be held.
- Agenda and minutes to be noted.
- Minutes of the Meetings are to be finalised in 5 working days and uploaded on the MoEF website.



# ENVIRONMENT IMPACT ASSESSMENT PROCESS FOR A THERMAL POWER PLANT WITH CAPACITY $\geq$ 500 MW

## 1.3.2 Flowchart: EIA Process for TPPs



*\* For TPPs of lower capacity, the MoEF will be replaced by the SEIAA and the EAC by the SEAC*

### 1.3.3 Obtaining EC for New TPPs

The EC Process:

- i) Application submission by Project Proponent/Applicant to MoEF/SEIAA
- ii) Issuance of Terms of Reference by MoEF/ SEIAA
- iii) Submission of EIA by Project Proponent/Applicant & Conduct of Public Consultation by State Pollution Control Board (SPCB)
- iv) Issuance of EC / Rejection of Application by MoEF/SEIAA

#### I Application submission by Project Proponent to MoEF/SEIAA

1. Project Proponent/Applicant is to make an application for EC only after the prospective site is identified. This application is to be made in **Form 1** (*See Annexure for Form 1 format*) and a copy of the project's **Pre-Feasibility Report**, is to be submitted, based on the proposed plant's capacity, to the MoEF or SEIAA. Form 1 includes the **ToR** proposed by the Project Proponent
2. Prior to obtaining an EC, the Project Proponent, also known as the Applicant, is not allowed to commence any activity at the site, except cleaning and fencing or making temporary shelters with basic amenities for labour.
3. At this stage, the Application made to the SEIAA will further be categorised as Category B1 & B2 by the Authority\*. This process is called **Screening**.
4. B2 projects do not require an EIA.

\*The MoEF issues a notification from time to time on the classification of projects as B1 and B2. Currently, all coal, lignite, naphtha & gas-based thermal power plants with a capacity over 5 MW are classified as B1 and require an EIA.

#### II. Issuance of Terms of Reference by MoEF/ SEIAA Mandated Time Frame - 60 days

1. Upon receipt of the application, the SEIAA/MoEF will check if all the required documents have been submitted.
2. If **Additional Details** are required, the Project Proponent/Applicant will be required to submit them.
3. On acceptance of the Application, the MoEF/SEIAA will invite the Project Proponent/Applicant for a meeting with the EAC/ SEAC where this project will be evaluated.

4. At the meeting, the **ToR** addressing all environmental concerns for conducting EIA studies will be issued by the MoEF/ SEIAA. This process is called **Scoping**.

Note:

If the EAC/ SEAC is of the opinion, during evaluation of the Application, that a visit to the site by its members is necessary to draw up the ToR(See Annexure for contents of a ToR), the site-visit will be undertaken and ToR issued subsequently. For this, the MoEF/ SEIAA should provide a notice of 7 days to the Project Proponent/Applicant, who should provide requisite facilities to carry out the inspection.

The ToR is determined based on the

- Form 1
- ToR proposed by the Project Proponent/Applicant
- Site visit by a sub-group of EAC or SEAC (if conducted)
- Other information that may be available with the EAC/SEAC

The ToR should be conveyed to the Project Proponent/Applicant by the EAC/SEAC within 60 days of receipt of Form 1. If not, the ToR as proposed by the Project Proponent/Applicant will be considered as the approved ToR for EIA purposes.

The approved ToR should be displayed on the website of the MoEF and the concerned SEIAA. The ToR for plants situated along the coast will contain details of additional studies required.

The Application can be rejected at this stage itself by the MoEF/ SEIAA based on the recommendation of the EAC/SEAC. If so, this decision, along with reasons for the rejection, should be communicated to the Project Proponent/Applicant in writing within 60 days of receipt of application.

The ToR and Form 1 should be displayed in the website of the MoEF/SEIAA before issuance of ToR to the Project Proponent

### III. After obtaining the ToR, an accredited consultant is engaged by the Project Proponent/Applicant to conduct the EIA studies and prepare a Draft EIA Report

1. After obtaining the ToR, an accredited consultant is engaged by the Project Proponent/Applicant to conduct the EIA studies and prepare a **Draft EIA Report**. (This draft is likely to take a minimum of 3 months as it is based on the number of seasons specified, in the ToR, for conducting the studies.)

2. Simultaneously a request to the SPCB is to be submitted by the Project Proponent/ Applicant to conduct the Public Consultation.
3. The Public Consultation consists of two parts:
  - a. A **Public Hearing** at the site or in its close proximity to ascertain concerns of locally affected persons
  - b. **Written Responses** obtained from concerned persons having a plausible stake in the socio-environmental aspects of the project or the activity. The MoEF/SEIAA and the State Pollution Control Boards should invite responses in writing about the project.

The Public Consultation has to be conducted and the **Public Hearing Report**- consisting of the summary of the hearing proceedings, statement of issues raised by the public and the comments of the applicant, video recording of the meeting and the received Written Responses- is to be submitted by the SPCB to the MoEF/SEIAA, within 45 days of receiving a request from the Project Proponent/ Applicant.

*For more details, refer to the chapter on Effective Participation In The Public Consultation Process*

The Public Hearing Report should be conspicuously displayed in the offices of the Panchayat, Zila Parishad and the District Magistrate, apart from the SPCB. The State Pollution Control board should also upload it on its (SPCB) website and all the responses received as part of the Public Consultation process should be shared with the Project Proponent by the MoEF/SEIAA

**Draft EIA Report** includes:

- Project description
- Description of environment-baseline data, demographic, geological details and ecologically sensitive attributes in the study area
- Anticipated environment and social impacts of project
- Analysis of alternative resources

#### **IV. Issuance of EC/Rejection of Application by MoEF/SEIAA: Mandated Time Frame - 135 days**

1. The Project Proponent/Applicant should address the socio - environmental concerns expressed during the public consultation process and make appropriate changes in the **Draft EIA Report**. The revised document is called the **Final EIA Report**.
2. The Final EIA Report is to be submitted to the MoEF/SEIAA for appraisal. (Alternatively, the Project Proponent/Applicant can submit a **Supplementary Report** addressing all

the concerns expressed during the public consultation. This and the Draft EIA make up the Final EIA.)

The Project Proponent will submit the following to the MoEF/SEIAA:

- Final EIA Report [20 hard copies, 1 soft copy]
- Copies of Final Layout Plan [20 copies]
- **Project Feasibility Report** (1 copy)

The proponent can also submit a copy of the Videotape or CD of Public Hearing Proceedings (1 copy)

3. Within **30 days** of receiving these documents, the MoEF should scrutinise them for adherence to the conditions mentioned in the ToR, and send, electronically or otherwise, an observation report to the EAC/SEAC, including any inadequacies noted. Along with it, a copy of the Final EIA Report, Public Consultation Report & Form I should be attached. The scheduled date of the EAC/SEAC meeting for considering the proposal is to be mentioned.
4. A letter to the Project Proponent to attend the meeting and to furnish clarifications, if necessary, about the project, either in person or through an authorized representative is to be sent by the MoEF/SEIAA. The Project Proponent should be informed at least **15 days** in advance about the EAC/SEAC meeting.
5. The EAC/SEAC is to complete the appraisal of the Application within **60 days** of receiving the requisite documents. If the EAC/SEAC recommends issue of EC, then the minutes should clearly list out the specific environmental safeguards and conditions. If a rejection of the application has been recommended, reasons for the same should be stated.
6. The minutes of the EAC/SEAC meeting should be finalized in **5 working days** and displayed in the MoEF/SEIAA website
7. The MoEF/SEIAA should inform the Project Proponent of the EC issue or rejection of application - within 45 days of receiving the information from the EAC/SEAC.

After this time, the recommendations of the EAC/SEAC on granting or refusing EC for the project become public documents. Thus, if the decision of the MoEF/SEIAA has not been communicated to the Project Proponent within the timeframe mentioned in Point 7, the Proponent can proceed as if the EC has been granted or denied based on the final recommendations of the EAC/SEAC.

The Environment Clearance should be published in an English and regional daily, apart from being uploaded in the MoEF/SEIAA website in seven days. The EC should also be displayed in a notice board in the MoEF & the premises of its Regional Offices for 30 days. The Project Proponent's website should display the EC permanently.

*Reconsideration of EC decision: 135 days*

The MoEF/SEIAA will normally accept the recommendations of the EAC/SEAC. In case of disagreement with the recommendations, the MoEF/SEIAA, stating its reasons for non-acceptance, may request a reconsideration of EAC/SEAC decision. The request is to be sent within **45 days** of receiving the recommendations.

Simultaneously, an intimation of this decision should be conveyed to the Project Proponent.

The EAC/SEAC has to consider the observations of the MoEF/SEIAA and furnish its views within **60 days**.

The MoEF/SEIAA should consider the views of the EAC/SEAC and decide on EC issuance. This decision of the MoEF/SEIAA is final, and should be conveyed to the Project Proponent within the next **30 days**.

*Validity of EC*

The validity of an EC for a TPP is for 5 years from the date the EC is granted till the start of production operations.

For renewing the EC, an application is to be made to the MoEF/SEIAA within the validity period, together with an updated Form I. The MoEF/SEIAA can consult the EAC/SEAC as required.

*Cancellation of EC*

If the Project Proponent has been found to deliberately conceal information or has submitted false or misleading information to obtain the EC and the project will have adverse or negative environmental or socio-economic impacts, the EC may be cancelled. The decision will be made by the MoEF/SEIAA after giving a personal hearing to the Project Proponent and following the principles of natural justice.

### **1.3.4 Process of obtaining an EC for Existing Plants (Expansion/Modernization/Change of Product Mix)**

1. A fresh Form 1 has to be submitted for all applications seeking prior EC for
  - Expansion of plant

- Modernisation of an existing plant with increase in production capacity beyond the threshold mentioned in the Schedule to the EIA Notification.\*
- Change in product mix for existing plant

The applications should be submitted to the SEIAA/MoEF based on the extent of expansion.

2. Applications to be considered by the EAC/SEAC in **60 days**.
3. EAC/SEAC to decide on due diligence necessary, including preparation of EIA and Public Consultation. Application will be appraised accordingly for grant of EC.

\*The threshold for TPPs, for which the EC is to be issued by the SEIAA, is 500 MW. So, if the capacity of a 300 MW plant after modernisation will be over 500 MW, it will require a prior environmental clearance involving all stages of the EIA process from the MoEF.

### 1.3.5 Post Environmental Clearance Monitoring

The Project Proponent has to submit half-yearly Compliance Reports to the terms and conditions stipulated in the EC, in hard and soft copies to the MoEF/SEIAA on 1st June and 1st December every year. Each of these documents is a public document and can be obtained by applying for it from the MoEF/SEIAA.

The latest Compliance Report should be displayed on the websites of the MoEF/SEIAA and the Project Proponent.

### 1.3.6 Transferability of EC

The EC given for a project to a Project Proponent can be transferred during its validity to another person entitled to undertake the project. In that case, an application to this effect should be submitted by the Transferor or by the Transferee with a written “no objection” by the Transferor.

The terms and conditions and validity period will remain in effect as stipulated in the EC. There is no requirement for further confirmation regarding these by the EAC/SEAC.

## **2. EMPOWERING COMMUNITIES IN EIA PROCESS**

### **2.1 EFFECTIVE PARTICIPATION IN THE PUBLIC CONSULTATION PROCESS**

#### **2.1.1 Public Consultation Process in a nutshell**

#### **2.1.2 Structure & intent of Public Consultation**

#### **2.1.3 Time-Frame in Public Consultation**

#### **2.1.4 Public Consultation Process flowchart**

#### **2.1.5 FAQs (Frequently Asked Questions)**

#### **2.1.6 Assert Your Rights in Public Hearings!**

#### **2.1.1 Public Consultation Process in a nutshell**

Public Consultation (PC) is currently the best opportunity and the biggest platform available for local communities and for all those with a stake in the environment of the region in which a TPP is being proposed, to get queries clarified and to express concerns and record their opposition to the project, if it legitimately impacts their rights. The outcome of the public consultation process depends both on the number of participants and on effective participation by the public. The queries, concerns and protests of the public are to be noted and, if found correct, may be used by the Regulatory Authorities to reject the application.

The PC is conducted after the Project Proponent/Applicant submits the draft EIA to the MoEF or SEIAA and simultaneously submits a letter to the relevant SPCB to conduct the PC.

Within 45 days of receiving the letter, the SPCB must complete the PC process and submit a report to the MoEF/SEIAA. If the SPCB does not complete the PC process within the time frame, the MoEF/SEIAA can appoint another agency to conduct the hearing.

The Project Proponent/Applicant must take these viewpoints into consideration and revise the draft EIA accordingly. The grant of EC/rejection of application by the Regulatory Authority will be based on the Final EIA submitted.

The Public Consultation is in two parts:

- 1) Public Hearing:** This is a mandatory meeting conducted by government officials for all TPPs, irrespective of their capacity and location. Here, the Project Proponent/Applicant explains the project to the people present. It is the forum for the people to individually



and collectively query and voice apprehensions/concerns about the project. The proceedings are to be recorded by the officials.

2. **Written Response:** Members of the public can also send in writing their queries and concerns about the project to the SPCB and the Regulatory Authority.

### 2.1.2 Structure and Intent of PC

#### *Publicity*

Advertisements announcing the Public Consultation (Public Hearing and Written Response) should be clear and appropriate.

Advertisements should be placed in one English daily and one Regional Language Daily in circulation in that district.

### Public Hearing

#### *Notice period*

The SPCB has to give at least one month's notice to the public about an upcoming hearing.

#### *Venue*

1. The venue for the public hearing should be close to the project site. A National Green Tribunal (NGT) Order says that as far as possible, the hearing venue should be within 1 km of the project site. (*Krishi Vigyan Arogya Sanstha & Anr Vs MoEF & Ors*)
2. The venue chosen should be the closest available one to the project site<sup>7</sup>. For example, if there is a suitable venue two kilometres from the site, the SPCB cannot choose another venue which is further away
3. If the venue is not close to the project site, the Project Proponent has to arrange to transport the public to the venue. Even if the Project Proponent is organising transport, the public hearing cannot be held too far away<sup>8</sup>.

#### *Mandatory presence of Government Officials*

1. District Magistrate / District Collector/ Deputy Commissioner or their representatives not below the rank of an Additional District Magistrate
2. Representative/s of the SPCB

#### *Public Participation*

1. Local communities and members of the public wishing to participate.

7 Jeet Singh Kanwar & Anr. v. Union of India and Ors.(10-2011 (T) )

8 Krishi Vigyan Arogya Sanstha & Ors. v.MOEF & Ors.(7-2011 (T) ) + Ossie Fernandes & Ors. v. MOEF & Ors. [12-2011 (Ap) ]

Local body representatives can be present at a public hearing. Display of party flags or slogans not permitted  
- NGT judgment  
(in *Ossie Fernandes & Another vs MoEF & Others*)

2. No quorum for attendance required.
3. Presence of all those at the venue should be noted.
4. Public should have access to the dais in case they wish to approach the officials present. (The dais area cannot be cordoned off).

#### *Recording of proceedings*

The SPCB should make arrangements for the public hearing to be video graphed. SPCB officials to accurately record the minutes of meeting.

#### *Complaints*

Any erroneous or changed fact about the project or its impact in the documents presented ahead of the hearing or in the minutes recorded and read out at the hearing can be reported by the public to the officials present at the public hearing.

Any procedural lapses in the conduct of the public hearing can be reported to the MoEF/SEIAA along with a demand for a fresh hearing.

### **Written Response**

During the one month notice period given for the public hearing, written responses from the public will be received by the SPCB.

The e-mail and postal address for receipt of written response should be advertised in the SPCB's Public Consultation advertisement. These responses are collated by the SPCB and included in the Public Consultation Report submitted to the MoEF/SEIAA.

The MoEF/SEIAA should reach the responses received as part of the Public Consultation process to the Project Proponent/Applicant through the 'quickest available means'. The written responses received will be part of the Public Hearing Report submitted by the SPCB, and should be available in the offices of the Panchayat, Zila Parishad, District Magistrate and the SPCB, apart from the SPCB website.

### 2.1.3 Time Frame in Public Consultation

## Step 1

#### **DAY 1: Proponent requests SPCB to conduct Public Consultation**

Simultaneously, the Executive Summary of EIA in English and local language and Draft EIA to be submitted to

- MoEF& its Regional Office
- State Pollution Control Board
- District Magistrate/ District Collector/ Deputy Commissioner
- Zila Parishad/Municipal Corporation/ Panchayat Union
- District Industries Office
- Urban Local Body/ Panchayat/ Development Authority

## Step 2

#### **Before DAY 7: SPCB announces details of Public Consultation**

- I. Public Hearing
- II. Written Response
- I. Public Hearing:
  - Details of the public hearing to be advertised in a vernacular and English daily
  - In places where newspapers do not reach, details to be advertised through Radio/TV & through 'Beating of Drums'
  - Summary of Draft EIA to be available in SPCB Website & MoEF website
  - Draft EIA & Executive Summary of Draft EIA to be available as hard/ soft copy at the offices mentioned in Step 1 and in locations indicated in the newspaper advertisement/ announcements
- II. Written Response:
  - Address and email address to which written responses can be sent to be mentioned in Public Hearing advertisement /announcement
  - Written responses are accepted for 1 month, till the date of the public hearing
  - All the offices mentioned in Step 1 should also invite written response

# Step 3

## **BEFORE DAY 45: SPCB to complete PC and submit report to MoEF/ SEIAA**

### ***I. Public Hearing Process:***

1. District Magistrate/ Deputy Commissioner/ District Collector to be present at venue
2. SPCB to note the names of all the participants, take down minutes and record proceedings and ensure fair opportunity for all to participate meaningfully
3. Project Proponent to present important details of the proposed project (especially social & environmental impacts) & the Executive Summary of Draft EIA
4. Participants to ask questions and voice legitimate concerns, if any
5. Project Proponent to respond with clarifications and proposed mitigation measures.
6. SPCB to read out and explain in local language the recorded minutes with corrections if required and agreed to by all
7. District Magistrate/ Deputy Commissioner/ District Collector to sign the minutes at venue
8. SPCB to submit Public Hearing Report to MoEF/ SEIAA

### ***II. Public Hearing Report consists of:***

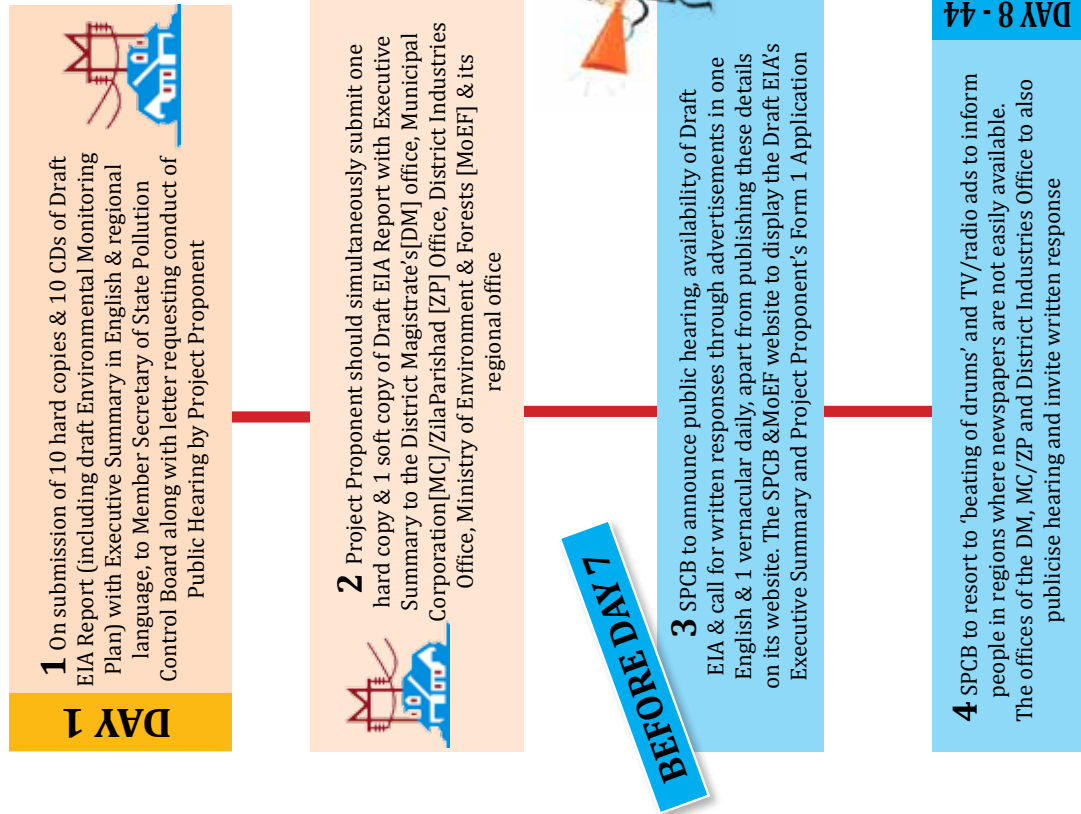
- Summary of the Public Hearing
- Statement in tabular form of each and every issue raised by the public and the corresponding reply/response of the Project Proponent
- Copy of the video recording of the Public Hearing
- Written responses received about the project
- Details of publicity measures undertaken for the hearing by the SPCB, which should certify that the process followed was adequate

### ***III. Availability of Public Hearing Report:***

The report should be conspicuously displayed in English & Regional Language in:

- Panchayat
- Zila Parishad
- District Magistrate
- State Pollution Control Board
- State Pollution Control Board website

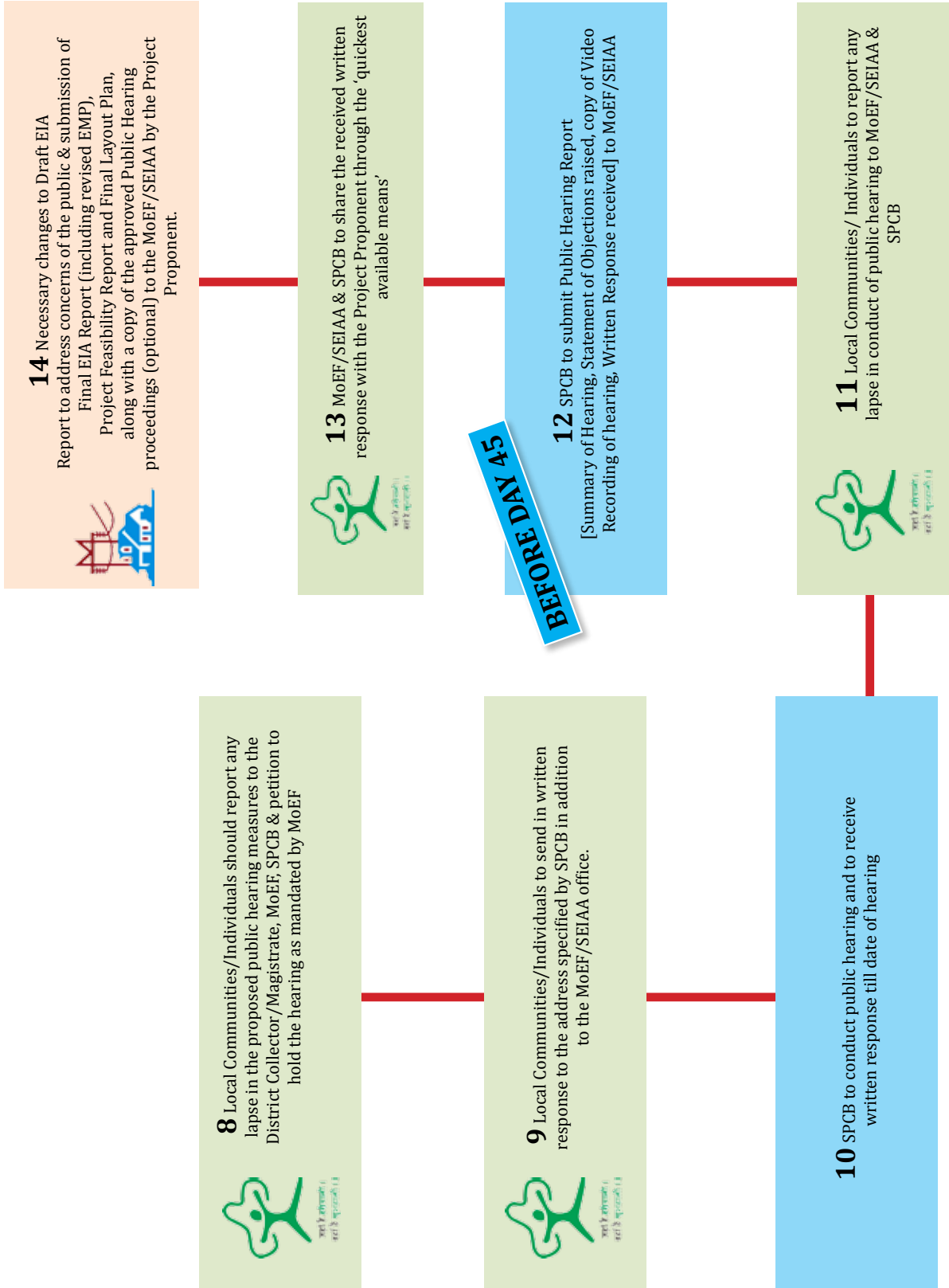
## 2.1.4 Public consultation process for a power plant



**6** Local Communities should scrutinise Draft EIA for adherence to ToR, accuracy in description of local environment, preliminary baseline study undertaken, etc.

**7** Local Communities/Individuals may consult an environment expert regarding likely environmental impacts and adequacy of mitigation measures proposed.

**5** Local Communities can access Draft EIA (CD/ hard copy) from the offices mentioned above or from MoEF's New Delhi office or other places mentioned in the SPCB advertisement. If ToR is not included in the Draft EIA Report, Local Communities can obtain it from the MoEF/SEIAA website or offices.



### 2.1.5 FAQs (Frequently Asked Questions)

**1. Can I attend the Public Hearing and also send in a Written Response?**

Yes, you can.

**2. I am not residing near the proposed project site - can I still participate at a Public Hearing and voice my concerns?**

Yes, you can, as long as you have valid social and environmental concerns to make!

**3. I don't have a core environmental issue to be raised in a Public Hearing. Instead, I want to raise queries about social and employment-related issues. Can I do it?**

Yes, the public hearing is intended to focus on the environmental impacts of a proposed project. However, the word 'environment' is to be interpreted broadly and issues concerning social as well as economic (including livelihood) impacts are part of EIA studies. They can, therefore, be raised during public hearings. Social Impact Assessment and Rehabilitation and Resettlement Plan are part of EIA studies and issues concerning these can be raised during the hearing.

The word 'Environment' should be interpreted broadly and issues of social & economic impact and livelihood can be raised at public hearings

**4. Who can send Written Responses about a project?**

Anybody who has a plausible stake in the environmental aspects of the project or activity, like activists and media personnel, apart from local communities, can send in written responses.

**5. What should be done if a project has been awarded EC without holding a Public Hearing?**

A petition has to be filed against the EC at the National Green Tribunal. This has to be done within 30 days of the communication of EC, extendable to 90 days if there is a justifiable reason for delay.

**6. Can the Public Hearing of two projects be held simultaneously at the same time and same venue?**

No, this is not allowed, as per an Office Memorandum issued by the MOEF in April 2010.<sup>9</sup>

**7. Can a Public Hearing be postponed?**

Yes, but only when there is an emergency. Otherwise, the public hearing date, time and venue cannot be changed.

9 [http://envfor.nic.in/divisions/iass/Cir/pub\\_hear\\_EIA.pdf](http://envfor.nic.in/divisions/iass/Cir/pub_hear_EIA.pdf)

- A hearing can be postponed only on the recommendation of the District Magistrate/ District Collector /Deputy Commissioner.
- The postponement should then be announced through advertisements in the same English and regional language daily that the scheduled hearing was announced. It should also be prominently displayed at all offices identified by the SPCB.
- The fresh date, time and venue for public consultation should then be decided by the Member-Secretary of SPCB only in consultation with the District Magistrate/District Collector/Deputy Commissioner and notified afresh.
- Due to a local situation, if the public hearing cannot be held in the stipulated manner, the SPCB will then report it to the MoEF/ SEIAA which may, after due consideration, decide that the public consultation in that particular case need not include the public hearing.
- However, a recent NGT order has said that in a situation where the people are aggressive and agitated, the public hearing should be cancelled and held later in order to ensure that proper representation is made.

**8. Can the people demand postponement of the public hearing?**

Yes, but only if there have been any procedural lapses in conducting the hearing - like the venue being too far or the Draft EIA not available in notified places. The people can make a joint representation to the District Magistrate/ Collector or Deputy Commissioner.

10 hard & soft copies each of the Draft EIA should be available one month before the public hearing at the offices of District Magistrate, Collector, Deputy Commissioner, Zila Parishad/ Municipal Corporation/ Panchayat Union, apart from the District Industries Office & MoEF Regional Office

**9. Is there a regulation on how many people can talk at a public hearing?**

No, there is no limit! All those who are present at the hearing should be given an opportunity to voice their views.

**10. Is there a fixed time limit for the public hearing?**

No! As long as there are public queries to be answered, the hearing should continue.

**11. A project has been proposed in a highly polluted area. Can I then ask about the total impact of all the polluting projects in a public hearing for one project?**

Yes, you can! The EIA study includes an assessment of the cumulative impact of projects-proposed and upcoming- in the project area. Issues related to the Cumulative Impact of these projects should be allowed in a public hearing.



**12. If the project site is in the boundary of two states, where should the public hearing be held?**

In such a case, the hearing should be jointly organised for both the states by the respective SPCBs.

**13. Is there a way to find how the SPCB publicised a public hearing?**

Yes! This information should be available in the Public Hearing Report. An Office Memorandum issued by the MoEF in April 2010 requires the SPCB to mention in the Public Hearing Proceedings how adequate measures were taken to inform the local people about the hearing time, venue and date. The SPCB should also certify that the process followed for the hearing was adequate.<sup>10</sup>

### 2.1.6 Assert Your Rights in Public Hearings

#### **Assert your rights in Public Hearings!**

1. Upon announcement of a public hearing, access the draft EIA and Summary of draft EIA.
2. Obtain a copy of the Terms of Reference issued by the MoEF/ SEIAA for the project.
3. Ensure that the draft EIA has been done according to the prescribed ToR.
4. At the hearing, insist that the proponent's presentation is made in the local language for all participants to understand.
5. Ask for specific details about the plant- focus on the social, economic and environmental impact of the project
6. As the public hearing comes to a close, ensure that your concerns have been duly recorded in the minutes- which should be read out and explained in the local language.
7. Obtain a copy of the public hearing proceedings to make sure your concerns have been noted.
8. Access a copy of the Final EIA to make sure that the concerns of the local people and the responses given by the proponent have been included.
9. Ensure that all the new assurances made by the proponent in the public hearing are reflected in the Final EIA and Revised Project Feasibility Report. For example: If a project proponent agrees at a public hearing to give piped water supply to project affected communities, there should be a budgetary allocation for this in the Final EIA.

<sup>10</sup> [http://envfor.nic.in/divisions/iass/Cir/pub\\_hear\\_EIA.pdf](http://envfor.nic.in/divisions/iass/Cir/pub_hear_EIA.pdf)

## 2.2 TIMELY INTERVENTIONS

### I Before Submission of Application

### II On Submission of Form 1

### III On issue of Terms of Reference

### IV On announcement of Public Hearing

### V On completion of Public Consultation & submission of Final EIA

### VI On issue of Environmental Clearance

## I. Before Submission of Application

### HOW TO FIND OUT ABOUT NEW PROJECTS / EXPANSION

- **Check newspapers constantly**-including regional and business papers for announcements on new projects
- **Watch out for and enquire about large-scale land acquisitions** - especially in the coastal areas. Find out the owner/s and for what purpose the land is being bought
- **Track supply announcements and check websites** of fuel supply company and the power generator for any announcement of a project or expansion plan, if fuel supply has been assured to a particular power company
- **Follow Public Sector Power Producers** like NTPC (<http://www.ntpc.co.in/>) and NLC (<http://www.nlcindia.com/>), which have several power plants. Read their Annual General Body Meetings and website for new project/ expansion announcements
- **Read the Annual Policy Notes** of the State Energy Department and Electricity Boards, which are available on their respective websites, for any plans of new projects/ expansions
- **Check the Annual General Body Meeting Proceedings & Websites of private sector power producers** for any project announcement:

Reliance (<http://www.reliancepower.co.in/>), Adani (<http://www.adanipower.com/>), Tata Power (<http://www.tatapower.com/>), Lanco (<http://www.lancogroup.com/>)

## WHAT YOU CAN DO

1. **Form or be part of an organised association or union** to oppose the plant or its objectionable aspects. Either be part of an existing group, like a farmers'/ fishermen's association, trade union, active NGO or form a group of potentially impacted people. Mobilise support from local people and voice your concerns as a group
2. **Associate/ link up with a group that has been fighting the established plant** to oppose the proposed plant/ expansion
3. **Compile a list of the problems faced by the local people** because of the existing plant. Also, access compliance reports submitted by the Project Proponent to the MoEF/SPCB and check for any lapses in the EC condition
4. **Calculate and report the cumulative impact on your environment**, if there are other polluting industries already in your neighbourhood, to the public and the authorities
5. **Write collectively to your Panchayat leader/ MoEF** about the plant and your objections to it
6. **Urge the Panchayat Leader to not issue an NoC** for the project in your area, or to issue it with conditions specified by you
7. **Get Acknowledgments** for all letters and mail

## II. On Submission of Form 1

### OBTAIN DOCUMENTS

1. **Form 1** will broadly mention:
  - Current use of land
  - Survey numbers
  - Utilisation of Natural Resources
  - Functioning of the PlantThese will give an idea about the extent of land to be acquired and its size, likely pollutants and impact of the plant.
2. **Pre- Feasibility Report** will mention:
  - Critical Pollutants
  - Project Size
  - Cost
  - Environment Mitigation Cost
  - Socio-economic Mitigation Cost

### WHAT YOU CAN DO - NEW TPPs

1. **Study Form 1 and Pre-Feasibility report** for likely environmental & socio-economic impact of the plant
2. **Check Form 1** for misrepresentation or errors w.r.t
  - Project Site,
  - Land Classification
  - Flora and Fauna
  - Water Bodies
  - Other Important Features
3. **Check Pre-feasibility Report** to evaluate socio-economic impact/ community needs, including adequacy of mitigation costs
4. **Bring to the notice** if information is incorrect **and lobby MoEF** to undertake ground verification of site conditions
5. **Check if CRZ Clearance is required** from the minutes of the monthly meetings of State Coastal Zone Management Authority in the MoEF website, and if yes, check if CRZ clearance has been recommended and issued following CRZ norms
6. **File a case with National Green Tribunal** if CRZ clearance has been issued contrary to norms and corrective action is not taken by the MoEF

### WHAT YOU CAN DO - TPP EXPANSION

1. **Access Compliance Reports** submitted by the Project Proponent to the MoEF/ SPCB
2. **Check the EC Conditions of the existing plant** for any lapses
3. **Record in writing to the Panchayat and MoEF** about lapses, if any, in EC conditions

### III. On issue of Terms of Reference

#### OBTAIN DOCUMENTS

1. **ToR** issued by MoEF/SEIAA: The ToR will give a basic idea of the expected impact of the plant, and studies that have been included to assess the extent of impact  
  
Note: The time frame for issue of ToR by the MoEF/SEIAA is 60 days. If timely action is not taken, the Project Proponent is permitted to use the 'proposed' ToR as submitted with Form 1 to conduct EIA studies. After the ToR is issued, EIA will take around three months to prepare
2. **Agenda & Minutes of SEAC/EAC meeting** will reveal the experts view on the project, the decisions taken and information on the project developments
3. **Site Visit Report** will give information about the potential impact of the plant as observed during the site visit by the EAC/SEAC team

#### WHAT YOU CAN DO - NEW TPPs

1. **Track EAC/ SEAC meetings** to find out if MoEF/ SEIAA is following deadline for issue of ToR
2. **Check availability of issued ToR and, if unavailable, demand immediate uploading** in MOEF/SEIAA website
3. **Use the period for preparation of EIA** by Project Proponent to understand the impact of project as suggested by conditions in the ToR and mobilise local and neighbourhood support to object to the polluting aspects of the plant
4. **Check the area of proposed study in ToR, and verify** if study has been done
5. **Study the Site Visit Report** to understand the project concerns
6. **Check the ToR issued** for inclusion of concerns of the Site Visit Report
7. **Demand the re-issue of a customised ToR**, by MoEF/ SEIAA, if concerns of Site Visit Report are not addressed

#### WHAT YOU CAN DO - TPP EXPANSION

1. **Petition the MoEF** if the ToR does not include a mechanism to assess the functioning of the existing plant for adherence to conditions in EC & CRZ Clearance\*
2. **Study the adherence of the existing plant** to the conditions mandated in the EC\*\*

\*ToR should require details of ash pond and action plan for study of heavy metals in and around the existing ash pond

\*\*Under RTI, it is possible to obtain the Quarterly Report submitted by the Project Proponent to SPCB, the Half Yearly Report submitted to Regional Office of MOEF, and the Annual Environmental Statement submitted to SPCB and the Consent-to-Operate Conditions

#### IV On announcement of Public Hearing

##### OBTAIN DOCUMENTS

1. **Draft EIA Report, Executive Summary of the EIA** in English & Regional Language submitted by the Project Proponent

Note:

- Both documents should have been submitted as hard & soft copies and available as such
  - Draft EIA Report will detail the studies undertaken, methodology used, mitigation measures to be adopted, and activities proposed as CSR etc
  - Environmental Management Plan in the Draft EIA Report will address various mitigation measures with a break-up of mitigation costs
  - Disaster Management Plan, which is part of the Environmental Management Plan, will be detailed based on process activity, the kind of hazardous chemicals to be handled, the emergency preparedness & response
2. **ToR** (accessed in Stage II): The ToR will specify studies to be undertaken

## WHAT YOU CAN DO – NEW TPPs

1. **Petition the District Collector, Magistrate / Deputy Commissioner for suitable and timely corrections to hold the public hearing as mandated**, if there are procedural lapses in announcing the public hearing, in publicity to be given in newspapers, in making Draft EIA Report available, or if the venue for the hearing is too far from project site
2. **Check if all the prescribed studies have been undertaken properly** by comparison of Draft EIA Report with the ToR
3. **Check the chapter sequence of the Draft EIA Report** for compliance to format as specified in EIA Notification 2006
4. **Consult an environmental expert** to check if the mitigation measures proposed are adequate
5. **Report to the MoEF/SEIAA** immediately if there is no original primary data\*
6. **Write your objections & concerns** about the plant to the District Environment Engineer of the region\*\*
7. **Make a checklist of objections** to be made at the public hearing
8. **Ensure high participation of locals** in the public hearing
9. **Urge your Panchayat Leader** to join in opposing the plant or in objecting to its worrying aspects
10. **Report immediately to the MoEF/ SEIAA and demand a fresh hearing or approach the NGT** if mandated procedures were not adopted in the public hearing

\*According to an NGT judgment (*Vinod R. Patel Vs Gujarat State Level Environment Impact Assessment Authority*), it is necessary for a Project Proponent & EIA consultant to conduct preliminary socio-economic data surveys

\*\* This can be done till the date of public hearing. Remember to make a representation as a group

### WHAT YOU CAN DO - TPP EXPANSION

1. **Check and report immediately to the MoEF** if Draft EIA Report has not truthfully reported the functioning of the existing units
2. **Urge local community members** to participate in the public hearing
3. **Detail the problems** faced by the existing plant at the Public Hearing
4. **Ensure recording** in minutes of concerns expressed at the Public Hearing

## V On completion of Public Hearing and submission of Final EIA

### OBTAIN DOCUMENTS

1. **Minutes of the Public Hearing** compiled by the SPCB
2. **Written Responses** received and responded to in Final EIA by Project Proponent
3. **Final EIA & Revised Project Feasibility Report** submitted by Project Proponent\*
4. **Report of MoEF/ SEIAA on the EIA's adherence to ToR:** The MoEF/ SEIAA Report will reveal inadequacies, if any, in the Final EIA. This can be used as an input for communities to file a petition if & when EC is granted
5. **Minutes of the EAC/ SEAC meeting** concerning the project

\* The Final EIA should detail and address the people's concerns in the Public Consultation. The Revised Project Feasibility Report should include the additional activities and budgetary allocations undertaken to mitigate the environmental impact, including those highlighted at the hearing

### WHAT YOU CAN DO

1. **Ensure proper recording** of the concerns of the people in the Public Hearing Report
2. **Compare the responses** given by the Project Proponent in the public hearing minutes & Public Consultation Report
3. **Compare the public hearing minutes and written responses** with the Final EIA and **verify** if the concerns of the people have been addressed by the Project Proponent\*



4. **Check if additional measures have been included** in the Feasibility Report and funds allocated for it to ensure that the Project Proponent has seriously planned to incorporate additional mitigation measures recorded in public hearing minutes and written responses
5. **Compare Final & Draft EIA Report** and intimate MoEF/ SEIAA of discrepancies if any\*\*
6. **Check the Public Hearing Report** and intimate MoEF of omissions of people's concerns, if any
7. **Scrutinise the minutes** of the EAC/ SEAC meeting for concerns raised by the committee and suitability of response of Project Proponent\*\*\*
8. **Check the break-up** of mitigation measures and associated costs, in EMP Chapter, in Draft EIA Report and Final EIA reports\*\*\*\*
9. **Check and demand speedy implementation** of agreed CSR measures, associated costs and implementation plans
10. **Demand "Public Disclosure"** of possible emergencies and preparedness

\*Final EIA should address concerns of the people including allocation of mitigation measures & costs

\*\*No new or additional studies have been included and no change in the baseline data in Final EIA

\*\*\*Observations of the EAC/SEAC revealing a bias towards the proponent is an input for the local communities to oppose to it by writing to the MoEF or filing a petition with the NGT

\*\*\*\*There should be some incremental increase in mitigation measures & cost in the Final EIA from the Draft EIA Report

## **VI On issue of Environmental Clearance**

### OBTAIN DOCUMENTS

1. **Environment Clearance** issued by MoEF/SEIAA\*
2. **Compliance Report** submitted by Project Proponent to MoEF/SEIAA
3. **Inspection Report** of the SPCB
4. **Annual Fly Ash Utilisation Report** submitted by Project Proponent to the Central Electricity Authority, SPCB & MoEF
5. **'Consent to Establish' & 'Consent to Operate'** issued by the SPCB

\*The conditions in the EC are an indicator of MoEF's concerns and checks / measures introduced for mitigation. These can be the focus areas for monitoring of the plant

### WHAT YOU CAN DO

1. **File a petition with NGT** if the local community believes with reason that the EC should not have been issued\*
2. **Report to MoEF** and, if required, file a petition with the NGT if the Inspection and/or Compliance Reports show a violation of EC conditions
3. **Notify** the same to **the MoEF, its Regional Office and lodge a complaint with the SPCB** if the conditions in the 'Consent-to-Establish' issued by SPCB are not aligned with or if there is any deviation to the EC conditions

\*Any procedural lapse in the earlier stages will serve as inputs for the petition

## 2.3 SUCCESSFUL INTERVENTIONS AGAINST POWER PLANTS

### 2.3.1 Sompeta Thermal Power Plant

Specifics	Power Plant Details
Name of power plant	Sompeta Thermal Power Plant
Location	Sompeta, Srikakulam in Andhra Pradesh
Project Proponent	Nagarjuna Construction Company (NCC)
Plant Capacity	2640 MW
Reason for opposition	<ul style="list-style-type: none"><li>• Plant site in wetland and nesting habitat for migratory birds</li><li>• Misrepresentation of facts in EIA</li><li>• No access to EIA report ahead of public hearing</li></ul>
Result	Clearance suspended by the National Green Tribunal in May 2012, project said to be relocated

In 2008, the State government of Andhra Pradesh permitted Nagarjuna Construction Company to construct a 2,640 MW thermal power plant in Sompeta, Andhra Pradesh.

The Expert Appraisal Committee did not issue the Terms of Reference at the first instance noting that the project land involved marshy sites, and asked the Project Proponent to find an alternate site away from the mudflats, conforming to CRZ Regulations. The Project Proponent informed the EAC that the project site was neither a wetland nor in the CRZ area, and the information provided by it earlier was based on errors. The site visit report by a sub-committee of the EAC stated that the project area was dry, agricultural land. Based on the site visit report, a TOR was issued in May 2009, after asking the Project Proponent to exclude a specific area of 400 acres. The public hearing was conducted in August, and environmental clearance granted by MoEF in December. Subsequently, in early 2010, petitions were filed at the National Environmental Appellate Authority (NEAA) against the clearance.

Due to the massive land acquisition involved in the project, residents were aware of the project. Their concerns were initially voiced by a regional NGO, Paryavarana Parikakshana Samithi (PPS), which wrote letters to the SPCB, Regional MoEF offices and the Chief Minister. An overwhelming majority of the public is said to have opposed the plant at the public hearing. The primary objection of the people was about the falsification of facts regarding the type of land.

The state government allotted land to NCC based on a report by the Collector of Srikakulam about the government lands to be alienated to the company. This excluded 44.6 ha of land

under agriculture and the area within the Coastal Regulation Zone. Later in 2009, through another order, these were included in the area to be allotted to the company. The Collector's report failed to disclose three lift irrigation projects operating there. This despite the fact that in 2003, the government had issued an instruction to all the District Collectors to notify all lands with water bodies and include them in the village 'Prohibitory Order Books' so that such land could be excluded from diversion and damage. The Collector's report suppressed this fact and described the land in question as "wasteland" and "non-cultivable", in order to pave the way for allotting it to NCC.

The plant site was a nesting and feeding habitat for migratory birds from Australia and Siberia, which visit the area for six months and within a wetland where no industrial activity can be permitted under the Environment Protection Act (EPA), 1986.

The project- if implemented- would have affected the villages of Rushikudda, Gollagunda, Baruvapeta and Benkili which are inhabited by both peasants and fishermen.

Local communities opposed the clearance issued for the project claiming it was granted based on misleading facts. PPS filed a petition against the Environment Clearance, claiming that it was granted based on misleading facts in the EIA.

Meanwhile, in July 2010, the Project Proponent initiated land acquisition which resulted in a fight between the Project Proponents and police on one side, and more than a thousand villagers on the other. The local police opened fire on the farmers and fishermen, killing two fishermen. In addition, 150 people were injured, including 45 policemen.

Two days after the police firing, the NEAA cancelled the environmental clearance for the project, stating that:

*"On inspection, the Authority found this land a typical wetland of great ecological importance and a source of water for nearby villages upon which three important lift irrigation projects of the Government depend. The reports of various agencies including that of sub-committee of EAC was found misleading", (Paragraph-6) and " the Authority has no doubt that the area in question is a typical wetland of great ecological significance and despite no law prohibiting its use for power plant, will not permit its use for that purpose" (Paragraph-9)."*

Following the NEAA order, the Project Proponents filed six review petitions, which were transferred to the National Green Tribunal. In May 2012, the NGT suspended the clearance issued to the project<sup>11</sup>. The bench noted that the baseline data was collected before the TOR

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11 <http://epaper.timesofindia.com/Default/Scripting/ArticleWin.asp?From=Archive&Source=Page&Skin=E-TNEW&BaseHref=ETD/2012/05/24&PageLabel=17&EntityId=Ar01702&ViewMode=HTML>

was issued, and the time for several surveys were not specified in the EIA report. The tribunal also noted that in the public hearing process, the people were deprived of information about the project as there was no access to the EIA Report. Based on these observations, the NGT asked that the EC for the project remain suspended.<sup>12</sup> Meanwhile, the Project Proponent company announced that the project has been relocated to Krishnampatnam.<sup>13</sup>

### 2.3.2 Chettinad Power Plant

Specifics	Power Plant Details
Name of power plant	Chettinad Power Plant
Location	Tarangambadi Taluk, Nagapattinam District, Tamil Nadu
Project Proponent	Chennai Power Corporation Private limited
Plant Capacity	1320 MW (Original capacity proposed was 1200 MW)
Reason for opposition	<ul style="list-style-type: none"> <li>• Non-adherence of ToR conditions in Draft EIA</li> <li>• Collection of baseline data before award of ToR &amp; after public hearing</li> <li>• Discrepancies between Draft &amp; Final EIA</li> </ul>
Result	NGT suspended clearance, which was later re-issued with additional conditions; the NGT judgment also spelt out suggestions for conducting public hearing

The Project Proponent submitted the application in October 2009, for which Terms of Reference for EIA studies was issued in January 2010. Subsequently, a draft EIA was submitted in April 2010, and the public hearing held in May.

The project was proposed in Nagapattinam, where several such projects were lined up for clearance. Coastal Action Network (CAN), a network of NGOs, filed a writ petition with the Madras High Court seeking to change the venue of the public hearing, as the venue proposed was within the plant premises where they feared intimidation by the Project Proponent. The Division Bench of the Court permitted the hearing to be conducted at the appointed time and venue, directing the Project Proponent to offer transport facility for the participants. It also announced a committee to monitor the hearing and submit a report.

The hearing was held on the announced date, and Environmental Clearance accorded in January 2011, after the EAC's appraisal of the project.

<sup>12</sup> <https://www.elaw.org/system/files/SompetaJudgment.pdf>

<sup>13</sup> [http://www.infrawindow.com/news/national-green-tribunal-cancels-clearances-to-sompeta-power-project\\_3502/](http://www.infrawindow.com/news/national-green-tribunal-cancels-clearances-to-sompeta-power-project_3502/)

Coastal Action Network, citing several procedural lapses by the Project Proponent in the EIA process, approached the National Green Tribunal, New Delhi. CAN claimed that several modifications/additions were made to the Final EIA, in comparison with the Draft EIA and falsely mentioned the project region as semi-arid. From government records it could be inferred that the proposed land was a 'wetland'. CAN also claimed that the project would severely affect agriculture in the area.

In order to verify the observations about the discrepancies about the Draft & Final EIA, the Principal Bench of the NGT requested the MoEF for a copy of the Draft EIA. The ministry responded that there was no record of the document. Using a copy of the Draft EIA submitted by the appellant, the Bench noted that the following issues were modified or partially dealt in the Final EIA report as compared to the Draft EIA:

1. Details of land acquisition were not provided fully, including the names of families and details of compensation paid/proposed to be paid per acre of land
2. CSR Component - Concept proposal with budget was not part of the Draft EIA
3. Detailed study on marine ecology - Both the EIA reports provided only a generic executive summary without management plan and budget
4. Ambient Air Quality - Data on PM2.5 & Hg were not present in Draft EIA
5. Fuel Analysis - Data on heavy metals were not present in Draft EIA

However, the Bench observed that these discrepancies would not have any substantial impact on the environment, and noted that procedural lapses alone cannot be a reason for setting aside the grant of Environmental Clearance. Other important observations made by the Bench were:

- Baseline data for terrestrial ecology was collected before award of ToR and did not fully comply with it. Dataset was updated/ modified in the final EIA report that was used for appraisal by EAC.
- Though the ToR required a report on Marine Ecology, an extremely generic executive summary of no relevance, devoid of any material facts was annexed to the EIA report. It was not available at the time of the public hearing or subsequent EAC appraisal.
- Both EIAs did not include primary or secondary data about the presence of Olive Ridley Turtles, though a report by the TN Fisheries Department mentioned the project site stretch as a nesting site.

- The Project Proponent had proposed the use of a blend of indigenous and imported coal in the EIAs, but while presenting the project to the EAC, the Project Proponent mentioned the use of imported coal only. The EC mentioned the use of coal with up to 34 percent ash value- this could have been fully domestic coal too (whose ash value is 30 percent), whose impact of air quality will differ from imported coal.
- The EIA did not specify the source of water in the construction phase.

Following these observations, the Bench ordered the suspension of environmental clearance for the project till the Final EIA report was updated about both terrestrial and marine ecology. The updated EIA was ordered to be uploaded on the MOEF website and objections/suggestion invited. The EAC was asked to appraise the project along with public feedback, and upload its recommendation on awarding the EC on the MoEF website.<sup>14</sup>

When the Project Proponent submitted the revised EIA, the EAC observed that it did not comply with all the conditions stipulated by the NGT. It demanded that a study on the impact of the project on Olive Ridley turtles be submitted, along with a long-term plan for preserving turtles. The revised EIA report- the EAC stated- should be submitted as an affidavit signed by a competent authority in the Project Proponent organisation and notarised. Upon the submission of the affidavit, clearance was issued stipulating thirteen additional conditions than given in the original clearance.

### NGT on Public Hearings

“On viewing the video CDs in majority of the cases which have come up for our consideration, we felt the public hearing was a mockery. The PH is worthless except mere recording of “support” or “oppose””

14 <http://www.indiankanoon.org/doc/5723251/>

## **2.4 FAQs (Frequently Asked Questions)**

### **2.4.1 General**

#### **2.4.2 Environmental Clearance &EIA Process for a new plant**

#### **2.4.3 Existing plants**

#### **2.4.4 Other Clearances**

#### **2.4.5 Redress**

### **2.4.1 General**

#### **2.4.1 (a) Industry Classification**

**Q: How are TPPs classified among industries?**

A: The Ministry of Environment & Forests (MoEF) has classified TPPs as one of the 17 Red Category industries. Red Category denotes heavily polluting industry.

For obtaining EC:

- Category A projects are -
  - ≥ 500 MW Coal/Lignite/Naphtha & Gas Based Fuel
  - ≥ 50 MW Petcoke, Diesel and all Other Fuels, including Refinery Residual Oil Waste (excluding Biomass)
  - ≥ 20 MW Biomass Based or Non-Hazardous MSW (Municipal Solid Waste) as Fuel
- Category B projects are -
  - < 500 MW Coal/Lignite/Naphtha & Gas Based Fuel
  - <50 MW or ≥ 3 MW Petcoke, Diesel and all Other Fuels, including Refinery Residual Oil Waste (excluding Biomass)
  - < 20 MW or ≥ 15 MW Biomass Based or Non-Hazardous MSW (Municipal Solid Waste) as Fuel

#### **2.4.1 (b) Siting of Plants**

**Q: Why is there a proliferation of TPPs along the coast?**

A: Situating a plant along the coast provides two important benefits to the Project Proponent:

1. Easy transport of imported coal through ports and captive jetties.
2. Easy availability of seawater for on-site seawater desalination technology for both once-through cooling and for boiler-feed water generation. This reduces fresh water requirement for running the thermal power plant.



**Q: Is there any regulation on where TPPs can be situated?**

A: Yes. There are three sets of criteria to be observed for situating TPPs. These are:

1. Criteria listed in the EIA Notification, 2006
2. Industry Siting Guideline of the Central Pollution Control Board (CPCB)
3. Siting Rules of the State Pollution Control Board (SPCB)

According to the EIA Notification 2006, TPPs with a capacity of less than 500 MW- which are awarded EC by the State Environment Impact Assessment Authority (SEIAA) - will have to seek clearance from the MoEF if they are to be situated within 10 kms of

- Protected Areas notified under the Wild Life (Protection) Act, 1972
- Critically Polluted Areas as notified by the Central Pollution Control Board from time to time
- Notified Eco-sensitive Areas
- Inter-State Boundaries and International Boundaries

As of October 2013, the CPCB has marked the following areas as critically polluted:

- Ankleshwar (Gujarat)
- Chandrapur (Maharashtra)
- Pali (Rajasthan)
- Vatva (Gujarat)
- Vellore (Tamil Nadu)
- Najafgarh Drain Basin (Delhi)
- Jodhpur (Rajasthan)

TPPs cannot be situated in these areas.

Besides these, State Governments also have a list of places where development activities are restricted.

The **Tamil Nadu** SPCB has passed an order banning heavily polluting industries (which includes TPPs) from being situated within 1 km from the embankment of certain rivers (mentioned in the link provided below) and within 5 kms from the embankment of river Cauvery & its tributaries, Pennaiyar, Palar, Vaigai and Tamrabarani

{<http://www.tnpcb.gov.in/GO1.html>

<http://www.pcboac.tn.nic.in/Docu/GOs.pdf>}

The **Andhra Pradesh** SPCB has stated that the distance between the boundary of the site for any industry and the boundary of the National Highway should be 100 m, State Highway-50 m and Village Roads 25 m. These guidelines, however, are not applicable to plots located in industrial estates.<sup>15</sup>

In **Karnataka**, no new industry can be set up within 1.5 km from the embankment of

- Cauvery, Kabini, Arkavathy, Shimsha, Pennar, Hemavathy, Lakshmanthirtha, Gundal river, Lokapavani, Palar, Thungabhadra, Krishna, Bheema, Varada, Ghataprabha, Malaprabha, Vedavathi, Karanja, Hagari
- All west flowing streams/rivers
- All those streams/rivers carrying water either seasonally or throughout the year
- All Major Dams
- Drinking surface water sources
- All major irrigation canals
- If any water body is a source of drinking water, then a distance, to where the discharge of pollutants will not affect the water, will be stipulated
- TPPs are not permitted within municipal/ city limits and residential areas<sup>16</sup>

For further details on siting guidelines, please check with the respective State Pollution Control Boards.

**Q: What is the CEPI (Comprehensive Environment Pollution Index)? How does it impact the location of TPPs?**

A: CEPI is a number to characterize the environmental quality of a given location. CEPI scores are calculated from time-to-time by the CPCB to identify critically polluted areas and industrial clusters, by monitoring their air, land and water.

CEPI Score is an important tool to identify those clusters where industrial development activities have been restricted due to their pollution levels. In 2010, the MoEF imposed a moratorium on the consideration of projects for EC, if they were located in 43 critically polluted areas. It has been reduced to 7 clusters as of September 2013. TPPs cannot be located in those places where the moratorium is imposed.

15 <http://www.appcb.ap.nic.in/cm/siting.htm>

16 <http://kspcb.gov.in/sitingguidelines.html>

### 2.4.1 (c) Transportation of Coal

**Q: How is coal usually transported to power plants from the port?**

A: By road, rail or through closed conveyor belts. If transportation of coal entails a long distance, the Project Proponent is expected to assess the possibility of rail transportation to the site. Wagon loading at source should preferably be through silo/conveyor belt.

### 2.4.2 Environmental Clearance & EIA Process For A New Plant

#### 2.4.2 (a) Public Consultation Process

See Chapter on Effective Participation in the Public Consultation Process

#### 2.4.2 (b) Before Environmental Clearance

**Q: What activities, with respect to project land, can the Project Proponent engage in, before EC?**

A: Activities permitted before an EC according to a circular by the MoEF<sup>17</sup>:

- Fencing of the site to prevent it from being encroached
- Construction of temporary sheds for guards

**Q: How long does it usually take for a plant to get EC?**

A: It depends on the size of the plant. Usually 1 to 1½ years is the time for a plant to obtain EC after filing of Application. The following are the time-bound activities according to the EIA Notification:

*Issuance of ToR:* To be issued within 60 days of Application submission by Project Proponent.

*Conducting of Public Hearing:* The Public Hearing Report to be submitted to the MoEF/SEIAA by the SPCB within 45 days of receiving request for hearing from the Project Proponent.

*Issuance of EC:* To be conveyed to Project Proponent with 135 days of Final EIA being submitted by Proponent

#### 2.4.2 (c) Coal Mix & Coal Linkage

**Q: What should the Project Proponent do if the particular coal mix, for which EC has been obtained, is to be changed?**

A: Project Proponent has to apply for a fresh EC for the new fuel mix. (This is stipulated under EIA Notification [2 (iii)])

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17 <http://envfor.nic.in/downloads/public-information/Act-prior-EC.pdf>

**Q: Can Project Proponent establish coal linkage before obtaining EC?**

A: Yes! In fact, it is a prerequisite for granting EC. The status of the Forest & Environmental Clearance of the coal source- be it the linked coal mine or coal block - should also be specified in the EIA. If imported coal is to be used, the MoU between the coal supplier and Project Proponent is required to be included in the EIA.<sup>18</sup>

The coal linkage can be through a specific mine, a basket of mines or through a dedicated coal block accorded by Standing Linkage Committee of the Ministry of Coal or the Fuel Supply Agreement.

**Q: If the quality/type of coal (i.e. coal parameters), different to the one based on which the EC was issued, is required, what should the Project Proponent do?**

A: If the coal parameters have changed, the Project Proponent should bring it to the attention of the MoEF, which will assess and incorporate new and additional conditions, if required.

**2.4.2 (d) Public Authorities in the EIA Process**

**Q: Which Public Authorities/Government Offices are involved in the EC Process?**

A: MoEF and SEIAA are the Regulatory Authorities that issue the EC. Category A projects are awarded clearance by the MoEF, while the SEIAA issues clearance for Category B projects.

SPCB is entrusted the task of conducting the Public Consultation by the MoEF and submitting the Public Consultation Report

**Q: Is the SEIAA a State or Central Government Body?**

A: It is a Central Government Body! However, its Member Secretary and Chairman are nominated by the respective State Government. The Member Secretary has to be a serving officer of the concerned State Government.

**2.4.2 (e) Documents to be available in Regional Language**

**Q: What are the documents in the EIA process that, additionally to English, are to be available in the Regional (local) Language?**

A: They are

1. The Executive Summary of Draft EIA, ahead of the public hearing

<sup>18</sup> <http://moef.nic.in/downloads/public-information/Coal-blocks.pdf>

2. A Statement of Issues raised by the public and responses given by the Project Proponent at the Public Hearing. This is compiled by the State Pollution Control Board

#### **2.4.2 (f) Site Visit**

**Q: Who will visit the project site for any survey or study?**

A: Accredited EIA Consultants will conduct surveys of the proposed project site and its neighbouring areas. According to an NGT order<sup>19</sup>, EIA Consultants should gather some primary material about the socio-economic data in the area and carry out a preliminary survey to understand the basic needs of the people in the project area to form the Environment Management Plan.

The ToR will stipulate the distance around the project site for survey for the EIA.

**Q: When can EAC/SEAC members make a site visit?**

A: The sub-committee of the EAC/ SEAC can make a site visit at any stage of the EC Process. It is commonly done before the ToR is issued and/or after the Draft EIA is submitted.

#### **2.4.2 (g) Terms of Reference (ToR)**

**Q: Who draws up the ToR and the extent of the EIA?**

A: The EAC/ SEAC!

The ToR, issued by EAC/SEAC, spells out the parameters of the EIA (e.g. the duration of the study (number of seasons), extent of study (number of kilometres around the proposed plant site) etc.

#### **2.4.2 (h) Final EIA**

**Q: What is the allowable extent of difference between the Draft EIA and Final EIA?**

A: The Final EIA cannot be drastically different from the Draft. Only those changes necessitated as part of the Public Consultation are permissible.

The EIA that is made ready and available before the Public Hearing is called the Draft EIA. It should cover all baseline study information, mitigation measures and any specialized study stipulated in the ToR.

The EIA revised and submitted after the Public Consultation Process, to include the concerns of the public and additional measures to address these concerns, is the Final

<sup>19</sup> <http://www.indiankanoon.org/doc/161693875/>

EIA. No change in baseline data or inclusion of specialized study information, as directed in ToR, can be incorporated after the Public Consultation Process.

**Q: Is the current environmental state of a project site studied?**

A: Yes! The state of the environment of the proposed project site and its neighbourhood is studied as part of the baseline study undertaken by the accredited EIA consultant. The study area to be considered for the EIA study is spelt out in the ToR issued by the MoEF/SEIAA. The EIA will contain the assessment of different components of the environment, called the 12 Functional Areas, including the ambient air, noise, groundwater, biology, land, socio-economic aspects.

**Q: How long does it usually take to conduct the EIA Study?**

A: That depends on the extent of study specified in the ToR. The EIA study will take at least 3 months (1 season) or up to 1 year.

**Q: Is the Final EIA available for public scrutiny?**

A: An MoEF circular issued in August 2013 requires the MoEF/SEIAA to upload the Final EIA before the EC is issued. If there is any objectionable part in the Final EIA, the public can report it to the MoEF, or petition the NGT.

**2.4.2 (i) EIA Consultant**

**Q: What is the need and what are the responsibilities of the EIA Consultant?**

In order to assess the environmental impacts of a proposed plant, the Project Proponent has to engage the services of a consultant accredited by National Accreditation Board of Education and Training/Quality Council of India (NABET/QCI).

The EIA for a project not done by an accredited consultant will not be considered for clearance. A Consultant, entrusted with the task of conducting an EIA for a TPP, should be accredited for that specific sector.

The list of accredited consultants is found at: <http://nabet.qci.org.in/environment/pop.asp?file=documents/Annexure7.pdf>

**Q: What is the composition and role of the EIA Consultant Team for a project?**

A: The EIA Consultant Team for a project is headed by an EIA Coordinator knowledgeable about the EIA process, rules and acts, sector knowledge, likely environmental impacts related to the sector, and the leadership quality required to plan, select and guide an EIA Team.

Apart from the EIA Coordinator, the Team will contain Functional Area Experts (FAE) for 12 specific areas.

The areas include:

1. Land Use
2. Air Pollution Monitoring, Prevention and Control
3. Meteorology, Air Quality Modeling and Prediction
4. Water Pollution Monitoring, Prevention and Control
5. Ecology and Biodiversity
6. Noise and Vibration
7. Socio-Economic Aspects
8. Hydrology, Ground Water and Water Conservation
9. Geology
10. Soil Conservation
11. Risks and Hazards Management
12. Solid and Hazardous Waste Management (including municipal solid wastes)

The minimum qualifications for an Expert are given in: [http://nabet.qci.org.in/environment/pop.asp?file=documents/EIA\\_Scheme.pdf&heading=About%20EIA%20Consultant%20Organizations%20Scheme](http://nabet.qci.org.in/environment/pop.asp?file=documents/EIA_Scheme.pdf&heading=About%20EIA%20Consultant%20Organizations%20Scheme)

A team member, with the necessary qualification criteria, can be both the EIA Coordinator and a Functional Area Expert. An expert can opt to be an FAE for a maximum of 4 domains, or as an EIA Coordinator for a maximum of 5 sectors.

#### **2.4.2 (j) After issue of EC**

**Q: Once the EC has been issued, can a Project Proponent start the construction of the plant?**

A: No! The Project Proponent has to apply for Consent to Establish with the respective SPCB. Upon obtaining it, the construction of the plant can commence.

Before starting operations in the plant, the Consent to Operate has to be obtained from the SPCB.

#### **2.4.2 (k) Chimney Height**

**Q: Are there any norms for Chimney Heights?**

A: The required stack height for TPPs has been notified under the Environment Protection Act, 1986.

Plant Capacity : Chimney Height

≥500 MW : 275 meters

210 MW- 500 MW : 220 meters

Less than 210 MW :  $H = 14 Q^{0.3}$  (where Q is emission rate of SO<sub>2</sub> in kg/hr, and H is stack height in meters).

#### **2.4.2 (l) Permitted Pollution Levels**

**Q: What are the permitted pollution levels for TPPs ?**

A: The standards for discharge of environmental pollutants have been specified in notifications issued over time under the Environment Protection Act, 1986. A compilation of the different parameters can be found in the annexures of the Technical EIA Guidance Manual for Thermal Power Plants. The manual can be found here: [http://environmentclearance.nic.in/writereaddata/Form-1A/HomeLinks/TGM\\_Thermal%20Power%20Plants\\_010910\\_NK.pdf](http://environmentclearance.nic.in/writereaddata/Form-1A/HomeLinks/TGM_Thermal%20Power%20Plants_010910_NK.pdf)

#### **2.4.2 (m) Land Acquisition**

**Q: At what stage can the Project Proponent acquire land for the project?**

A: Land acquisition can begin even before the Project Proponent submits an application for EC. However, it is not mandatory for the Project Proponent to buy all the land required for the project site at this stage. This is an area that an accredited EIA Consultant Organization should probe for likely Socio-Economic issues and Resettlement & Rehabilitation.

**Q: How is the rate for the required project land to be decided?**

Under the recent legislation, Right To Fair Compensation And Transparency In Land Acquisition, Rehabilitation And Resettlement Act, 2013, there is a formula for compensation calculation and the District Collector only has to ensure that the procedure is followed.

#### **2.4.3 Existing Plants**

**Q: What is the difference between a greenfield EIA and brownfield EIA?**

If the proposed project is a new one in a location, then it is called a Greenfield project. Such a project demands baseline study of the project area and the expected change after its operation with impact assessment and required mitigation measures.



A brownfield project is an expansion in an already operating site. For such projects, the baseline study should cover effectiveness of existing mitigation measures, including the compliance status of all EC conditions, and expected change with comprehensive impact assessment and required mitigation measures.

**Q: How are established plants monitored?**

A: The SPCB should conduct periodic inspections of all industries, including TPPs, to ascertain if they are functioning according to permitted emission levels and adhering to other conditions stipulated in the EC.

The Project Proponent has to submit the following Compliance Reports:

- Quarterly Monitoring Report to the SPCB
- Half Yearly Compliance Status Report to the Regional Office of MoEF
- An Annual Report has to be submitted to Central Electricity Authority in a specified format (under the Fly Ash Utilization Rule), with a copy sent to SPCB
- Yearly Environmental Statement to SPCB
- Additional reports asked for by SPCB (based on public complaints)

**Q: What should the Compliance Reports contain? How can one access them?**

A: EC for every TPP contains specific conditions that have to be adhered to and corroborated in the Compliance Reports submitted to the MoEF/ SEIAA.

These reports are to be available in public domain and the latest Compliance Report should be on the MoEF/ SEIAA website.

The MoEF/ SEIAA must make available copy of any Compliance Report on request from the public.

**Q: What are the other documents that the public can access?**

- a) Quarterly Compliance Report submitted to SPCB
- b) Annual Environmental Statement submitted to SPCB
- c) Annual Fly Ash Utilization Report submitted to Central Electricity Authority with copies to SPCB & MoEF

## **2.4.4 Other Clearances**

### **2.4.4 (a) Coastal Regulation Zone (CRZ) Clearance**

#### **Q: What is CRZ Clearance and its relevance to the EIA Process?**

Projects situated in close proximity to the coast require CRZ Clearance. The CRZ Notification of 2011 specifies where a CRZ Clearance is required. If the site of a proposed TPP lies within the CRZ, then the EC for the project will be subject to the recommendations of the State Coastal Zone Management Authority for CRZ Clearance. The minutes of the meeting of the State Coastal Zone Management Authority- uploaded on its website- will reveal if a project has been recommended CRZ clearance.

### **2.4.4 (b) Forest Clearance**

#### **Q: Who issues Forest Clearance?**

A: Forest Clearance is issued by the Central Government under Section 2 of the Forest Conservation Act, 1980, when a project uses Forest Land.

### **2.4.4 (c) Further Clearances**

#### **Q: Apart from EC of the MoEF, what other clearances are required?**

A: Some of the other clearances required include:

1. NoC from the Panchayat for setting up a TPP within its limits
2. Consent to Establish and Consent to Operate from the concerned SPCB
3. Approval for drawing water from the state water authority if the source is from a perennial river
4. Clearance for the chimney height to be obtained from the Airport Authority of India
5. Permission from the Indian Railways for railway siding/Right of Way for railway track

### **REDRESS**

#### **Q: Where should complaints about any aspect of the EC process of a plant be made?**

A: Any violation at any stage of the EIA process can be reported to the MoEF. If the EC has been awarded for a project with violations, it should be challenged at the National Green Tribunal.

**Q: Where should complaints about an existing TPP be made if conditions regarding employment, CSR and others are not followed?**

A: If the conditions stipulated in the EC are not followed, it should immediately be brought to the notice of the MoEF and the SPCB.

**Q: What is the National Green Tribunal (NGT)?**

A: The NGT is a quasi-judicial body established to adjudicate cases relating to environmental protection, conservation of forests and other natural resources. New Delhi is the principal place of sitting of the Tribunal and Bhopal (Central Zone), Pune (Western Zone), Kolkata (Eastern Zone) and Chennai (Southern Zone) are the other four places of sitting of the Tribunal.

**Q: Is there a time limit for filing petitions with the NGT?**

A: Yes! Petitions to the NGT are time-barred, and allowed to be filed within 30 days of the cause of action, extendable to 90 days with sufficient justification for delay. This means that a person appealing against the EC issued to any project must, except under exceptional circumstances, do so within 30 days of the issue of the EC.

## **2.5 LANDMARK NATIONAL GREEN TRIBUNAL ORDERS**

- I. Upload Environment Clearance on MoEF/SEIAA website within 7 days**
- II. Date on which EC was uploaded on MOEF website should be used for calculating limitation period to file applications with NGT**
- III. MoEF should make available all relevant info about a project to the public**
- IV. Cumulative impact assessment required for plant situated close to ecologically fragile ecosystems**
- V. MOEF must ensure EIA's adherence to ToR**
- VI. NGT's suggestions for conducting public hearing**
- VII. Public hearing is not just for locals living close to project site**
- VIII. SPCB should carry project info on its website**
- IX. Nuclear radioactivity of coal should be include in ToR**
- X. PH should ideally be held within 1 km of project site**
- XI. EAC should scrutinise Final EIA for how the concerns of the local people have been addressed**
- XII. No drastic variation allowed between Draft & Final EIA**
- XIII. Primary data for socio-economic data in EIA is a must**
- XIV. MoEF to review EAC's appraisal process**

### **I. Upload Environment Clearance On MoEF/SEIAA Website In 7 Days**

1. The EC granted should be uploaded on the MoEF/ SEIAA website as early as possible, latest by 7 days from the date it was granted.
2. The SEIAA/MoEF website has to be maintained properly.
3. One of the EC conditions imposed by the MoEF should be that the granted clearance be widely published by all the stakeholders according to the EIA Notification 2006.

#### **Case Details:**

Appeal 1 of 2013

Medha Patkar & Anr VS Ministry Of Environment Ors

Link to judgment:

[http://www.indiaenvironmentportal.org.in/files/file/pench%20thermal%20project\\_11July2013\\_final\\_order-1.pdf](http://www.indiaenvironmentportal.org.in/files/file/pench%20thermal%20project_11July2013_final_order-1.pdf)

Judgment Date: July 11, 2013

## **II. Date on which EC was uploaded on MoEF website to be used for calculating Limitation Period to file Petition with NGT**

1. The limitation period for filing petitions with the NGT [under Section 16 of the NGT Act] commences from the date the order is communicated. This refers to the day when: MoEF uploads the EC on its website such that it can be downloaded without a hindrance and the day the order is put on its notice board

Or

The Project Proponent uploads the clearance on his/her website such that it can be downloaded and publishes it in the newspapers

### **Case details:**

Review Application 9 of 2013 of Appeal mentioned above

Medha Patkar & Anr VS Ministry Of Environment Ors

Link to judgment:

[http://www.greentribunal.gov.in/judgment/9\\_2013\(RA\)\\_28Nov2013\\_final\\_order.pdf](http://www.greentribunal.gov.in/judgment/9_2013(RA)_28Nov2013_final_order.pdf)

Judgment Date: November 28, 2013

## **III. MoEF should make available all relevant info about a project to the public**

## **IV. Cumulative impact assessment required for plant situated close to ecologically fragile ecosystems**

1. The MoEF should make available in its website all the relevant information other than EIA report and report of the public hearing considered during the appraisal of the project - including the executive summary of specific studies
2. The State Pollution Control Board (SPCB) should make available in its website pertinent information regarding the public hearing proceedings, Consent to Establish and Consent to Operate, compliance status etc
3. The Project Proponent must upload the compliance status of EC conditions, including the Executive Summary of the specific studies done in respect of the project and update the same periodically
4. Keeping in view the precautionary principle and sustainable development approach, cumulative impact assessment studies are required to be done in order to suggest adequate mitigative measures and environmental safeguards to avoid adverse impacts on ecologically fragile eco-system of Pichavaram Mangroves and to the biological marine environment in the vicinity.

**Case Details:**

Appeal number 17 f 2011 (t), NEAA No 20 of 2010

T Murugandam & Anr VS MoEF & Ors

Link to judgment:

[http://www.ercindia.org/files/EIA-Review-TPP/judgments/NGT\\_Muruganandam.pdf](http://www.ercindia.org/files/EIA-Review-TPP/judgments/NGT_Muruganandam.pdf)

Judgment Date: 23 May, 2012

**V. MoEF must ensure EIA'S adherence to TOR**

**VI. Suggestions for public hearing**

1. MoEF should evolve a strict mechanism to check that the ToR is duly complied in the draft EIA before it is uploaded on the website conducting the PH
2. The final EIA report shall be evaluated by the MoEF in terms of awarded ToR, draft EIA and suggestions made during PH before it is placed to the EAC for appraisal.
3. The MoEF may consider granting all the clearances that are required under the Environment Protection Act for a project together instead of making a piecemeal approach, which may result in fragmented and incomplete/lopsided evaluation of the project, both environmentally and ecologically
4. A procedure requiring approval of the draft EIA Report needs to be introduced to avoid any ambiguity vis-à-vis with the ToR
5. The MoEF may have to strengthen the PH process and make it more meaningful by taking the following suggestions:
  - a) The draft EIA must be presented by the Project Proponent in the presence of all the people assembled for PH, item wise
  - b) Leaders of local institutions like Gram Panchayat, Samiti, MLAs and MPs can be requested to be present in the hearing. They may also speak as to the viability or otherwise of the project and submit their written representations
  - c) The PH should strictly be confined to the issues that arise from the draft EIA Report and ancillary to it
  - d) The persons who want to speak in the PH may be asked to give their names in a prescribed form indicating details such as name, father/husband's name, name of the village, Taluk/Tehsil, the extent of land if any, affected, and the subject on which he or she wants to speak etc

- e) No person shall be allowed to enter the hall where PH is being conducted holding party flags and they shall not be allowed to raise party slogans.
  - f) Those who do not want to speak may be asked to stand/sit behind the persons intending to speak in a separate enclosure
  - g) Those who have given names may be called to the dais one by one and be allowed to speak on the subject indicated allotting about five minutes time to speak
  - h) The Authority conducting PH may be asked to take active part in following each and every minute procedure required for conducting the PH
  - i) At the end, all the views whether for or against the project may be pulled subject wise/issue wise and the same be briefly replied by the Project Proponent
  - j) The Authority conducting PH shall prepare minutes of the meeting strictly in accordance with the EIA Notification, 2006 and make it known to the public.
  - k) The PH proceedings shall be drawn in a tabular form addressing each and every issue raised in the PH and the reply offered by the project Proponent.
  - l) If the project involves a presentation or clarification that requires knowledge of science and technical issues, an environmentalist or scientist can be invited to speak on the occasion in the presence of the public and submit his/her own views in writing on the subject
6. EAC minutes should incorporate detailed reasons, in writing, for acceptance or otherwise against each issue arising out of PH and brought before it
7. The MoEF may consider placing these suggestions before the EACs for further refinement of the procedure to be adopted in conducting PH.

**Case Details:**

Appeal No 12 of 2011

Ossie Fernandes & Anr VS MoEF & Ors

Link to judgment:

[http://www.greentribunal.gov.in/judgment/12-2011\(AP\)\\_30May2012\\_final\\_order.pdf](http://www.greentribunal.gov.in/judgment/12-2011(AP)_30May2012_final_order.pdf)

Judgment Date: May 30, 2012

## **VII. Public hearing is not just for locals living close to project site**

### **VIII. SPCB should carry project info on its website**

1. The EIA Notification of 2006 does not preclude or prohibit persons not living in the close proximity of the project site from participating in the public hearing - they too are permitted to participate and express their views for or against the project
2. Locally affected persons can give their responses in writing to the concerned authorities, even if they were unable to participate in the public hearing
3. The EIA Notification does not prohibit a person who lives at a distance from the plant from attending the public hearing
4. If the website of the State Pollution Control Board does not carry relevant information about the project or activity for which a public hearing is contemplated, it can amount to giving inadequate notice to the local populace, thereby vitiating the public hearing

#### **Case Details:**

Writ Petition (Civil) No. 9317 of 2009

Samarth Trust & Anr VS Union Of India & Ors

Link to judgment: <http://indiankanoon.org/doc/1050363/>

Judgment Date: May 28, 2010

### **IX. Nuclear radioactivity level of coal should be included in TOR**

#### **X. PH should ideally be held within 1 km of project site**

1. The Ministry of Environment and Forests shall include in the Terms of Reference of all the future projects asking the Project Proponent to furnish details of possible nuclear radioactivity levels of the coal proposed to be used for the plant
2. It is desirable to conduct the Public Hearing within the close proximity of the project site, say within 1 km radius
3. The notification inviting people to participate in the Public Hearing has to be clearly worded. The authorities should take care to avoid any ambiguous or inappropriate wording

#### **Case Details:**

Appeal No 7 of 2011 (T)

Krishi Vigyan Arogya Sanstha & Anr Vs MoEF & Ors

Link to judgment: <http://www.ercindia.org/files/Koradi%201.pdf>

Judgment Date: September 20, 2011



## **XI. EAC should scrutinise final EIA for how the concerns of the local people have been addressed**

EAC should conduct a detailed scrutiny of the Final EIA and state as to how the objections raised by the members of public have been addressed by the Project Proponent

### **Case Details:**

Appeal No. 10/2011 (T)

Jeet Singh Kanwar & Anr VS MoEF & Ors

Link to judgment:

<http://www.indiankanoon.org/doc/16871829/>

Judgment Date: 16 April, 2013

## **XII. No drastic variation allowed between draft & final EIA**

### **Suggestions to the MoEF**

1. The MoEF should evolve a mechanism to check that the draft EIA has been prepared by the Project Proponent according to the ToR.
2. The MoEF should ensure that the draft EIA is according to the ToR, and then place it on its website before conducting the PH.
3. If the draft EIA report prepared by the Project Proponent is not in consonance with the ToR awarded, it may reject the same and ask for fresh draft EIA.
4. After conducting the PH and submission of the final EIA, the MoEF should evaluate if it is in tune with the ToR and the proceedings of the PH.
5. The MoEF may take care that there are no drastic variations between the draft and final EIA except for certain intrinsic technical and scientific information related to the project, and things which are necessary for furthering the environmental and ecological interest.
6. The MoEF to consider displaying the final EIA in public domain before the grant of EC – so that representations can be made before the EAC.
7. The PH cannot be said to be vitiated because it was not conducted within 45 days from the date of receipt of the draft EIA by the MoEF.

### **Case details:**

Appeal No. 20/2011 (T)

Ramesh Agrawal & Anr VS SEIAA & Ors

Link to judgment: <http://www.indiankanoon.org/doc/59958653/>

Judgment Date: May 31, 2012

### **XIII. Primary data for socio-economic data in EIA is a must**

During the preparation of the EIA Report, Environmental Consultants should gather some primary material with respect to the socio-economic data in the Project area and carry out some preliminary survey to understand the basic needs of the people in the project area so that appropriate environmental management plan is formulated.

#### **Case Details:**

Appeal No. 25 of 2011

Vinod R. Patel VS Gujarat State Level Environment Impact Assessment Authority

Link to Judgment: <http://www.indiankanoon.org/doc/161693875/>

Judgment Date: December 18, 2012

### **XIV. MoEF to review scrutiny mechanism of EAC**

1. The Expert Appraisal Committee [EAC] should record and maintain the details of technical discussion amongst its members. It is essential that the views, opinions, comments and suggestions made by each and every member of the committee are recorded in a structured manifest/ format.
2. Where a particular point is not decided unanimously by the EAC, specific noting should be prepared and scientific reasons for accepting the majority view should be recorded and maintained for future reference.
3. Seldom do the minutes of EAC meetings make a specific mention about the viewing of videograph of the public hearing submitted for its consideration. The EAC should take note of this and incorporate its view on the same in the minutes of the meeting, in future.
4. The EAC is directed to review its appraisal process with regard to issues raised in the public hearing and give attention to points missed by it, if any, during the earlier process of appraisal and stipulate additional conditions, if so warranted.
5. The MoEF is directed to restrict generic conditions in the Environmental Clearance document to a bare minimum and impose conditions that would reflect the need and feasibility to address specific issues on a case to case basis.
6. The scrutiny mechanism of the EAC should be reviewed by the MoEF and a more explicit documentation be made and maintained, in future. The Chairman of EAC has been directed to ensure complete compliance of this aspect in all future appraisals.

**Case Details:**

Appeal No. 9 of 2011

SAMATA & Anr Vs The Union of India & Ors

Link to Judgment:

[http://www.greentribunal.gov.in/judgment/92011\(SZ\)\(Ap\)\\_13Dec2013\\_final\\_order.pdf](http://www.greentribunal.gov.in/judgment/92011(SZ)(Ap)_13Dec2013_final_order.pdf)

Judgment Date: 13 December, 2013

## **2.6 IMPORTANT CIRCULARS OF MOEF**

- 2.6.1 Information Submission & Availability**
- 2.6.2 Coal Linkage**
- 2.6.3 Ultra Mega Power Projects (UMPP)**
- 2.6.4 Violation Of EC/FC/CRZ**
- 2.6.5 Public Hearing**
- 2.6.6 Monitoring Existing Plants**
- 2.6.7 Projects on Same Land**
- 2.6.8 Corporate Environment Policy**
- 2.6.9 Permitted Activities Before Issue of EC**
- 2.6.10 Project Expansion**
- 2.6.11 Validity of ToR**
- 2.6.12 Interlinked Projects**

### **2.6.1 Information Submission & Availability**

#### **UPLOADING ON WEBSITE:**

ToR, Form 1 & Pre Feasibility Report should be uploaded on the MoEF website before the ToR is conveyed to the Project Proponent. This is the responsibility of the concerned Director and Member Secretary of the sectoral EAC. That officer should also ensure the EIA, EMP, Public Hearing Minutes, EAC Minutes and EC are uploaded on the MoEF website before EC is conveyed to Project Proponent

Date of Order: August 29, 2013

Link:

<http://www.MoEF.nic.in/sites/default/files/OM-reg-sTorage-of-files-29.8.13.pdf>

#### **SUBMISSION OF ADDITIONAL INFORMATION:**

If the EAC asks a Project Proponent to submit any information, it has to be submitted within 6 months of the EAC meeting date. After this period, if the information has not been submitted, the project will be delisted from the list of pending projects. If it has been pending for three - six months from the EAC's request for information, a reminder can be sent to the Project Proponent to provide it in a month. If the Project Proponent fails to do so, the project should be delisted from the pending projects list.

Date: 30 October 2012

Link : <http://MoEF.nic.in/assets/ia-30102012.pdf>

### **SUBMISSION OF SOFT COPIES OF PROJECT DOCUMENTS:**

In addition to hard copies, Project Proponent should submit soft copies as PDFs of the following documents to the MoEF/SEIAA:

- Form 1
- Pre Feasibility Report
- Draft ToR
- EIA
- Filled-in Questionnaire for EIA Projects
- Public Hearing Proceedings
- All Study Reports undertaken at the instance of the EACs
- Any Additional Information submitted by Project Proponent to the EAC

This is to facilitate uploading of these documents in the MoEF/ SEIAA websites. Any information submitted without soft and hard copies should be considered incomplete and not processed. Member Secretaries of EAC and the SEIAA should upload these documents along with EAC/ SEAC Site Visit Reports.

Date: March 20, 2012

Link: <http://envfor.nic.in/downloads/public-information/order-20032012-a.pdf>

### **PROVIDING CORRECT & ORIGINAL INFORMATION:**

The onus of submitting correct data in the EIA rests with the Project Proponent as it is time consuming for the MoEF or the EAC to compare the contents of one EIA with another to check for copied data or information. So, the Project Proponent has to submit an undertaking in the EIA report, owning the contents of the EIA. If it is brought to the notice of the MoEF at any stage that data has been lifted out of other reports in the EIA, the project will be summarily rejected. The Project Proponent should then apply afresh for EC. If the EC has been issued based on a copied EIA Report, it will be cancelled. The procedure for clearance has to be initiated afresh in this case.

Further, the EIA Consultant will be delisted from the list of accredited consultants.

Date: October 5, 2011

Link: [http://envfor.nic.in/downloads/public-information/OM\\_IA\\_ownershipEIA.pdf](http://envfor.nic.in/downloads/public-information/OM_IA_ownershipEIA.pdf)

## 2.6.2 Coal Linkage

For Thermal Power Plants dependent on domestic coal from coal baskets of Coal India or Singareni Collieries Company which have the EC/FC, proposal for EC will be considered only when the calorific value, ash and sulphur content of the coal in the basket is mentioned in the EIA/EMP.

Coal linkage is a prerequisite for awarding clearance for a proposed project. A Fuel Supply Agreement or a linkage to a specific mine/ basket of mines/ dedicated coal block, as stipulated by the Standing Linkage Committee of the Ministry of Coal is required. The linkage must provide the ash and sulphur content of the coal, apart from its calorific value. These qualities of coal must be taken into account while preparing the EIA for the project.

Later, if any of these parameters of coal have changed, it has to be referred to the MoEF for revisiting the conditions of the EC and to check for adequacy. These may include additional conditions, including provisions for Flue Gas Desulphurisation for control of Sulphur Oxide emissions.

Date: 19 April 2012

Link : <http://envfor.nic.in/downloads/public-information/notif-20042012.pdf>

The Coal Linkage is required in the EIA Report and not for issuance of Terms of Reference.

Date: 19 January 2011

Link : <http://envfor.nic.in/downloads/public-information/Cir-19-01-2011.pdf>

## 2.6.3 Ultra Mega Power Projects (UMPP)

Inviolate areas are those in which certain industrial activities are not permitted. If a coal block linked to an UMPP is not in an inviolate area, then the EC for the UMPP will be considered individually, without being linked to the EC & Stage 1 FC necessary for the coal allocation.

For UMPPs that are using imported coal, the following parameters are a must:

Gross Calorific Value (Kcal/Kg)	-	5000 minimum
Ash content	-	12% maximum
Sulphur content	-	0.8% maximum

The validity of the EC is subject to the adherence to these parameters.

The EIA/EMP for these projects should also include these details:

- Port, Jetty, Railway Line required for imported coal

- Coal handling capacity of port
- Transportation of coal from port to plant

Date of Order 1 - 30December 2013

Link : <http://MoEF.nic.in/sites/default/files/OM%2030.12.2013.pdf>

Date of Order 2 - February 5, 2013

Link : <http://MoEF.nic.in/assets/om-050513.pdf>

#### **2.6.4 Violation Of EC/FC/CRZ**

Project Proponent must explore the feasibility of locating the project on non-forest land. If that is not possible, a prior application should be made seeking approval for diversion of forest land and before submitting a Form 1. The EC has to be issued for such projects only after Stage 1 approval for diversion of forest land (under the Forest Conservation Act, 1980) has been obtained.

- If the Project Proponent has carried on construction without a valid CRZ or FC or EC or in violation of conditions therein, the MoEF should order suspension of construction activities at the existing level till the required clearance is obtained or is amended.
- If a Project Proponent is engaged in production beyond the capacity for which CRZ/EC has been issued, then the MoEF should order the proponent to restrict production to the approved capacity till clearance for the expanded amount has been obtained.
- If a plant is operating without a CRZ/EC, then the MoEF should order full stoppage of production till the clearances are obtained.
- Modernisation of a project or changing its product mix should be stopped by the MoEF till the clearances are obtained and status quo prior to such modernisation/change should be maintained.

The MoEF is entrusted the task of issuing these orders, apart from obtaining compliance of the same from the Project Proponent. For any violation of the directions issued above, legal action can be taken by the MoEF against the Project Proponent under the provisions of the EPA 1986, and clearances summarily rejected.

Date of Order: June 27<sup>th</sup> 2013

Link: <http://www.MoEF.nic.in/sites/default/files/om-270613.pdf>

### **OPERATING WITHOUT CLEARANCE:**

If complaints are received by the MoEF about a plant operating without required CRZ/EC, the veracity of the complaint will be verified by the Coastal Zone Management Authority, State Government or Regional Offices of the MoEF. In 60 days, the Project Proponent has to take the matter to the Board of Directors (for Companies) or the CEO (for Trusts) and obtain a formal resolution to not repeat the violation. In the meantime, the project will be delisted by the MoEF. The details of the Project Proponent and a copy of the resolution will be uploaded in the MoEF website.

If no response has been received within 60 days, it will be assumed that the Project Proponent is not interested in pursuing the project and the file will be closed. Fresh Procedures need to be initiated if Project Proponent is still interested in the project.

State Governments should initiate credible action for taking legal action on the Project Proponent for the period of violation. It should then provide MoEF evidence of credible action taken.

After action has been taken on violation/s, the usual procedure for obtaining the clearance will be adopted. However, giving ToR or EC for these cases will not be a matter of right for the Project Proponent. If the nature of the violation is serious, the Ministry can reject the proposal outright.

Date: 12 December 2012

Link : <http://MoEF.nic.in/assets/om-12122012-b.pdf>

### **2.6.5 Public Hearing**

#### **PUBLICITY:**

Hearings related to different projects cannot be held at the same time on a given day. Sufficient time should be given between the two hearings if they are scheduled on the same day.

The Public Hearing proceedings should mention details of publicity given by the SPCB for the hearing. SPCB should certify that the process followed was adequate.

April 19, 2010

Link : [http://envfor.nic.in/divisions/iass/Cir/pub\\_hear\\_EIA.pdf](http://envfor.nic.in/divisions/iass/Cir/pub_hear_EIA.pdf)

#### **PUBLIC HEARING IN SEZs:**

If an SEZ as a whole has had a public hearing, its individual units can be exempt from holding another hearing. But fresh hearing must be conducted for any type of individual unit/process, not part of the SEZ during the earlier public hearing.



Date: November 1, 2012

Link : <http://MoEF.nic.in/assets/ia-01112012.pdf>

#### **UPLOADING PH PROCEEDINGS:**

All State Pollution Control Boards/ Union Territories Pollution Control Committees should regularly and with due priority display the proceedings of the public hearing in their respective websites.

Date: March 20, 2012

Link : <http://envfor.nic.in/downloads/public-information/order-20032012-b.pdf>

#### **2.6.6 Monitoring Existing Plants**

Site visits by the regional office of MoEF to monitor compliance to EC conditions of existing projects, should also check compliance of transparency conditions of the EC. This should be included in their monitoring report.

The transparency condition in EC letters usually includes a condition on uploading compliance status and monitoring data on the website of the proponent. The latest Compliance Report should be uploaded in the MoEF/SEIAA website. All Compliance Reports are public documents.

Date: August 5, 2011

Link : <http://envfor.nic.in/downloads/public-information/O.M-dated-05.08.2011.pdf>

Existing Thermal Power Plants with a capacity over 500 MW should conduct a continuous monitoring of stack emissions as well as ambient air quality of their plant. Corrective measures as required must be taken to ensure emissions are within permissible limits.

A six monthly monitoring report has to be submitted to the SPCB, Regional Office of the MoEF and uploaded in the Project Proponent company's website. The ambient air quality data and stack emission data should be displayed in public domain in a common place near the main gate of the company and updated real time.

Date: April 6, 2011

Link : <http://envfor.nic.in/downloads/public-information/Addtnl-Con-mega-prjt.pdf>

#### **2.6.7 Projects on Same Land**

If two projects have applied for Environmental Clearance on the same land, both projects will be put on hold, and the respective state government asked to advice on this. The project favoured by the state government will then be taken up for appraisal, and EIA procedure duly followed.

Date: 8 June, 2011

Link : <http://envfor.nic.in/downloads/public-information/App-rcvd-prcdr.pdf>

### **2.6.8 Corporate Environment Policy**

All Central Public Sector Units and TPPs with capacity equal to and over 500 MW should adopt a Corporate Environment Policy to ensure adherence to Forestry/Environmental Clearance conditions. Their Board of Directors should be informed of any violations of the EC and FC conditions that have been found by the Ministry or any public authority and should be announced in the Project Proponent's website and annual report. For all project proposals, the EAC should deliberate on aspects related to the Corporate Environment Policy, especially about its adherence and comprehensiveness.

Date: 26 April 2011

Link : <http://envfor.nic.in/downloads/public-information/corporate-env-res.pdf>

### **2.6.9 Permitted Activities Before Issue of EC**

Fencing of the site to prevent encroachment.

Construction of temporary sheds for security personnel.

For any other activity, ToR can be suspended or withdrawn and penal action initiated against the Project Proponent under the provisions of the Environment Protection Act, 1986.

Date: 19 August, 2010

Link : <http://envfor.nic.in/downloads/public-information/Act-prior-EC.pdf>

### **2.6.10 Project Expansion**

The proposal for EC for an expansion project will be considered only if the implementation of the previous phase has commenced. If EC has not been issued for the earlier phase, the Project Proponent has to apply afresh clubbing all the phases so that the environmental issues can be assessed holistically.

Date: March 22, 2010

Link : [http://envfor.nic.in/divisions/iass/Cir/EXP\\_EC.pdf](http://envfor.nic.in/divisions/iass/Cir/EXP_EC.pdf)

When a Project Proponent applies for EC for expanding an existing project, a certified report by the Regional Office of the MoEF should be submitted on compliance to EC conditions. Without this document, the application for expansion will not be accepted. This compliance report should be discussed in the EAC meeting for the appraisal of the expansion project, and duly recorded in its minutes.

Date: May 30, 2012

Link : <http://MoEF.nic.in/downloads/public-information/eia-300512.pdf>

### **2.6.11 Validity Of ToR**

The ToR should be issued with a validity period of 2 years for the submission of the EIA/EMP reports. Exemption may be given with an outer limit of three years based on proper justification and approval of the EAC/SEAC.

March 22, 2010

Link : [http://envfor.nic.in/divisions/iass/Cir/TOR\\_EC.pdf](http://envfor.nic.in/divisions/iass/Cir/TOR_EC.pdf)

### **2.6.12 Interlinked Projects**

Integrated and interlinked projects having multi-sectoral components should prepare a common EIA report, covering each of the components comprehensively, after obtaining ToRs from each sectoral EAC/SEACs. The common EIA report should be considered cumulatively by each of the sectoral EAC/SEACs. Based on their recommendations, the proposals will be processed on individual files for obtaining simultaneous approval of the regulatory authorities.

Date: December 24, 2010

Link : <http://envfor.nic.in/downloads/public-information/integrated-interlinked-prjt.pdf>

## 2.7 USING RTI ACT FOR EC & EIA

- 2.7.1 Application for EC/EIA Documents
- 2.7.2 Addresses & Payment Modes for RTI requests
- 2.7.3 Frequently Asked Questions on RTI
- 2.7.4 RTI Flowchart
- 2.7.5 Central Government's Appeal Format
- 2.7.6 MoEF's Application Format

### 2.7.1 Application for EC/EIA Documents through RTI

Stage	Document Available to Public (on request)	Send RTI Application to (Project Capacity is < 500 MW)			Send RTI Application to (Project Capacity is ≥ 500 MW)		
		PIO	AA	2 <sup>nd</sup> Appeal	PIO	AA	2 <sup>nd</sup> Appeal
Before issue of ToR	1. Form 1, including Proponent's ToR 2. Pre Feasibility Report 3. Additional Information from Project Proponent 4. SEIAA/ MoEF's Letter for date of SEAC/EAC Meeting 5. Minutes of the SEAC/ EAC Meeting 6. Site Visit Report of SEAC/ EAC, if held	SEIAA	SEIAA	CIC	MoEF	MoEF	CIC
On issue of ToR	7. ToR issued by SEIAA/MoEF						
On announcement of Public Consultation	8. Draft EIA by Project Proponent 9. Executive Summary of Draft EIA by Project Proponent						
On completion of Public Consultation	10. Collated Written Response 11. Public Hearing Report 12. Videotape of Public Hearing	SPCB	SPCB	SIC	SPCB	SPCB	SIC

Stage	Document Available to Public (on request)	Send RTI Application to (Project Capacity is < 500 MW)			Send RTI Application to (Project Capacity is ≥ 500 MW)		
		PIO	AA	2 <sup>nd</sup> Appeal	PIO	AA	2 <sup>nd</sup> Appeal
Before grant of EC / rejection of Application	13. Final EIA by Project Proponent 14. SEIAA/ MoEF observations on the Final EIA's adherence to TOR 15. Minutes of SEAC/ EAC Meeting with Project Proponent 16. Recommendations to issue/ reject EC by SEAC/ EAC	SEIAA	SEIAA	CIC	MoEF	MoEF	CIC
On granting of EC	17. Environmental Clearance 18. Compliance Reports of Project Proponent	SEIAA	SEIAA	CIC	MoEF	MoEF	CIC
	19. SPCB's Inspection Reports	SPCB	SPCB	SIC	SPCB	SPCB	SIC

### 2.7.2 Addresses & Payment Modes for RTI Application

Authority	Address	Accepted Payment Mode	Application Fee	Appeal Fee <sup>20</sup>
MoEF	Paryavaran Bhavan CGO Complex, Lodhi Road, New Delhi - 110 003 Phone: 11-24362064	Cash, Postal Order, DD & cheque in favour of PAO MOEF New Delhi	Rs 10	None
SEIAA, Andhra Pradesh	Payavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad - 500018, Phone:040-23887594	Cash	Public Authority Village: No fee Mandal: Rs 5 Others: Rs 10	None
SEIAA, Andhra Pradesh. Karnataka	7th Floor, M.S. Building, 4th Phase, Bangalore- 560 001. Karnataka Phone: 080-22032497	Postal Order	Rs. 10	None

<sup>20</sup> No fee for applications by persons Below Poverty Line. A copy of the BPL card should be attached with the application in this case

Authority	Address	Accepted Payment Mode	Application Fee	Appeal Fee <sup>20</sup>
SEIAA, Kerala	Pallimukku, Pettah PO, Trivandrum-695024, Kerala. Phone: 0471-2742264	Court Fee Stamp, Bankers Cheque in favour of State Public Information Officer, Department of Environment & Climate Change	Rs. 10	None
SEIAA, Tamil Nadu	3 <sup>rd</sup> Floor, Panagal Maligai, No 1, Jeenis Road, Saidapet, Chennai: 600015, Tamil Nadu Phone:044-24359974	Court Fee Stamp, Demand Draft	Rs. 10	None

### 2.7.3 Frequently Asked Questions on RTI

1. **What is the Right to Information (RTI) Act?**
2. **Who are public authorities?**
3. **Who is responsible to provide the information sought?**
4. **How is an RTI application different from a letter/petition written to a public authority?**
5. **Is there a word limit for an RTI application?**
6. **What should I do under RTI to obtain information?**
7. **What can be obtained using RTI?**
8. **What information cannot be obtained using RTI?**
9. **What language can I ask for information in?**
10. **How can I view/copy the information required?**
11. **How should the Authorities provide the sought information?**
12. **Is there a template to request information under RTI?**
13. **Can I file an RTI online?**
14. **What is the time frame for receiving a response?**
15. **Can an RTI application be returned because it was not addressed to the appropriate public authority?**
16. **Do I have to pay a fee for obtaining information?**
17. **What if there is no response for my RTI application?**
18. **What if the information received is wrong/ incomplete?**
19. **Can I be refused information?**

- 20. What can I do if I am not satisfied with the response of the Appellate Authority?**
- 21. Is the SIC/CIC bound to issue an order in a time limit?**
- 22. What happens to an officer who does not provide the requested information?**

### **1. What is the Right to Information Act?**

The Right to Information Act was passed in 2005 in order to bring more transparency and accountability in the working of the state and central government. It guarantees all citizens of India the right to access information from public authorities in both governments.

### **2. Who are public authorities?**

Public authorities refer to all authorities, bodies, and institutions of self-government formed by the Constitution, a law by the Parliament or the State Legislature. It also includes all bodies which are owned, controlled and financed substantially by the government, and NGOs which are substantially financed by funds provided by the government.

### **3. Who is responsible for providing the information sought?**

The Public Information Officer, who has been appointed in every public authority for this purpose, should provide the information required. So, RTI applications should be addressed to him/her. At a sub-district or sub-divisional level in public authorities, an Assistant PIO is appointed to receive applications/ appeals and forward them to the PIO.

### **4. How is an RTI application different from a letter/petition written to a public authority?**

Unlike a regular letter/ petition for information, the RTI Act obligates the public authority to respond to the request in a time-bound manner.

There is a provision to penalize the officer who does not provide correct information within the specified deadline, and initiate disciplinary action against him/her, if required.

Also, the nature of information that you can obtain, using RTI, is vast. According to the Act, any information that can be provided to the Parliament and the State Legislatures can be made available to the people using RTI.

A person seeking any information need not give a reason for requesting information, nor is she/he required to share personal details except her/his contact address.

**5. Is there a word limit for an RTI application?**

Yes! It should not exceed five hundred words, including the address of the Central Public Information Officer and that of the applicant but excluding annexures.

Your application cannot be rejected information because it exceeds 500 words.

**6. What should I do under RTI to obtain information?**

A simple letter seeking the information you want should be made to the public authority concerned, along with a standard fee. The Application should be addressed to the Public Information Officer of the relevant Public Authority. He/She is the official who has been given the responsibility of receiving and processing RTI requests. The name of the Public Information Officer (PIO) is not required for this purpose. The application can be addressed simply to the PIO. If you are unable to write a letter, the concerned PIO should assist you in writing the application.

**7. What can be obtained using RTI?**

Under the RTI, you can obtain any of the following:

- Documents, Records, Memos, E-Mails, Opinions, Advices, Press Releases, Orders, Log Books, Contracts, Reports, Papers, Circulars, Samples, Models.
- Data in electronic form, facsimile copy of document.
- Microfilm, microfiche or copy of images in the microfilm.

**8. What information cannot be obtained using RTI?**

Information that cannot be obtained includes that:

- i which can affect India's integrity and sovereignty
- ii which relates to the security, strategic, scientific and economic interests of India, or which is in relation with a foreign state or which can incite violence
- iii which has been banned from publishing by any court, law or tribunal
- iv whose disclosure will amount to contempt of court
- v whose disclosure will cause a breach of privilege in the Parliament or State Legislature
- vi which includes trade secrets and intellectual property, the disclosure of which will harm the competitive position of a third party, unless this disclosure serves a greater public interest



- vii which is available to a person in his fiduciary relationship, unless this disclosure serves a greater public interest
- viii which has been received in confidence from a foreign government
- ix whose disclosure can endanger life or safety of any person
- x which can impede the investigation process or apprehension or prosecution of offenders
- xi Cabinet papers on decisions till the decision has been made public
- xii which relates to personal information which has no relationship to any public activity or interest, or would cause invasion of privacy

### **9. What language can I ask for information in?**

Information can be asked in English, Hindi or in the official language of the region where the application is filed.

### **10. How can I view/copy the information required?**

The RTI Act specifies that you can:

- Inspect the required documents, manuscripts & records
- Take notes, copies of certified documents or copies of their extracts
- Take certified samples of the material
- Obtain information in CDs, floppies, tapes, video cassettes, print outs (when information is stored on a computer) or any electronic mode

### **11. How should the authorities provide the sought information?**

The information sought should be provided in the form that you want it in, unless it will 'disproportionately divert the resources of the public authority'. Or if it is detrimental to the safety of the record to provide it in the form you have asked.

### **12. Is there a template to request information under RTI?**

No! There is no specific format for an RTI application. But an applicant is required to include the following details:

- Date of Application
- Address of PIO concerned
- Applicant's address
- Information Sought (It is advisable that this is asked in numbered form or as a table form as responses will also have to be given that way)

- Form in which the information is sought- print out, CD, e-mail
- Affix/ attach payment
- Mention mode of payment
- Signature

Several state and central government authorities have prescribed sample formats for RTI requests. The Ministry of Environment & Forests has specified a format here: [http://envfor.nic.in/sites/default/files/app\\_pro.pdf](http://envfor.nic.in/sites/default/files/app_pro.pdf)

The Central Information Commission also has an appeal format. It is, however, not mandatory to follow it and an application/appeal cannot be denied information for that reason.

### 13. Can I file an RTI online?

This depends on the public authority concerned. The Central Government has recently launched an online RTI portal- <http://rtionline.gov.in/>

This portal allows you to file RTI applications with select Central Government Ministries.

A few states are said to be in the process of launching a website for this.

If the information sought concerns the life and liberty of a person, the requested information has to be provided in 48 hours

### 14. What is the time frame for receiving a response?

Information should be provided by the PIO within 30 days of receiving the RTI request.

If the application is submitted to an APIO, then an additional 5 days will be taken to provide the response.

If the information sought concerns the life and liberty of a person, the requested information has to be provided in 48 hours.

### 15. Can an RTI application be returned because it was not addressed to the appropriate public authority?

No! Under the Act, the PIO to which you addressed the request for information, should forward the application to the appropriate PIO, within five days of receiving the request.

### 16. Do I have to pay a fee for obtaining information?

Yes! The state government decides the fee that a public authority of the state can charge for providing information. The Central Government has

Keep a copy of your RTI application before you send it! Send RTI applications by Registered Post for acknowledgment of receipt

announced a fee of Rs 10 per application. *Please check Table II (above) for the fee charged by different state governments and how they can be paid.*

If you possess a Below Poverty Line card, you need not pay the RTI fee, and should attach a copy of the card along with the request for information.

Apart from the application fee, the public authority can also charge you for providing the information sought in printed or electronic forms. This depends on the volume of data requested. Usually, information that runs to several pages is charged at Rs 2 per page. Any additional fees required for the information will be detailed by the PIO in his response.

If the information is not provided within the stipulated 30 days, then the information has to be provided free of charge.

#### **17. What if there is no response for my RTI application?**

Then you should prefer an appeal. This appeal must be made to the Appellate Authority, who has been given the task of processing RTI appeals in every public authority. The appeal must be made within 30 days after the time by which you should have ideally received a response for your application- that is, the appeal should be filed between 30 and 60 days after your RTI application reached the public authority.

#### **18. What if the information received is wrong/ incomplete?**

You should appeal to the Appellate Authority. The appeal must be made within 30 days of receiving the response. If there is a justifiable reason for delay, the appeal can be filed even after the allowed time period.

#### **19. Can I be refused information?**

Yes! Certain information need not be shared using the RTI. In that case, information can be refused. You can still appeal against the refusal, if you think the information should be accessible under the RTI Act.

This appeal must be made to the Appellate Authority within 30 days of receiving a response.

When the PIO rejects information for your request, reasons for the refusal, how you can appeal against the refusal and the Appellate Authority to whom the appeal must be sent should also be mentioned in his/her response.

**20. What can I do if I am not satisfied with the response of the Appellate Authority?**

In this case, you may file a second appeal with the Central/State Information Commission concerned. The appeal has to be filed within 90 days of the expiry of the response period for the RTI appeal, or within 90 of receiving a response for the appeal. Appeals can be accepted even after this time period if a valid justification for delay has been provided.

**21. Is the SIC/CIC bound to issue an order in a time limit?**

No, there is no time limit for the SIC/CIC order.

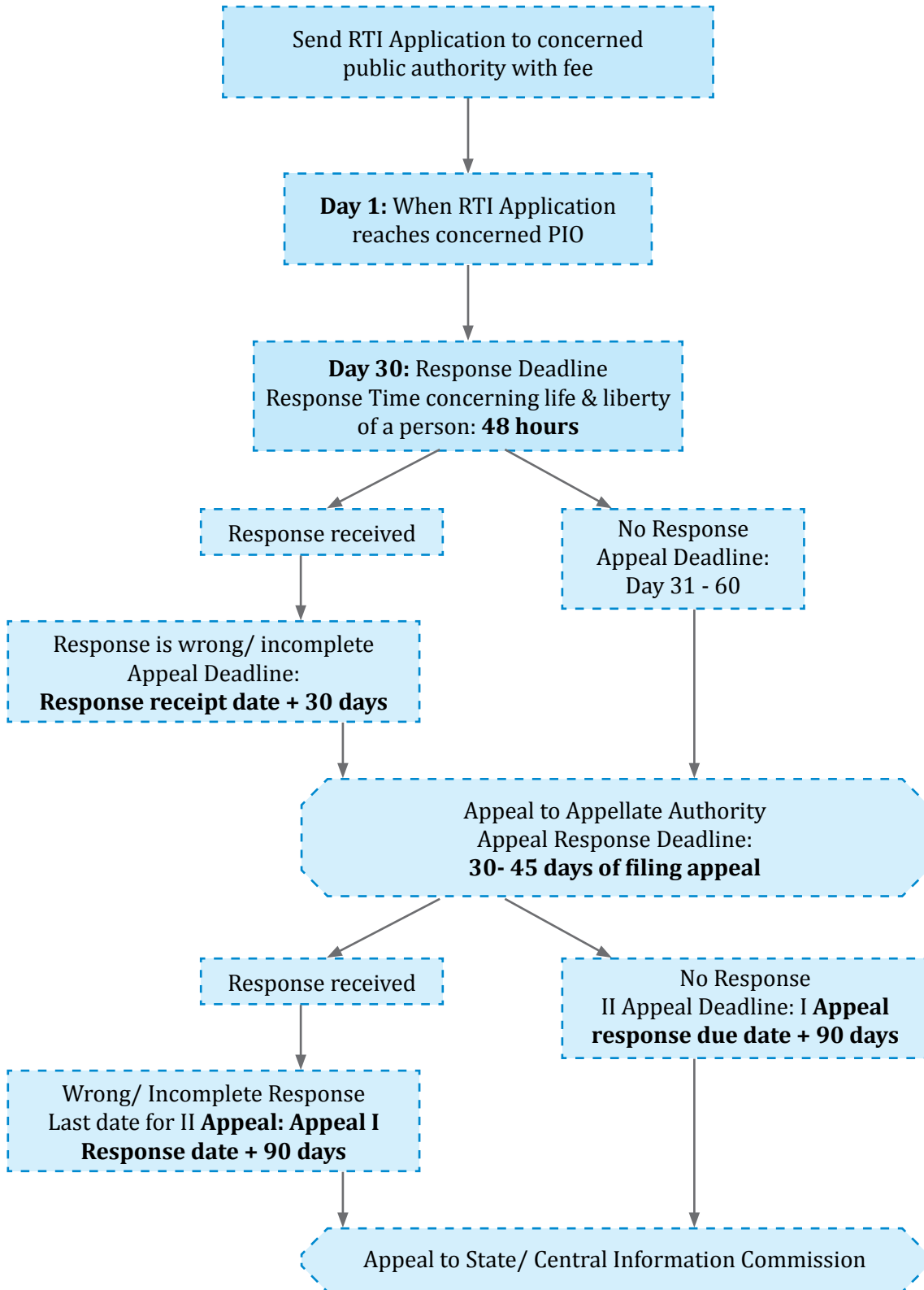
**22. What happens to an officer who does not provide the requested information?**

If the CIC/ SIC finds that a PIO has

- unreasonably refused to receive the RTI application
- unreasonably refused to provide the information in the time specified
- delayed information
- knowingly given wrong, incomplete, misleading information
- destroyed the information requested
- obstructed providing the information in any way

it can impose a penalty of Rs 250 daily on the PIO till he/she provides receives the application or provides the information, as the case may be. The maximum fine that can be imposed is Rs 25,000.

## 2.7.4 RTI Flowchart



### **2.7.5 Central Government's Appeal Format**

- I. Name and address of the appellant
2. Name and address of the Central Public Information Officer to whom the application was addressed
3. Name and address of the Central Public Information Officer who gave reply to the Application
4. Name and address of the First Appellate Authority
5. Who decided the First Appeal?
6. Particulars of the application
7. Particulars of the order(s) including number, if any, against which the appeal is preferred
8. Brief facts leading to the appeal
9. Prayer or relief sought
10. Grounds for the prayer or relief
11. Any other information relevant to the appeal
- I 2. Verification/authentication by the appellant

*Note:*

*It is not mandatory to follow this template and an application/appeal cannot be denied information for not following it*

*Link: This appeal format was part of the Right to Information Rules, 2012. It can be found here: [http://ccis.nic.in/WriteReadData/CircularPortal/D2/D02rti/1\\_35\\_2009-IR-1.pdf](http://ccis.nic.in/WriteReadData/CircularPortal/D2/D02rti/1_35_2009-IR-1.pdf)*

## 3. SHIFT TO RENEWABLE ENERGY

### 3.1 Renewable Energy Sources

### 3.2 Renewable Electricity Projects

### 3.3 Policies and Incentives to Promote RE

Renewable Energy (RE) uses inexhaustible and natural resources, such as the sun, wind, plants and water, to generate sustainable and clean energy. The environmental and economic benefits of RE include:

- Energy generation without greenhouse gas emissions and reduction of air pollution.
- Energy diversification reducing dependency on imported fuels.
- Economic development and jobs in manufacturing, installation and more.

### 3.1 Renewable Energy Sources

**Solar Energy** uses the power of sunlight for generating electricity to heat and light buildings, for hot water, cooling and a variety of other commercial and industrial uses.

**Wind Energy** uses the energy in wind for electricity generation, battery charging, pumping water and grinding grain. Many turbines are built close together to form a wind farm to provide utility-scale grid power generation.

**Biomass Energy** uses organic matter such as plants, residue from agriculture and forestry and organic components of municipal and industrial waste to produce power. For example, wood has been used to provide heat for thousands of years.

**Hydro Power** uses capture of flowing water to produce electricity. Large and small-scale hydropower production technologies are available.

**Geo-Thermal Energy** uses the heat from the earth as the source for energy. Geothermal energy sources range from shallow ground to hot water and hot rock found a few miles beneath the earth's surface.

**Ocean Energy** produces two types of energy: Thermal Energy from the sun's heat and Mechanical Energy from the tides and waves. Oceans cover more than 70% of the earth's surface, making them the world's largest solar collectors. The sun's heat warms the surface water more than the water in the deep and this temperature difference creates thermal energy.

## **3.2 Renewable Electricity Projects**

### **3.2.1 Small Scale Technologies**

These RE systems or devices are located where the power is used (e.g.) roof-tops of buildings. Small-scale RE technologies are localised and decentralised (i.e. provide electricity or cooling / heating to meet local needs such as an apartment, industrial plant, recreation centre or local community). Small-scale RE generation systems are either (1) embedded (i.e. physically connected) into an electricity grid, (2) connected to district heating and/or cooling network or (3) used as a stand-alone off-grid system.

#### **Roof Top Solar**

Roof Top Solar electricity systems use photovoltaic panels, installed on rooftops of buildings, to convert sunlight into electricity.



#### **Small-scale Wind Turbines**

Small Wind Turbine' refers to a size that would suit the needs of a domestic dwelling or a small business. These are less than 100 KW and are most commonly in the range 1-10 KW.



#### **Domestic Solar Water Heaters**

Domestic Solar Water Heating systems are commonly used for providing hot water in residential homes. The solar hot water systems have roof-mounted solar collectors (or panels) that absorb sunlight to heat the water, and a water storage tank. These systems may also have a gas or electric booster to heat the water when necessary on cloudy days.



#### **Heat Pumps**

Heat pump technology will take the heat out of your house (where you don't want it) or elsewhere, and will transfer it into the water. And, as the excess heat in your house or in the atmosphere is heated by the sun, this is indeed a form of solar hot water.



#### **Commercial Industrial Solar Water Heaters**

Another promising use for solar thermal systems is for commercial and small industrial applications (e.g.) hospitals, laundries, schools, multifamily houses.



## Solar Cooling Systems

Solar Cooling Systems refer to air conditioning systems that use solar power. This can be done through passive solar, solar thermal energy conversion and photovoltaic conversion (sunlight to electricity)



### 3.2.2 Large Scale RE Systems

RE systems can be set up that feed into the electricity grid. Grid-interactive renewable power projects based on wind power, biomass and solar (above 1 MW) and small hydro (below 25 MW) are mainly private investment driven, with tariff policy regimes established by State Electricity Regulatory Commissions (SERC).

### 3.2.3 Medium Scale RE System

#### Community Based - Decentralized Distributed Generation (DDG)



Solar Power Plant



Wind Power Plant



Biomass Plant



Small Scale Hydro Power Plant

DDG comprises small, modular, decentralized off-grid RE systems located in or near the place where energy is used. It is ideal for villages that are located in off-grid areas or are not connected to the electricity grid due to distance/terrain. However these stand-alone systems are suitable due to advantages for local employment, recycling of local waste and local control over infrastructure and usage of energy.

DDG systems can be from single source (e.g. a central wind or solar) or multiple (hybrid) sources (e.g. a combination of wind and solar). DDG provide an alternative to or an enhancement of the traditional electric power system. It is electric Power generating Units connected to the network on the consumer side. It involves low T&D loss.



Distributed Solar Plant



Distributed Biogas Plant



Distributed Wind Plant

### **3.3 Policies and Incentives to Promote RE**

- **Renewable Portfolio Standards (RPS)**

Indian states have been giving RPS in order to promote RE. The RPS mechanism generally places an obligation on (a) electricity supply companies to produce a specified fraction of their electricity from renewable energy sources and (b) distribution companies to purchase from RE sources. For this purpose, State Electricity Regulatory Commissions are encouraging the development of renewable energy by obligating electric utilities to pay pre-established above-market rates for RE power fed onto the grid. These tariffs, which may vary depending on the type of resource used, provide renewable generators with a set stream of income from their projects.

- **Renewable Energy Certificates (RECs)**

The shift to RE is also promoted through RE Certificates. These are given for the technology and environmental attributes of electricity generated from renewable sources and are distinct from the power generated. These attributes are unbundled from the physical electricity and REC is issued for the former. In effect, there are two products available to be sold or traded – the RE Certificate and the power generated. One REC represents that 1MWh of energy is generated from renewable sources. Those interested in trading or investments need not use RE power to own RE Certificates.

- **Net Metering**

The net metering system encourages on-site generation of RE power through roof top systems (e.g. solar photovoltaic panels or windmills) that can also feed into the grid. Generators will receive compensation for the quantity put into to the grid. Net metering system ensures that generators' electric meters track the quantity of electricity used on site and the quantity that is fed into the grid. When generation is insufficient to meet on-site needs, electricity from the grid may be used.

- **Open Access**

Open Access allows large users of power — typically having connected load of 1 megawatt (MW) and above — to buy cheaper power from the open market or from renewable energy sources. The Electricity Act, 2003 allows open access to the transmission and distribution (T&D) networks of the licensees with the payment of a surcharge and payment by open access consumers for using the lines (wheeling charge)

to compensate them for the loss of revenue. The idea is that the customers should be able to choose among a large number of competing power companies—instead of being forced to buy electricity from their existing electric utility monopoly. It helps large consumers particularly the sick textile, cement and steel industrial units by ensuring regular supply of electricity at competitive rates and boost business of power bourses.

- **Subsidies**

Financial incentives, such as grants, loans, rebates, and tax concessions, to encourage RE development, is given by the Ministry of New and Renewable Energy, through Indian Renewable Energy Development Agency Limited (IREDA) and state governments.

- **Generation Based Incentive (GBI)**

Government of India has introduced and incentivised additional generation of electricity from grid-connected wind and solar power projects through Generation Based Incentive. Under the scheme, in addition to payments for feed-in tariffs - for the quantity of power put into the grid- financial incentives are given to generators of wind and solar electricity. Under the scheme, a GBI will be provided to wind electricity producers at the rate of Rs. 0.50 per unit of electricity fed into the grid for a period not less than 4 years and a maximum of 10 years with a cap of Rs. 100 lakhs per MW.

- **Accelerated Depreciation**

Accelerated depreciation refers to any one of several methods by which a company, for 'financial accounting' or tax purposes, depreciates a fixed asset in such a way that the amount of depreciation taken each year is higher during the earlier years of an asset's life. For financial accounting purposes, accelerated depreciation is expected to be much more productive during its early years, so that depreciation expense will more accurately represent how much of an asset's usefulness is being used up each year. For tax purposes, accelerated depreciation provides a way of deferring corporate income taxes by reducing taxable income in current years, in exchange for increased taxable income in future years. This is a valuable tax incentive that encourages businesses to purchase new assets.

In the case of solar power generation, in order to incentivize the entrepreneurs to enter the solar power generation market, the Government of India has allowed claiming 80% depreciation in year one of the commissioning of the solar power generation plant.

**Renewable Energy in Electricity Act 2003, National Electricity Policy 2005 and National Tariff Policy**

<b>Electricity Act 2003</b>	<p>Preamble (Page No-1)</p> <p>“An Act to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally for taking measures conducive to development of electricity industry, ..., promotion of efficient and environmentally benign policies ...”</p>
<b>Mandate of Regulators to promote RE</b>	<p>Section 2(47) “Non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission”.</p> <p>Section 86 (1) (e) of the Electricity Act 2003 states that the State Commission shall promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.</p> <p>Section 61 (h) the Appropriate Commission shall, .., specify the terms and conditions for determination of tariff and in doing so shall be guided by the following namely : .....</p> <p>.....</p> <p>(h) the promotion of cogeneration and generation of electricity from renewable sources of energy,</p> <p>(i) the National Electricity Policy and Tariff Policy.</p>
<b>National Electricity Policy</b>	<p>“5.2.20 Feasible potential of non-conventional energy resources, mainly small hydro, wind and bio-mass would also need to be exploited fully to create additional power generation capacity. With a view to increase the overall share of non-conventional energy sources in the electricity mix, efforts will be made to encourage private sector participation through suitable promotional measures.”</p>
<b>National Tariff Policy</b>	<p>6.4 “... It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.</p> <p>(2) Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process ... within suppliers offering energy from same type of non-conventional sources. ...”</p>

## Institutions To Promote RE

<i>Organisation</i>	<i>Objective</i>	<i>Details</i>	<i>Address</i>
<b>Ministry of New and Renewable Energy (MNRE)</b>	Nodal Ministry of the Government of India for all matters relating to new and renewable energy.	Facilitate research, design, development, manufacture and deployment of new and renewable energy systems/ devices for transportation, portable and stationary applications in rural, urban, industrial and commercial sectors	Block-14, CGO Complex, Lodhi Road, New Delhi-110 003, India. Tel: +91-11-24362772 Email: secy-mnre@nic.in
<b>Indian Renewable Energy Development Agency Limited (IREDA)</b>	Promotes, develops and extends financial assistance for Renewable Energy and Energy Efficiency/ Conservation Projects.	Give financial support to specific projects and schemes for generating electricity and / or energy through new and renewable sources and conserving energy through energy efficiency	3rd Floor, August Kranti Bhawan, Bhikaiji Cama Place, New Delhi – 110 066. Tel : +91 11 26717400 - 413 Fax: +91 11 26717416 Email: cmd@ireda.gov.in
<b>Renewable Energy Development Agencies</b>	Functions as the state nodal agency for promoting RE  Works under the MNRE umbrella and guided by its policy and respective state's policy	To promote the use of new and renewable sources of energy (NRSE) and to implement projects therefore. To promote energy conservation activities. To encourage research and development on renewable sources of energy.	Tamil Nadu Energy Development Agency E.V.K Sampath Maaligai, 5 <sup>th</sup> floor, No.68, College Road, Chennai-600 006 Phone: (044) 28224830 & 28236592 Fax: 2822 2971 Email: info@teda.in

<i>Organisation</i>	<i>Objective</i>	<i>Details</i>	<i>Address</i>
			<p>Karnataka Renewable Energy Development Agency No.39,"Shanthigruha" Bharath Scouts &amp; Guides Building Palace Road Tel: (080)22207851/22208109/9480691041. Fax: 080-22257399 Email: kredlnce@yahoo.co.in</p> <p>Kerala Agency for Non-conventional energy and Rural Technology, Police Parade Ground, Thycaud, Thiruvananthapuram - 695014. Tel: (0471)2329854, 2338077, 2334122, 2333124 &amp;2331803 Fax: (0471)2329853 Email: director@anert.in</p> <p>Andhra Pradesh: Non-conventional Energy Development Corporation of Andhra Pradesh Limited [NEDCAP] 5-8-207/2, Pigsaw Complex, Nampally, Hyderabad - 500 001. Tel: (040)2320 2391 Fax: (040)23201666 Email: info@nedcap.gov.in, nedcap@ap.nic.in</p>
<b>State Electricity Regulatory Commission</b>	Rationalisation of electricity tariff, transparent policies regarding subsidies, promotion of efficient and environmentally benign policies and for matters connected therewith or incidental thereto.	Section 84 (1) (e) mandates the electricity regulatory commission to promote RE	<p>Tamil Nadu: No 19A, Rukmini Lakshmi pathy Salai, Egmore, Chennai - 600 008. Tel: (044) 28411376,28411378, 28411379 Fax : (044) 28411377. Email: tnerc@nic.in</p>

<i>Organisation</i>	<i>Objective</i>	<i>Details</i>	<i>Address</i>
			<p>Karnataka: 6th &amp; 7th Floor, Mahalaxmi Chambers, # 9/2, M.G.Road, Bangalore - 560 001 Tel: (080) 25320213 / 214, 25320339, 25323765 Fax: 080-25320338, Email: kerc35@bsnl.in</p> <p>Andhra Pradesh: 4th &amp; 5th Floors 11-4-660, Singareni Bhavan Red Hills, Hyderabad 500 004 Tel: (040) 23397381 Fax: (040) 23397378 &amp; 23397489 Email: chmn@aperc.gov.in</p> <p>Kerala: K.P.F.C. Bhavanam, C.V. Raman Pillai Road, Vellayambalam Thiruvananthapuram Kerala 695010 Tel: 0471 2735544 Fax: 0471 2735599 E-mail: kserc@erckerala.org</p>

## **ANNEXURE A: FORM I FORMAT**

### **1. Basic Information**

- Name of project:
- Nature:
- Proposed capacity:
- Nearest town/city/railway station/airport along with distance in kms:
- Village Panchayat/Zilla Parishad/Municipal Corporation/Local Body with postal address and contact nos:
- Details if the project involves approval/clearance under:
  - a The Forest (Conservation) Act 1980
  - b The Wildlife (Protection) Act 1972 and
  - c The CRZ Notification 1991
- Details of alternative sites examined, if any, along with topo sheet:
- Interlinked projects and details of application for interlinked projects submitted:
- Name, address and designation of the Applicant:
- Information on Government Order/Policy relating to the site:
  - a Forest Land
  - b Particulars on any litigation pending against the project/land

### **2. Activity Details**

- Construction
- Operation or Decommissioning of the project involving actions which will cause physical changes in the locality- Topography, Land Use, Charges in water bodies and Others
- Permanent or Temporary Change in land use
- Cover or Topography including increase in intensity of land use (with respect to local land use plan)
- Clearance of existing land



- Vegetation and Buildings
- Creation of new land uses
- Pre-construction investigations -Bore wells, Soil testing and Others
- Construction works
- Demolition works
- Temporary sites used for construction works or housing of construction workers  
Above ground buildings structures or earthworks including linear structures
- Cut and fill or excavations
- Underground works including mining, tunnelling
- Reclamation works
- Dredging
- Offshore structures
- Production and Manufacturing Processes
- Facilities for storage of goods or materials
- Facilities for treatment or disposal of solid waste or liquid effluents
- Facilities for long term housing of operational workers
- New road
- Rail or Sea traffic during construction or operation
- New road, rail, air, waterborne or other transport infrastructure including new or altered routes and stations, Ports Airports etc;
- Closure or Diversion of existing transport routes or infrastructure leading to changes in traffic movements
- New or diverted transmission lines or pipelines
- Impoundment/damming/culverting
- Realignment or other changes to the hydrology of watercourses or aquifers
- Stream crossings
- Abstraction or transfers of water form ground or surface waters

- Changes in water bodies or the land surface affecting drainage or run-off
- Transport of personnel or materials for construction; operation or decommissioning  
Long-term dismantling or decommissioning or restoration works
- Ongoing activity during decommissioning which could have an impact on the environment
- Influx of people to an area either temporarily or permanently
- Introduction of alien species
- Loss of native species or genetic diversity
- Any other activities

### **3. Use of Natural Resources including Source Information & Data**

- Land -especially undeveloped or agricultural land - in Hectares
- Water - expected source & competing users - in units Kilo Litres/Day
- Minerals in Metric Tonnes
- Construction material – stone, aggregates, sand / soil -expected source – in Metric Tonnes
- Forests and Timber -source – in Metric Tonnes
- Energy - electricity and fuels including source, competing users – Unit for fuel in Metric Tonnes and for electricity in MegaWatts
- Any other natural resource (use appropriate standard units)

### **4. Storage, Transport, Handling or Production of Substances harmful to human health or environment**

- Changes in occurrence of disease
- Affect disease vectors (e.g. insect or water borne diseases)
- Affect the welfare of people (e.g. by changing living conditions)
- Vulnerable groups of people who could be affected by the project (e.g. hospital patients, children, the elderly etc)
- Any other causes

## **5. Production of Solid Waste during Construction/ Operation / Decommissioning**

- Spoil
- Overburden or Mine Waste
- Municipal Waste (domestic and or commercial waste)
- Hazardous Wastes (as per Hazardous Waste Management Rules)
- Other Industrial Process Waste
- Surplus Produce
- Sewage Sludge or Other Sludge from effluent treatment
- Construction or Demolition Waste
- Redundant Machinery or Equipment
- Contaminated Soils or other materials
- Agricultural Waste
- Other Solid Waste

## **6. Release of pollutants or any hazardous; toxic or noxious substances to air**

- Emissions from combustion of fossil fuels from stationary or mobile sources
- Emissions from production processes
- Emissions from materials handling including storage or transport
- Emissions from construction activities including plant and equipment
- Dust or odour from handling of materials including construction material, sewage and waste
- Emissions from incineration of waste
- Emissions from burning of waste in open air (e.g. slash materials; construction debris);
- Emissions from any Other Source

## **7. Generation of Noise and Vibration and Emissions of Light and Heat**

- From operation of equipment (e.g. engines, ventilation plant, crushers)
- From industrial or similar processes

- From construction or demolition
- From blasting or piling
- From construction or operational traffic
- From lighting or cooling systems
- From any other sources

#### **8. Risk of Contamination of Land or Water**

- Release of pollutant into the ground / sewers / surface waters / groundwater / coastal waters / sea
- From handling, storage, use or spillage of hazardous materials
- From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)
- By deposition of pollutants emitted to air into the land or into water
- From long-term build up of pollutants from these sources, in the environment
- From other sources

#### **9. Risk of Accidents during Construction or Operation which could affect human health or environment**

- From explosions, spillages, fires etc
- From storage handling use or production of hazardous substances
- From any other causes, including natural disasters causing environmental damage like earthquakes, floods etc

#### **10. Factors that could lead to Environmental Effects or the potential for Cumulative Impacts in the locality**

- Lead to development of supporting ancillary development or development stimulated by the project which could have impact on the environment (e.g.; supporting infrastructure, roads power supply, waste or waste water treatment, etc.)
- Housing Development
- Extractive industries

- Supply industries;
- Others
- Lead to after-use of the site; which could have an impact on the environment
- Set a precedent for later developments
- Have cumulative effects due to proximity to other existing or planned projects with similar effects

### **11. Environmental Sensitivity**

- Areas protected under international conventions; national or local legislation for their ecological landscape, cultural or other related value
- Areas which are important or sensitive for ecological reasons – wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains and forests
- Areas used by protected important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration
- Inland, coastal, marine or underground waters
- State, national boundaries
- Routes or facilities used by the public for access to recreation or other tourist pilgrim areas
- Defence installations
- Densely populated or built-up area
- Areas occupied by sensitive man-made land uses (e.g.hospitals; schools; places of worship; community facilities)
- Areas containing important, high quality or scarce resources (e.g. ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)
- Areas already subjected to pollution or environmental damage and where existing legal environmental standards are exceeded
- Areas susceptible to natural hazard which could cause the project to present environmental problems (e.g. earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)

## **12. Proposed Terms of Reference (ToR)**

Following this; an affidavit stating;

“I hereby give undertaking that the data and information given in the Application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of data and information submitted is found to be false or misleading at any stage; the project will be rejected and clearance given; if any; to the project; will be revoked at our risk and cost”

Date: Signature of the Applicant

Place: With name and full address  
to be submitted.

*Note:*

With regard to projects involving clearance under CRZ Notification 1991, the following are to be submitted along with the Application-

1. A CRZ map duly demarcated by an authorized agency showing Project Activities with reference to CRZ (at the stage of ToR)
2. Recommendations of the State Coastal Zone Management Authority (before issue of EC)

With regard to projects located within 10 kms of National Parks, Sanctuaries, Biosphere Reserves and Migratory Corridors of Wild Animals the following are to be submitted along with the Application-

1. A Map duly authenticated by the Chief Wildlife Warden showing these features and project location
2. Comments of the Chief Wildlife Warden

## ANNEXURE B: TERMS OF REFERENCE

1. Vision document specifying prospective long term plan of the site, if any, shall be formulated and submitted
2. Status of compliance to the conditions stipulated for environmental and CRZ clearances of the previous phase(s), as applicable, shall be submitted
3. Executive summary of the project indicating relevant details along with recent photographs of the approved site shall be provided.
4. Response to the issues raised during Public Hearing and to the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed
5. Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and status of implementation shall be submitted to the Ministry
6. The coordinates of the approved site including location of ash pond shall be submitted along with topo sheet (1:50,000 scale) and confirmed GPS readings of plant boundary and NRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/river shall be specified, if the site is located in proximity to them
7. Layout plan indicating break-up of plant area, ash pond, area for green belt, infrastructure, roads etc. shall be provided
8. Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement and revised layout (as modified by the EAC) shall be provided
9. Present land use as per the revenue records (free of all encumbrances of the proposed site, shall be furnished. Information on land to be acquired) if any, for coal transportation system as well as for laying of pipeline including ROW shall be specifically stated
10. The issues relating to land acquisition and R&R scheme with a time bound Action Plan should be formulated and clearly spelt out in the EIA report
11. Satellite imagery or authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest villages, creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided

12. Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Office of the Chief Wildlife Warden of the area concerned
13. Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of fill material required; its source, transportation etc. shall be submitted
14. A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land to be acquired is developed alternatively and details plan shall be submitted
15. A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on economically feasible mineable mineral deposit shall be submitted.
16. Details of 100% fly ash utilization plan as per latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash.
17. Water requirement, calculated as per norms stipulated by CEA from time to time, shall be submitted along with water balance diagram. Details of water balance calculated shall take into account reuse and re-circulation of effluents which shall be explicitly specified.
18. Water body/nallah (if any) passing across the site should not be disturbed as far as possible. In case any nallah / drain has to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of diversion required shall be furnished which shall be duly approved by the concerned department.
19. It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc.



20. Hydro-geological study of the area shall be carried out through an institute/ organisation of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.
21. Detailed Studies on the impacts of the ecology including fisheries of the river/estuary/ sea due to the proposed withdrawal of water / discharge of treated wastewater into the river/creek/ sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
22. Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project. Commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
23. Detailed plan for carrying out rainwater harvesting and its proposed utilisation in the plant shall be furnished.
24. Feasibility of zero discharge concept shall be critically examined and its details submitted.
25. Optimization of COC along with other water conservation measures in the project shall be specified.
26. Plan for recirculation of ash pond water and its implementation shall be submitted.
27. Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals.
28. Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out by a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of local communities.

29. Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
30. If the area has tribal population it shall be ensured that the rights of Tribals are well protected. The Project Proponent shall accordingly identify tribal issues under various provisions of the law of the land.
31. A detailed CSR plan along with activities wise break up of financial commitment shall be prepared. CSR component shall be identified considering need based assessment study. Sustainable income generating measures which can help in upliftment of poor section of society, which is consistent with the traditional skills of the people shall be identified. Separate budget for community development activities and income generating programmes shall be specified.
32. While formulating CSR schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The Project Proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CSR details done in the past should be clearly spelt out in case of expansion projects.
33. R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
34. Assessment of occupational health as endemic diseases of environmental origin shall be carried out and Action Plan to mitigate the same shall be prepared.
35. Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conducive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of

various health measures undertaken at intervals of two years shall be conducted with an excellent follow up plan of action wherever required.

36. One complete season site specific meteorological and AAQ data (except monsoon season) as per MoEF Notification dated 16.11.2009 shall be collected and the dates of monitoring recorded. The parameters to be covered for AAQ shall include SPM, RSPM (PM10, PM2.5), SO<sub>2</sub>, NO<sub>x</sub>, Hg and O<sub>3</sub> (ground level). The location of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone, villages in the vicinity and sensitive receptors including reserved forests. There should be at least one monitoring station each in the upwind and in the pre – dominant downwind direction at a location where maximum ground level concentration is likely to occur.
37. A list of industries existing and proposed in the study area shall be furnished.
38. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The wind roses should also be shown on the location map as well.
39. Radioactivity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
40. Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
41. Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished.
42. Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/ conveyor belt.
43. For proposals based on imported coal, inland transportation and port handling and rolling stocks /rail movement bottlenecks shall be critically examined and details furnished.

44. Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.
45. EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
46. A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be carried out. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided.
47. The DMP so formulated shall include measures against likely Tsunami/Cyclones/Storm Surges/Earthquakes etc, as applicable. It shall be ensured that DMP consists of both on-site and off-site plan, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan shall be prepared both in English and local languages.
48. Detailed plan for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary (except in areas not possible) with tree density of 2000 to 2500 trees per ha with a good survival rate of about 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports.
49. Over and above the green belt, as carbon sink, additional plantation shall be carried out in identified blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the Project Proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months.
50. Corporate Environment Policy
  - a. Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
  - b. Does the Environment Policy prescribe for standard operating process / procedures

to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

- c. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
  - d. Does the company have a system of reporting of non compliances /violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
51. All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
  52. Details of litigation pending or otherwise with respect to project in any court, tribunal etc. shall invariably be furnished.

#### **Additional TOR for Coastal Based TPPs:**

In addition to the general conditions specified above, the following should also be strictly followed (as applicable):

1. Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.
2. If the site includes or is located close to marshy areas and backwaters, these areas must be excluded from the site and the project boundary should be away from the CRZ line. Authenticated CRZ map from any of the authorized agency shall be submitted.
3. The soil levelling should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek. Major canals should not be altered but their bunds should be strengthened and de-silted.
4. Additional soil for levelling of the sites should be generated as far as possible within the sites, in a way that natural drainage system of the area is protected and improved
5. Marshy areas which hold large quantities of flood water shall be identified and shall not be disturbed.

6. No waste should be discharged into Creek, Canal systems, Backwaters, Marshy areas and seas without appropriate treatment. The outfall should be first treated in a guard pond (wherever feasible) and then discharged into deep sea (10 to 15 m depth). Similarly, the intake should be from deep sea to avoid aggregation of fish and in no case shall be from the estuarine zone. The brine that comes out from desalinization plants (if any) should not be discharged into sea without adequate dilution.
7. Mangrove conservation and regeneration plan shall be formulated and Action Plan with details of time bound implementation shall be specified, if mangroves are present in study area.
8. A common Green Endowment Fund should be created by the Project Proponents out of EMP budgets. The interest earned out of it should be used for the development and management of green cover of the area.
9. Impact on fisheries at various socio economic level shall be assessed.
10. An endowment of Fishermen Welfare Fund should be created out of CSR grants not only to enhance their quality of life through creation of facilities for fish landing platforms / fishing harbour / cold storage, but also to provide relief in case of emergency situations such as missing of fishermen on duty due to rough seas, tropical cyclones and storms etc.
11. Tsunami Emergency Management Plan shall be prepared and plan submitted prior to the commencement of construction work.
12. There should not be any contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. In other words necessary preventive measures for spillage from pipelines, such as lining of guard pond used for the treatment of outfall before discharging into the sea and surface RCC channels along the pipelines of outfall and intake should be adopted. This is just because the areas around the projects boundaries is fertile agricultural land used for paddy cultivation.

## Annexure C: Contents of EIA Document & Executive Summary of EIA

EIA Structure	Contents
Introduction	<ol style="list-style-type: none"> <li>1. Purpose of the Report</li> <li>2. Identification of Project &amp; Project Proponent</li> <li>3. Brief Description of the Project -nature, size, location, its importance to the country or region</li> <li>4. Scope of the Study (As per ToR)</li> </ol>
Project Description	<ol style="list-style-type: none"> <li>1. Description of those aspects of the Project that are likely to cause environmental effects.</li> <li>2. Details should give clear picture of the following: <ul style="list-style-type: none"> <li>• Type</li> <li>• Need</li> <li>• Location (maps showing location. project boundary; site layout)</li> <li>• Size of Operation</li> <li>• Proposed Schedule for Approval and Implementation</li> <li>• Technology and Process</li> </ul> </li> <li>3. Project Description (including drawings showing project layout, etc.)</li> <li>4. Schematic Representations (including feasibility drawings which give information important for purpose of EIA)</li> <li>5. Mitigation measures (to meet environmental standards and other EIA requirements)</li> <li>6. Assessment of New &amp; Untested technology (for the risk of technological failure)</li> </ol>
Description of the Environment	<ol style="list-style-type: none"> <li>1. Study Area</li> <li>2. Period</li> <li>3. Components &amp; Methodology</li> <li>4. Establishment of Baseline (for valued environmental components as identified in the scope)</li> <li>5. Base Maps of all environmental components</li> </ol>
Anticipated Environmental Impacts & Mitigation Measures	<ol style="list-style-type: none"> <li>1. Details of Investigated Environmental Impacts due to various aspects like: <ul style="list-style-type: none"> <li>• Location</li> <li>• Design</li> <li>• Construction</li> <li>• Regular Operations</li> <li>• Final Decommissioning or Rehabilitation (of a completed project)</li> </ul> </li> <li>2. Measures for Minimizing / Offsetting Identified Adverse Impacts</li> <li>3. Irreversible Commitments of environmental components</li> <li>4. Assessment of Significance of Impacts</li> <li>5. Mitigation Measures</li> </ol>

EIA Structure	Contents
Analysis of Alternatives (Technology & Site)	<p>Details for each Alternative (if Scoping indicates need for alternatives)</p> <ol style="list-style-type: none"> <li>1. Description</li> <li>2. Summary of Adverse Impacts</li> <li>3. Proposed Mitigation Measures</li> <li>4. Selection of Alternative</li> </ol>
Environmental Monitoring Program	<p>Technical aspects of monitoring effectiveness of mitigation measures include:</p> <ul style="list-style-type: none"> <li>• Measurement Methodologies</li> <li>• Frequency</li> <li>• Location</li> <li>• Data Analysis</li> <li>• Reporting Schedules</li> <li>• Emergency Procedures;</li> <li>• Detailed Budget</li> <li>• Procurement Schedules</li> </ul>
Additional Studies	<ul style="list-style-type: none"> <li>• Public Consultation</li> <li>• Risk Assessment</li> <li>• Social Impact Assessment</li> </ul>
Project Benefits	<p>Improvements in Physical and Social Infrastructure                      Employment Potential (skilled/ semi-skilled / unskilled)                      Other Tangible Benefits</p>
Environmental Cost Benefit Analysis	<p>If recommended during Scoping</p>
EMP	<p>Description of the Administrative Aspects after approval of the EIA to ensure implementation of mitigation measures and monitoring their effectiveness</p>
Summary & Conclusion (This will constitute the Summary of the EIA Report)	<ul style="list-style-type: none"> <li>• Overall Justification for implementation of the project</li> <li>• Explanation of mitigation of adverse effects</li> </ul>
Disclosure of Consultants engaged	<p>Details of the consultants engaged including:</p> <ul style="list-style-type: none"> <li>Name</li> <li>Brief Resume</li> <li>Nature of Consultancy</li> </ul>



## **Contents of Executive Summary of EIA Report**

The Executive Summary of EIA Report shall be a summary of the full EIA report condensed to 10 A4 size pages maximum. It should necessarily cover in brief the following chapters of the full EIA Report:

1. Project Description
2. Description of the Environment
3. Anticipated Environmental Impacts and Mitigation Measures
4. Environmental Monitoring Programme
5. Additional Studies
6. Project Benefits
7. Environment Management Plan





