

## Understanding the Environmental Clearance Process

Environmental clearance from Ministry of Environment & Forests is required for following 30 categories of project as per EIA notification-

### **Sector: Industry**

1. Petroleum refineries including crude and products pipelines
2. Chemical fertilizers (nitrogenous and phosphatic other than single superphosphate)
3. Pesticides (Technical)
4. Petrochemical complexes (both olefinic and aromatic) and petro chemical intermediates such as DMT, Caprolactam, LAB etc. and production of basic plastics such as LDPE, HDPE, PP, PVC
5. Bulk drugs and pharmaceuticals
6. Exploration of oil and gas and their production, transportation and their storage
7. Synthetic rubber
8. Asbestos and asbestos products
9. Hydrocyanic acid and its derivatives
10. a) Primary metallurgical industries (such as production of iron and steel, aluminum, copper, zinc, lead and ferro alloys) b) Electric Arc Furnace (Mini Steel Plants)
11. Chloro alkali industry
12. Integrated paint complex including manufacture of resins and basic raw materials required in the manufacture of paints
13. Viscose staple fiber and filament yarn
14. Storage batteries integrated with manufacture of oxides of lead and lead antimony alloys
15. Distilleries
16. Raw skins and hides
17. Pulp paper and news print
18. Dyes
19. Cement
20. Foundries (individual)
21. Electroplating
22. Meta Amino phenol

### **Sector: Mining**

23. Mining projects (with lease more than 5 hectares)

### **Sector: Thermal Power**

24. Nuclear power and related projects such as heavy water plants, nuclear fuel complex, rare earths
25. Thermal power plants

### **Sector: River Valley and Hydroelectric**

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

### **Sector: Infrastructure and Miscellaneous Infrastructure**

27. Ports, Harbors, Airports (except minor ports and harbors)
28. Highway projects except projects relating to improvement work including widening and strengthening of roads with marginal land acquisition along the existing alignments provided it does not pass through ecologically sensitive areas such as National Parks, sanctuaries, tiger reserves reserve forests
29. Tarred road in the Himalayas and forest areas
30. **Miscellaneous** All tourism projects between 200m – 500m of High Water line and at location with an elevation of more than 1000m with investment of more than Rs. 5 crores

The rationale behind listing these projects is environmental damage intensity. However, depending upon size/investment the applicability of our requirement may vary in certain cases. Similarly, certain areas are

more degraded and require specific regulation for permitting setting up of any kind of developmental project. MoEF has brought out various notifications regulating setting up projects in these areas. The expansion or modernization of the projects also increases the damage potential on environment. MoEF has therefore regulated undertaking expansion and modernization projects also for above identified 30 categories of projects.

The certain category of projects reserved for Small Scale Industry where investment is less than 1 crore been exempted from the preview of Environmental Clearance (EC).

Setting up projects in Coastal zone area has also been regulated for the protection of Coastal area environment. Since public may be effected by a developmental project, provision of public consultation (with few exceptions) has been made in the EC process. Ministry of Environment & Forests has grouped 30 categories of projects in five-sub group depending on the similarity of EC process work flow. These groups are as under:

- 1. Industry**
- 2. Mining**
- 3. Thermal Power**
- 4. River Valley and Hydro Electric**
- 5. Infrastructure and Miscellaneous projects**

The projects falling in coastal Zone regulated area out of the above requires clearance under CRZ notification also.

### **Life Cycle of a Project**

**Screening:** This phase facilitates decision-making about applicability of EC process. It provides clear guidance to decide whether the proposed project requires environmental clearance from MoEF or not. If not, does it require clearance from State Department (like in thermal Power plant) or to approach State Pollution Control Board for Consent to establish.

**Siting and EIA Report Preparation:** This phase facilitates identifying the siting guidelines applicable to the project so as to select the right location for the proposed project. This phase also guides about the stage when it can start detail rapid EIA study.

**Public hearing:** This phase facilitates screening the applicability of public hearing for the proposed project and what steps to follow for completion of public hearing completion. It also provides the direction of legislated time limit applicable to public hearing process and NOC from Pollution Control Board.

**Other Approvals, recommendations, and certifications:** This phase provides direction for approvals / recommendation essential in case utilities like power, water, raw material, handling of hazardous chemicals, hazardous waste, explosives etc has the repercussion on environment before the EC process. These requirements would necessitate approvals from the concerned government departments. This phase also provide direction about the CRZ approvals requirement and its applicability.

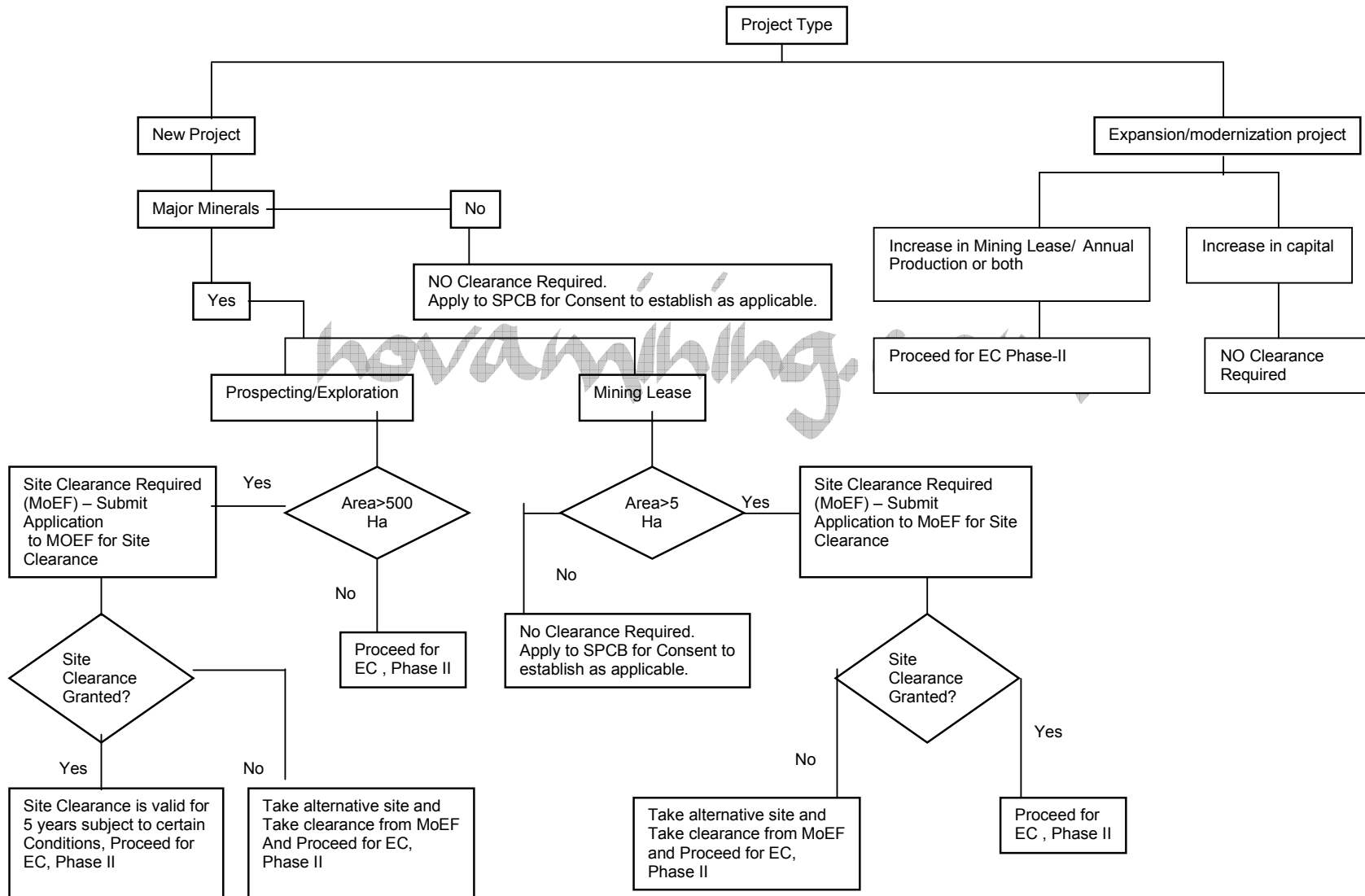
**Clearance from IAA-MoEF:** This phase facilitates the steps of EC process and time limits for completion of EC process.

**Post Environmental Clearance Monitoring:** This phase defines the monitoring requirement once a project has been accorded environmental clearance.

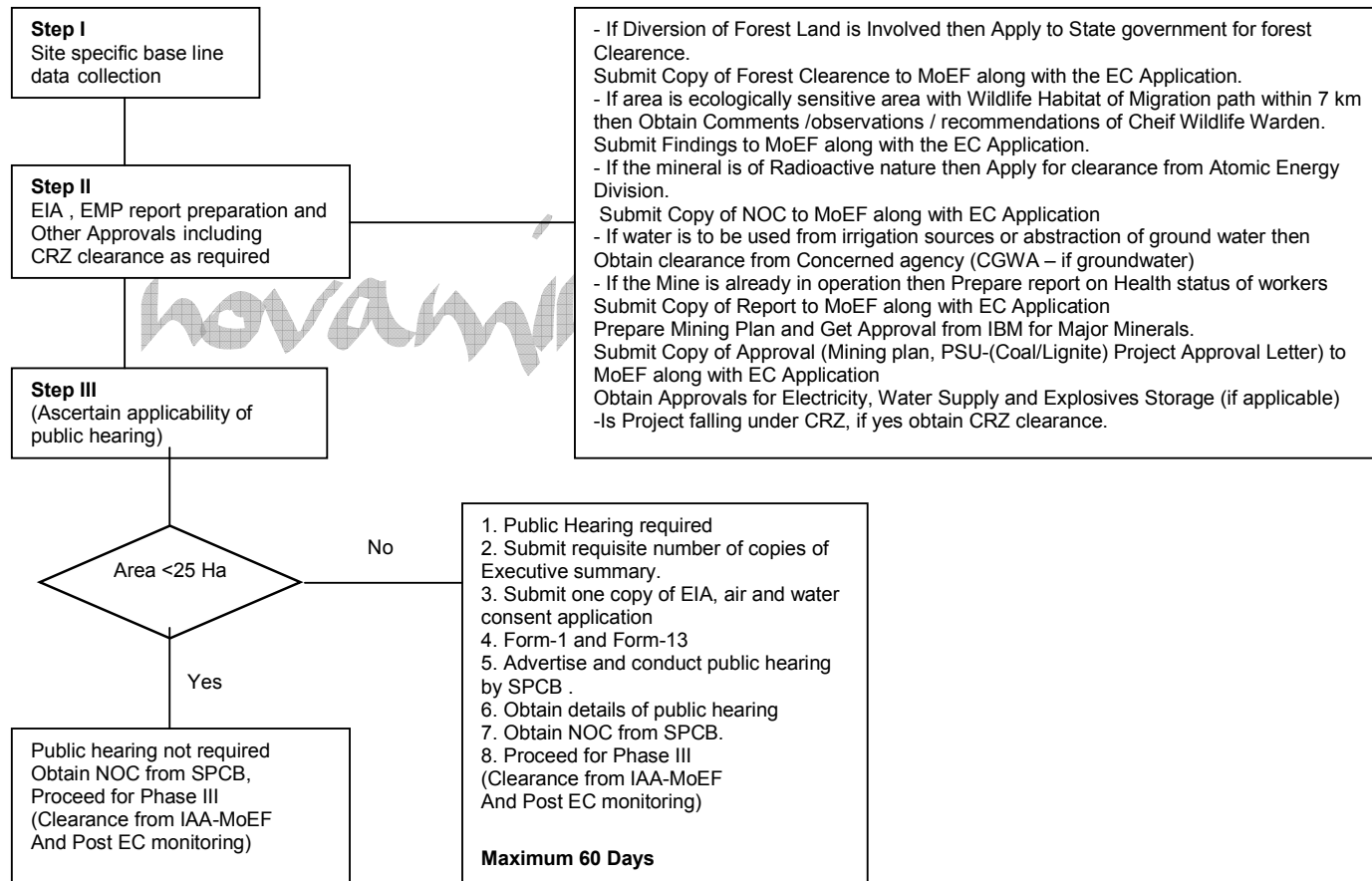
**For mining investment clause is not applicable.**

## Information required at different stages of mining sector project

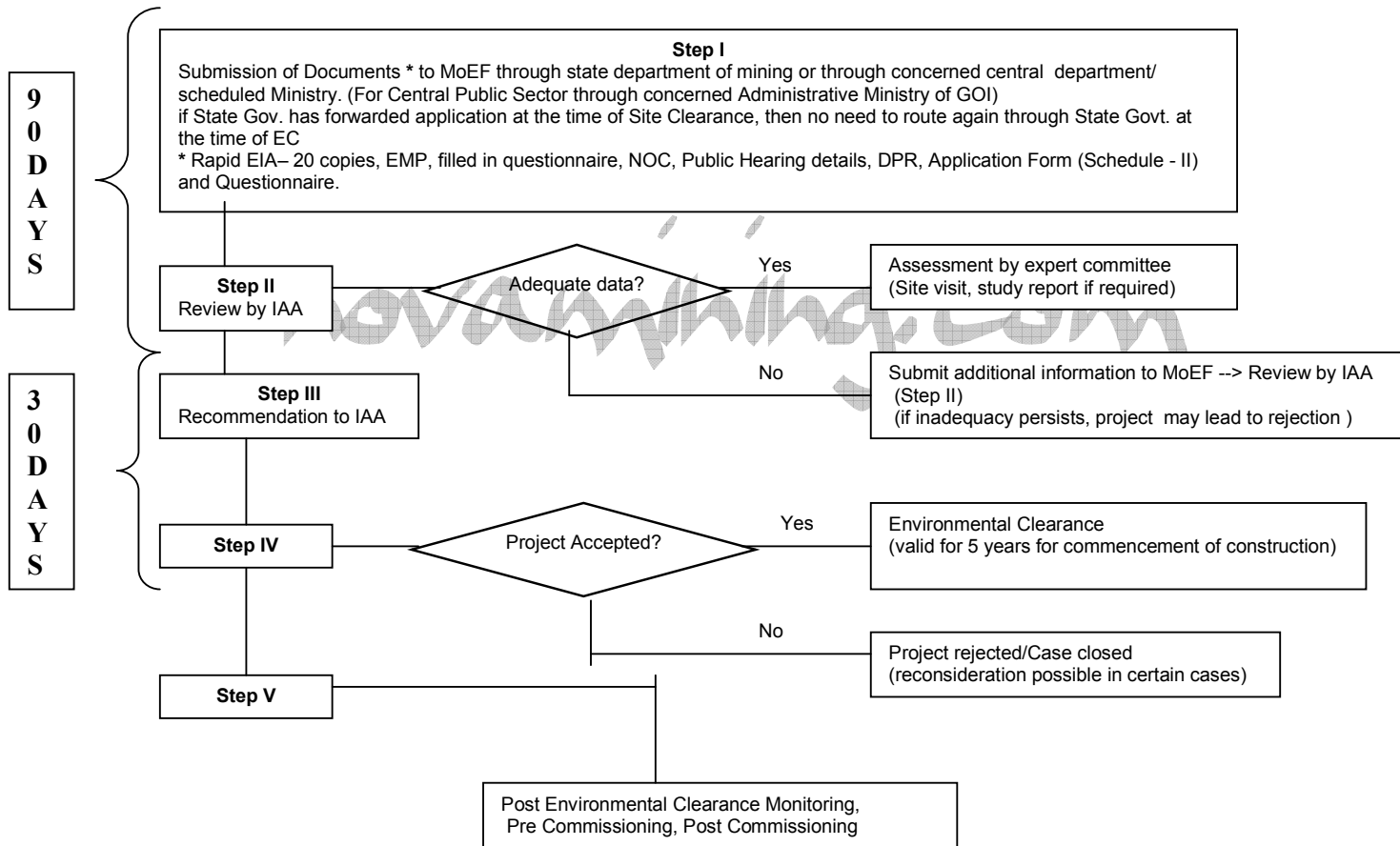
### Environmental clearance procedure for Mining: Phase I ( Screening)



**Environmental Clearance: Phase II (Siting, EIA Report Preparation, Public hearing)**



**Environmental Clearance: Phase III (Clearance from IAA-MoEF and Post EC monitoring)**



**SCREENING**

<b>Major activity</b>	<b>Information to be collected</b> (depending on the project location,size and type there can be variation in the information needed)	<b>Source of information</b>	<b>Stake holders</b>
To check the requirement of Environmental Clearance	Capital Investment	Project proponent	Project proponent
	Technical Information of project	Project proponent	
	Regulations Applicable and requirement under them	MoEF / SPCB / State Department of Environment websites / Gazette Notification	

**SITING**

<b>Major activity</b>	<b>Information to be collected</b> (depending on the project location,size and type there can be variation in the information needed)	<b>Source of information</b>	<b>Stake holders</b>	<b>Remarks</b>
Obtain site clearance / consent to establish / air and water consent from State Pollution Control Board	Basic Project Information – includes information about location, proposed investment, manpower, raw materials, products, manufacturing process, siting details, climate, settlement	Project Proponent	State Pollution Control Board, State Department of Environment, Project Proponent	For Mining and prospecting and exploration of major minerals in areas above 500 Ha the site clearance is to be taken from the Ministry of Environment and forest.
	Regulations Applicable and requirement under them	MoEF / SPCB / State Department of Environment websites / Gazette Notification (refer Appendix 1 for summary and linkages)	Concerned Government Authorities	

	Emission inventory of air pollution – includes information about melting furnaces, boilers, process emissions, emission control equipment for air pollution	Project Proponent		
Assessment of waste water discharge – includes information like source of water supply, characteristics, water treatment details, disposal of waste water				
Solid Waste – information about solid waste generation, quantity, method of disposal				
Other type of pollution – like noise, odour pollution, emergency management				
Other attachments – industrial license, explosive license, permission from local body, land schedule of the site, layout map of proposed project, list of pollution control equipment, process flow chart				
Hazardous Waste – information about solid waste generation, quantity, method of disposal				

**Additional Remarks:** Some areas have been restricted for establishing of new thermal projects. These areas include:

- Doon Valley
- Dahanu Taluka
- Antop Hill, Bombay
- Taj Trapezium

-Panchmari

-Panchgani Murud-Janjira in Raigadh district

### EIA REPORT PREPARATION

Major activity	Information to be collected (depending on the project location, size and type there can be variation in the information needed)	Source of information	Stakeholders	Remarks
Preparation of Environmental Impact Assessment Report and submission to Ministry of Environment and Forest for their appraisal	<b>General Information about the proposed facility</b>	Project Proponent	Project Proponent	The EIA report should be based on three monthly monitoring data or else as specified by MoEF.
	<b>Geographical Information (includes Latitude longitude, geographical characteristics, nature of soil, etc.)</b>	Survey of India maps, National Bureau of Soil Survey and Land Use Planning, Nagpur		
	<b>Environmental settings</b>	Census books, Project Proponent		
	Current land usage			
	Proposed projects area details			
	Area features in a radius of 10 kms – includes ecological, man made features			
	Information about flora and fauna in 10 km radius	Zoological Survey of India, Botanical survey of India, Project Proponent		
	Information about seismic activity	Indian Meteorology Department		
	If mining is to be done in CRZ confirmation of mineral not available outside CRZ, also a layout plan showing the mining area	Chief Hydrographer		
	Major Geological formation in the area	Geological survey of India		
	<b>Mine Details</b>	Project Proponent		
	Information about life of mines and details like lease period			
	Type and method of mining			
	Details of loading, transportation and unloading of minerals			
	Details of machinery to be used at the mines			
Surface drainage pattern at the mine				
<b>Micro-Meteorological</b>	Indian Meteorology Department, micro-			



<b>Information</b>	meteorological survey to be carried out by the Project Proponent
Rain fall	
Hourly relatively humidity	
Hourly Temperature	
Hourly average wind direction and speed	
Solar radiation	
Cloud cover	
Mixing height	
<b>Air Environment</b>	Ambient air quality monitoring to be conducted by project proponent
24 hourly concentrations for SPM, RPM, SO <sub>2</sub> , NO <sub>x</sub> , CO, Lead	
Specific air pollution issues in the project area	
Predicted impact of the project on air environment	
<b>Water Environment</b>	Central / state ground water authorities, water sampling to be carried out by project proponent
Water requirement for the project and its components	
Source of raw water supply	
Ground water Information	
Physico chemical analysis of water to be used in project / township	
Waste water generation details from the project and its component	
Predicted impact on water quality of the receiving body	
<b>Waste Management</b>	Waste analysis to be carried out by project proponent
Details of the solid waste to be generated	
Possibility of recovery / recycle of the waste	
Details of solid waste disposal	
Details of the land fill in case the waste is to be disposed in a land fill	
Details of incinerator in case the waste is to be incinerated	
<b>Noise Environment</b>	Noise monitoring to be carried out by project proponent
Noise levels (Leq) at generating source	
Ambient day-night	

noise level (Leq)	
<b>Fuel / Energy Requirements</b>	Project Proponent
Total power requirements	
Sources of Power	
Details of the fuels to be used	
<b>Atmospheric impact</b>	Project Proponent
Flue gas characteristics	
Stack emission details	
Predicted impact on air quality	
<b>Pollution Load statement ( applicable to expansion / modernization plants)</b>	Project Proponent
Comparison of land area, water, power, waste water, air emissions, hazardous chemical storage and solid waste details	
<b>Occupational health and safety</b>	Project Proponent
Details of occupational hazards/risks and consequences levels and control measures.	
<b>Pollution control</b>	Project Proponent
Details of pollution control equipments	
<b>Green belt</b>	Project Proponent
Details of plantation	
<b>Construction phase</b>	Project Proponent
Details of construction phase in regards to people employed, their requirements and facilities to be provided	
<b>Human settlement</b>	Census, socio economic survey to be conducted by the project proponent
Socio economic data for the population in 10 km radius	
Predicted socio economic impact	
Rehabilitation and resettlement plan (wherever applicable)	
<b>Environment Management Plan</b>	
<b>Emergency Preparedness and Response plan</b>	

**PUBLIC HEARING**

<b>Major activity</b>	<b>Information to be collected/submitted</b> (depending on the project location,size and type there can be variation in the information needed)	<b>Source of information</b>	<b>Stakeholders</b>
Conduct of public hearing of the project and grant of NOC from SPCB	Requisite number of copies of Executive summary of the project in English and local language	Project Proponent	State Pollution Control Board, Project Proponent, any person likely to be affected by the grant of environmental clearance, any association of person not likely to be affected, any local authority in whose jurisdiction the project is falling, NGO's
	EIA report (on request by concerned stake holder)		
	Advertisement in two newspaper notifying about the public hearing (one should be of the local language)		
	Filled in Form I prescribed under Air(prevention and control of pollution) Act 1983.		
	Filled in Form 13 prescribed under Water(prevention and control of pollution) Act		

**OTHER CERTIFICATIONS , RECOMMENDATIONS AND APPROVALS**

<b>Major activity</b>	<b>Information to be collected</b> (depending on the project location,size and type there can be variation in the information needed)	<b>Source of information</b>	<b>Stake holders</b>	<b>Remarks</b>
Grant of other licenses, approvals and recommendations from concerned departments	Approval of ground water board / irrigation department / municipality for water supply	Project Proponent	Project proponent and the respective departments	The concerned licenses are to be accrued by the project proponent as per the specific information need of the concerned department or ministry
	Approval of electricity connection from electricity supply board			
	Approval of chief controller of explosives for storage of hazardous substances			
	Forest Clearance from state department of			

	Forest			
	Approval from atomic Energy Division			
	Mining plan approval from Indian Bureau of Mines / Ministry of Coal			
	Observations / recommendations of chief wildlife warden			

**CLEARANCES FROM IAA- MINISTRY IF ENVT. AND FOREST**

<b>Major activity</b>	<b>Information to be collected/submitted</b> (depending on the project location,size and type there can be variation in the information needed)	<b>Source of information</b>	<b>Stakeholders</b>	<b>Remarks</b>
Environmental clearance from Ministry of Environment and Forest	20 copies of filled up application form as per Schedule II of EIA notificagtion dated 27th January 1997. 20 copies of EIA /Risk assessment report Filled in Questionnaire along with enclosure/other approvals. 1 copy of project report(RAP report if required,NOC & Public Hearing Report)	Project Proponent	Ministry of Environment and Forest, Expert Committee, Project Proponent, Public / NGO	In case of inadequacy found by the Expert committee clarifications to the same are to be provided by project proponent

**POST PROJECT MONITORING**

<b>Major activity</b>	<b>Information to be collected/submitted</b> (depending on the project location,size and type there can be variation in the information needed)	<b>Source of information</b>	<b>Stake holders</b>
Monitoring of the terms and conditions for environmental safeguards as stipulated by IAA	Six monthly compliance report to be submitted to the regional MOEF	Project Proponent	Project Proponent, State Pollution Control Board, Regional

			offices of MoEF
	Monitoring report/suggestions and recommendations to the MOEF.	Regional MOEF	Regional MOEF, MOEF

hovanining.com