

No.IA-J-11015/23/2020-IA-II(M)
Government of India
Minister of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110003
16 Dec 2020

To,

M/s COAL MINE BIRLA CORPORATION LIMITED
Industry House, 2nd Floor, 159, Churchgate Reclamation,
Mumbai City-400020
Maharashtra

Tel.No.-; Email:sandeep.jain@birlacorp.com

Sir/Madam,

This has reference to the proposal submitted in the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the proponent had submitted online information in the prescribed format (Form-1) along with a Pre-feasibility Report. The details of the proposal are given below:

- | | |
|---|--|
| 1. Proposal No.: | IA/MP/CMIN/185753/2020 |
| 2. Name of the Proposal: | Bikram Coal Mine (ML Area: 239 Ha), for 0.36 MTPA Coal Production by Opencast & Underground Coal Mining at Tehsil - Burhar, District – Shahdol, M.P. |
| 3. Category of the Proposal: | Coal Mining |
| 4. Project/Activity applied for: | 1(a) Mining of minerals |
| 5. Date of submission for TOR: | 07 Dec 2020 |

In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows:

**STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR
PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE**

**1(a):STANDARD TERMS OF REFERENCE FOR CONDUCTING
ENVIRONMENT IMPACT ASSESSMENT STUDY FOR COAL
MINING PROJECTS AND INFORMATION TO BE INCLUDED IN
EIA/EMP REPORT**

**C. STANDARD TOR FOR AN OPENCAST-CUM-UNDERGROUND COAL MINING
PROJECT**

- 1) An EIA-EMP Report would be prepared for a combined rated capacity ofMTPA for OC-cum-UG project which consists of MTPA for OC and MTPA for UG in an ML/project area ofha based on the generic structure specified in Appendix III of the EIA Notification 2006.
- 2) An EIA-EMP Report would be prepared for ----. MTPA rated capacity cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for MTPA of coal production based on approval of project/Mining Plan for MTPA. Baseline data collection can be for any season except monsoon.
- 3) The TOR prescribed for both opencast and underground mining are applicable for opencast - cum-underground mining.
- 4) Information on the following aspects of the corporate Environment Responsibility should also be provided for opencast, underground and opencast-cum-underground Mine
- 5) Corporate Environment Responsibility:
 - e) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - f) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - g) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - h) To have proper checks and balances, the company should have a well laid down 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.

**1(a):STANDARD TERMS OF REFERENCE FOR CONDUCTING
ENVIRONMENT IMPACT ASSESSMENT STUDY FOR COAL
MINING PROJECTSAND INFORMATION TO BE INCLUDED IN EIA/
EMP REPORT**

A. STANDARD TOR FOR AN OPENCAST COAL MINING PROJECT

- 1) An EIA-EMP Report shall be prepared for..... MTPA rated capacity in an ML/project area of.....ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
- 2) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season except monsoon.
- 3) A map specifying locations of the State, District and Project location should be provided.
- 4) A Study area map of the core zone and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- 5) Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
- 6) Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- 7) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- 8) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.

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- 9) In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and flood control Department of the concerned state.
- 10) Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map.
- 11) Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

LANDUSE DETAILS FOR OPENCAST PROJECT should be given as per the following table:

S.N.	LANDUSE	Within ML Area (ha)	Outside ML Area (ha)	TOTAL
1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			
	TOTAL			

- 12) Break-up of lease/project area as per mining operations should be provided.
- 13) Impact of changes in the land use due to the project, if much of the land being acquired is predominantly agricultural land/forestland/grazing land.
- 14) One-season (non-monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- 15) Map of the study area (1: 50, 000 scale) (core and buffer zone clearly delineating the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources should be provided. The number and location of the stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Values should be provided based on desirable limits.

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- 16) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I fauna, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan should be prepared and submitted with EIA-EMP Report; and comments from the CWLW of the State Govt. should also be obtained and furnished.
- 17) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures.
- 18) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- 19) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- 20) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- 21) Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be given.
- 22) Impact of mining and water abstraction use in mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- 23) Impact of blasting, noise and vibrations should be given.
- 24) Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- 25) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop, management plan for maintenance of HEMM, machinery, equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- 26) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo entirely wagons and into trucks/tippers.

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- 27) Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28o angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
- 28) Efforts be made for maximising progressive internal dumping of O.B., sequential mining , external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.
- 29) Impact of change in land use from mining operations and wether the land can be restored to agriculture use post mining.
- 30) Progressive Green belt and ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEF&CC given below) and selection of species (native) based on original survey/landuse should be given.

Table 1: Stage-wise Landuse and Reclamation Area (ha)

S.No.	Land use Category	Present (1st Year)	5th Year	10th Year	20th year	24th Year (end of Mine life)*
1.	Backfilled Area(Reclaimed with plantation)					
2.	Excavated Area (not reclaimed)/void					
3.	External OB dump Reclaimed with plantation)					
4.	Reclaimed Top soil dump					
5.	Green Built Area					
6.	Undisturbed area (brought under plantation)					
7.	Roads (avenue plantation)					
8.	Area around buildings and Infrastructure					
	TOTAL	110*	110*	110*	110*	110*

* As a representative example

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Table 2: Stage-wise Cumulative Plantation

S.N.	YEAR*	Green Belt		External Dump		Backfilled Area		Others (Undisturbed Area/etc.)		Total	
		Area (ha)	No. of trees	Area (ha)	No. of trees	Area (ha)	No. of trees	Area (ha)	No. of trees	Area (ha)	No. of trees
1.	1st year										
2.	3rd year										
3.	5th year										
4.	10th year										
5.	15th year										
6.	20th year										
7.	25th year										
8.	30th year										
9.	34th year (end of mine life)										
10.	34-37th Year (Post-mining)										

* As a representative example

- 31) Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the status pre- mining should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of rehandling (wherever applicable) and backfilling and progressive mine closure and reclamation should be detailed.

Table 3: Post-Mining Landuse Pattern of ML/Project Area (ha)

S.N.	Land use during Mining	Land Use (ha)				
		Plantation	Water Body	Public Use	Undisturbed	TOTAL
1.	External OB Dump					
2.	Top soil Dump					
3.	Excavation					
4.	Roads					
4.	Built up area					
5.	Green Belt					
6.	Undisturbed Area					
	TOTAL					110

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- 32) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be accorded?.
- 33) Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
- 34) Risk Assessment and Disaster Preparedness and Management Plan should be provided.
- 35) Integration of the Env. Management Plan with measures for minimising use of natural resources - water, land, energy, etc. should be carried out.
- 36) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- 37) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- 38) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- 39) Corporate Environment Responsibility:
 - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down 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.
- 40) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

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- 41) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
- 42) Status of any litigations/ court cases filed/pending on the project should be provided.
- 43) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- 44) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

FORESTRY CLEARANCE:

Details on the Forest Clearance should be given as per the format given:

TOTAL ML/PROJECT AREA (ha)	TOTAL FOREST-LAND (ha)	Date of FC	Extent of forestland	Balance area for which FC is yet to be obtained	Status of appl. for diversion of Forestland
		If more than one, provide details of each FC			

B. STANDARD TOR FOR AN UNDERGROUND COAL MINING PROJECT

- 1) An EIA-EMP Report shall be prepared for a peak capacity of.....MTPA over an area of..... ha addressing the impacts of the underground coalmine project including the aspects of mineral transportation and issues of impacts on hydrogeology, plan for conservation of flora and fauna and afforestation/plantation programme based on the generic structure specified in Appendix III of the EIA Notification 2006. Baseline data collection can be for any season except monsoon.
- 2) The EIA-EMP report should also cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality with respect to air, water, land, biotic community, etc. through collection of baseline data and information generation of baseline data on impacts for..... MTPA of coal production based on approved project/Mining Plan.
- 3) A Study area map of the core zone and 10 km area of the buffer zone (15 km of the buffer zone in case of ecologically sensitive areas) delineating the major landscape features such as the land use, drainage, locations of habitats, major construction including railways, roads, pipelines, major industries/mines and other polluting sources;and shall also indicate the migratory corridors of fauna,

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if any and the areas where endangered fauna and plants of medicinal and economic importance are found in the area.

- 4) Map showing the core zone along with 3-5 km of the buffer zone showing the delineation of the agricultural land (irrigated and unirrigated, uncultivable land (as defined in the revenue records), forest areas (as per records) and grazing land and wasteland and water bodies should be provided.
- 5) Contour map at 3 m interval along with Site plan of the mine (lease/project area with about 3-5 km of the study area) showing the various surface structures such as buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within/adjacent to the ML), green belt and undisturbed area and if any existing roads, drains/natural water bodies that are to be left undisturbed and details of natural drainage adjoining the lease/project and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channeling of the water courses, etc. and highways passing through the lease/project area should be given.
- 6) Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area should be provided as per the tables given below. Impacts of project, if any on the land use, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations should be analyzed. Extent of area under surface rights and under mining rights should be specified.

S.N.	ML/Project Land use	Area under Surface Rights (ha)	Area under Rights (ha)	Area under Both (ha)
1.	Agricultural land			
2.	Forest Land			
3.	Grazing Land			
4.	Settlements			
5.	Others (specify)			

Area Under Surface Rights

S.N.	Details	Area (ha)
1.	Buildings	
2.	Infrastructure	
3.	Roads	
4.	Others (specify)	
	TOTAL	

- 7) Study on the existing flora and fauna in the study area carried out by an institution of relevant discipline and the list of flora and fauna duly authenticated separately for the core and buffer zones and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. The report and the list should be authenticated by the concerned institution carrying out the study and the names of the species (scientific and common

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names) along with the status of species as per the classification of the Wild Life Protection Act, 1972 should be furnished.

- 8) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working plan/scheme until the end of mine life should be reflected on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan should be provided. Geological maps should also be included.
- 9) Impact of mining on hydrology, modification of natural drainage, diversion and channelling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon should be provided.
- 10) Collection of one-season (non-monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SO_x, NO_x and heavy metals such as Hg, Pb, Cr, AS, etc), noise, water (surface and groundwater), soil along with one-season met data should be provided.
- 11) Map of the study area (core and buffer zone) clearly delineating the location of various sampling stations for air/water/soil and noise (each shown separately) superimposed with location of habitats, wind roses, other industries/mines, polluting sources should be given. The number and location of the stations should be selected on the basis of the proposed impacts in the downwind/downstream/groundwater regime. One station should be in the upwind/upstream/non-impact non-polluting area as a control station. Wind roses to determine air pollutant dispersion and impacts thereof shall be determined. Monitoring should be as per CPCB guidelines and standards for air, water, noise notified under Environment Protection Rules. Parameters for water testing for both ground and surface waters should be as per ISI standards and CPCB classification of surface water wherever applicable.
- 12) Impact of mining and water abstraction and mine water discharge from the mine on the hydrogeology and groundwater regime within the core zone and 10km buffer zone including studies on the impact of mining on the groundwater regime. Details of rainwater harvesting and measures for recharge of groundwater should be reflected wherever the areas are declared dark/grey from groundwater development.
- 13) Study on subsidence, continuous monitoring measures for mitigation/prevention of subsidence, modelling subsidence prediction and its use during mine operation, safety issues should be done.
- 14) Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
- 15) Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
- 16) Impacts of mineral transportation inside and outside the lease/project should be provided. The entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, and their impacts on air quality should be shown in a flow chart with the specific points where

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fugitive emissions can arise with the specific pollution control/mitigative measures proposed to be put in place. The carrying capacity of existing roads in the area and if new roads are proposed, the impact of their construction and particularly if it involves use forest land. Efforts be made to reduce coal dust generation by truck loading through CHP and wagon loading through CHP/SILO to reduce air pollution

- 17) Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
- 18) The number and efficiency of mobile/static water sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
- 19) Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
- 20) Conceptual Final Mine Closure Plan along with the fund requirement for the detailed activities proposed there under should be given. Impacts of change in land use for mining operations and details of post mining land use, including the feasibility of using the land for agriculture should be provided.
- 21) Greenbelt development should be undertaken particularly around the transport route and CHP. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
- 22) Details of cost of EMP (capital and recurring) in the project cost and for final mine closure plan and these include the specific costs (capital and recurring) of each pollution control/mitigative measures proposed in the project until the end of mine life and a statement that this is included in the project cost should be given.
- 23) The Env. Management Plan should be integrated with measures for minimizing the use of natural resources - water, land, energy, raw materials/mineral, etc.
- 24) Detailed project specific R&R Plan with data on the existing socio-economic status (including tribals, SC/ST) of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be provided.
- 25) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- 26) Corporate Environment Responsibility:
 - a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.

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- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d) To have proper checks and balances, the company should have a well laid down 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.
- 27) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- 28) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated
- 29) Status of any litigations/ court cases filed/pending in any Court/Tribunal on the project should be provided.
- 30) Details on sample test analysis of: Characteristics of coal: This should include details on grade and other characteristics such as ash content, and heavy metals including levels of Hg, As, Pb, Cr etc. should be given.
- 31) Copies of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval, NOC from Flood and Irrigation Dept. (if req.), etc. should be provided wherever applicable.

FORESTRY CLEARANCE: Details on the forest clearance the details should be given as per format.

TOTAL ML/PROJECT AREA (ha)	TOTAL FORESTLAND (ha)	Date of FC	Extent of forestland	Balance area for which FC is yet to be obtained	Status of appl. for diversion of forestland
		If more than one, provide details of each FC			

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C. STANDARD TOR FOR AN OPENCAST-CUM-UNDERGROUND COAL MINING PROJECT

- 1) An EIA-EMP Report would be prepared for a combined rated capacity ofMTPA for OC-cum-UG project which consists of MTPA for OC and MTPA for UG in an ML/project area ofha based on the generic structure specified in Appendix III of the EIA Notification 2006.
- 2) An EIA-EMP Report would be prepared for ----. MTPA rated capacity cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for MTPA of coal production based on approval of project/Mining Plan for MTPA. Baseline data collection can be for any season except monsoon.
- 3) The TOR prescribed for both opencast and underground mining are applicable for opencast - cum-underground mining.
- 4) Information on the following aspects of the corporate Environment Responsibility should also be provided for opencast, underground and opencast-cum-underground Mine
- 5) Corporate Environment Responsibility:
 - e) The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - f) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
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 - h) To have proper checks and balances, the company should have a well laid down 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.

D. GENERAL CONDITIONS AND ADDITIONAL POINTS OF TOR

The following general points should be noted:-

- 1) All documents should be properly indexed, page numbered.
- 2) Period/date of data collection should be clearly indicated.
- 3) Authenticated English translation of all material in Regional languages should be provided.
- 4) After the preparation of the draft EIA-EMP Report as per the aforesaid TOR, the proponent shall get the Public Hearing conducted as prescribed in the EIA Notification 2006 and its subsequent amendments and take necessary action for obtaining environmental clearance under the provisions of the EIA Notification 2006 and its subsequent amendments.

STANDARD TERMS OF REFERENCE (TOR) FOR EIA/EMP REPORT FOR PROJECTS/ACTIVITIES REQUIRING ENVIRONMENT CLEARANCE

- 5) The letter/application for EC should quote the MOEF&CC file No. and also attach a copy of the letter prescribing the TOR.
- 6) The copy of the letter received from the Ministry on the TOR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- 7) The final EIA-EMP report submitted to the Ministry must incorporate the issues in TOR and that raised in Public Hearing. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific TOR prescribed by Ministry and the issue raised in the P.H. have been incorporated. Mining Questionnaire (posted on MOEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- 8) General Instructions for the preparation and presentation before the EAC of EC for projects of Coal Sector should be incorporated/followed.
- 9) The following additional points are also to be noted: (a) Grant of TOR does not necessarily mean grant of EC. (b) Grant of TOR/EC to the present project does not necessarily mean grant of EC to the captive/linked project. (c) Grant of TOR/EC to the present project does not necessarily mean grant of approvals in other regulations such as the Forest (Conservation) Act 1980 or the Wildlife (Protection) Act, 1972 and (d) Grant of EC is also subject to Circulars issued under the EIA Notification 2006 from time to time, which are available on the MOEF&CC website: www.envfor.nic.in
