MODEL TERMS OF REFERENCE (TOR) (GUIDELINES) FOR PREPARATION OF TOR FOR OPENCAST COAL MINES AND UNDERGROUND COAL MINES OF M/s COAL INDIA LTD. (CIL)

The following is a Model TOR (guideline) for preparation of TOR for coal mines (OC and UG) of M/s Coal India Ltd., which have not obtained an EC and are in violation of the EIA Notification 1994 and 2006. The status of violation is determined comparing present status (of lease area/production/both) with maximum pre-1994 of the following categories:

1. Expansion in production only with no prior EC.
2. Expansion in lease area only with no prior EC
3. Expansion in production and in lease area with no prior EC
4. Change in technology/process/method of mining such as conversion of UG Mining to OC mining and vice-versa with no prior EC
5. Reopening an old abandoned mine into OC
6. Realignment of mine boundaries of neighbouring mines.
7. Clusters of small mines for preparation of one EIA-EMP
8. Renewal cases vide the SC Judgement dated 13.02.2004 in W.P. 4677/1985- M.C. Mehta Vs. UOI & Ors.

STRUCTURE OF TOR FOR OC MINES

- EIA-EMP Report would based on the highest achievable rated capacity of the Project in terms of reserves, technology, equipment, manpower, resource use and calendar programme and in the lease area (ha).
- Maps to be provided
- Landuse* details including topographical features
- EIA-EMP Report would be based on the Generic structure given in Appendix III to the EIA Notification 2006 for the life of the mine over a specified lease/project area or its expansion based on proposed peak rated capacity or expansion in production base don peak rated capacity.

For mines acquired from pre-nationalization period for which records of status of land/lease details are not available, status of the mine at the time of acquisition by the respective coal company may be presented.

Baseline data on:

- Geology
- Ecology
- Env. Quality for at least one season data except monsoon as per
- Monitoring Protocol established by the Central Pollution Control Board
- Socio-economic status.

Mining Method and Technology, Equipment used

Calendar Plan for coal production and excavation programme based on proposed **peak rated capacity** for the life of the mine over a specified lease/project area or its expansion.

Impacts on:

- Changes made in landuse
- Ecology and Natural resources.
- Environmental Quality Water, Air, Noise, Soil
- Hydrology and Hydrogeology
- Socio-economic status

Environmental Management Plan:

- Ecological (landuse) and habitat (species and human) restoration including Conservation Plan.
- Environmental mitigation and control measures.
- Waste management and land reclamation
- Progressive and Final Mine closure.
- Disaster Prevention and Management
- Risk Assessment
- Socio-economic measures including R&R
- Environmental Monitoring (both by PP and by regulator)
- Costs for (i) EMP (ii) Socio-economic (iii) R&R

EMP for OC mines should also include:

- Conservation Plan for the endangered/ endemic/economically important biotic species found in the study area and for areas near ecologically sensitive areas/migratory corridors
- Greenbelt Development, Progressive Mine Closure and Final Mine Closure and Habitat Restoration and Post Mining Landuse

- Occupational Health
- ntegrating in the Environmental Management Plan with measures for minimising use of natural resources - water, land, energy, etc.

Stage 1: Application for TOR (please also refer to attached instructions)

- Form I with all sections filled in
- Pre-feasibility report (along with draft Mining Plan/Project Report if already prepared)

A. Structure of EIA-EMP Report

(i). An EIA-EMP Report would be prepared for _____ MTPA rated capacity based on the generic structure specified in Appendix III of the EIA Notification 2006.

(ii). The EIA-EMP Report prepared for_____ MTPA rated capacity would cover, inter-alia, the baseline data generation and collation, impact assessment and management plan for the project specific activities on the environment of the study area (core zone and buffer zone as specified in the Notification), and the environmental quality air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modelling for _____ MTPA of coal production based on approval of project/Mining Plan for that production capacity. Baseline data collection can be for any season except monsoon.

(iii). A map specifying locations of the State, District and Project location.

(iv). A Study area map of the core zone and 10km area of the buffer zone (from boundary of the core zone) clearly delineating the major topographical features such as the land use features such as surface drainage of rivers/streams/nalas/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources, and in case of ecologically sensitive areas within 15 km of the core zone 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 are found in the area,.

Essential Topo Sheet/Maps to be provided with TOR Application

(v). Land use map of the study area (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note of the land use forest, agricultural, grazing, wasteland, water bodies, human habitation and other surface features such as railway tracks, roads, N.H., etc.

(vi). Toposheet of present land use map of the study area (1: 50,000 scale) may also be provided with explanatory note of the land use ? forest, agricultural, grazing, wasteland, water bodies, human habitation and other surface features such as railway tracks, roads, N.H., habitation, location of major industries, mines etc.

(vii). Toposheet showing the core zone delineating the agricultural land (irrigated and unirrigated, uncultivable land (as defined in the revenue records), forest areas (as per records), water bodies, and other surface features such as railway tracks, roads, incl, N.H., habitation, etc

(viii). Contour map of 3m intervals of core zone and Site plan of the mine showing the various 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 and if any, in topography such as existing roads, drains/natural water bodies are to be left undisturbed along with any natural drainage adjoining the lease and modification of thereof in terms of construction of embankments/bunds, proposed diversion/rechannelling of the water courses, etc., approach roads, major haul roads, etc.

Baseline data on Landuse

(ix). Existing land use details and major topographical features in the core zone and buffer zone.

(x). Break up of lease area as per different land uses and their stage of acquisition.

Baseline Data on Env. Quality

(xi). Collection of one-season (non-monsoon) primary base-line data on environmental quality - air (SPM, RSPM, SOx and NOx), noise, water (surface and groundwater), soil. Baseline data on coal characteristics based on a recent sample analysis should also be provided

(xii). Map of the study area (core and buffer zone) clearly delineating the location of various stations (of air, water and noise stations each on a different map) superimposed with location of habitats, other industries/mines, pouting sources. The number and location of the stations in both core zone should be selected on the basis size of lease 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 ground water as per ISI and surface water as per CPCB guidelines.

Baseline Data on Ecology

(xiii). Study on the existing flora and fauna in the study area carried out by an university/institution/expert of relevant discipline (such as BSI, ZSI, WII, etc.), the list of flora and fauna duly authenticated separately for the core and buffer zone along with classification as per Schedule given in the Wildlife Protection Act, 1972 (for fauna) and in the Red Data Book (Flora) and a statement clearly specifying whether the study area forms a part of an ecologically sensitive area or migratory corridor of any endangered fauna. If the study area has endangered flora and fauna, or if the project falls within 15km of an ecologically sensitive area, then a comprehensive Conservation Plan should be prepared and furnished along with comments from the CWLW of the State Govt.

Baseline Data on Geology

(xiv). 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 end of mine life should be reflected on the basis of the rated capacity and calendar plans of production from the approved Mining Plan/Project. Geological maps along with sections should be included.

Impacts of the Project On:

- Landuse
- Water, Hydrology & Hydrogeology
- Air & Noise
- Ecology & Biodiversity
- Socio-economic
- Other Issues

Impacts of Changes in Landuse and on Landuse

(xv). Impacts on Break-up of lease area as per mining operations.

(xvi). Impact of changes in the land use due to the start of the projects.

Mining Method & Technologies Adopted and Potential Impacts

(xvii). Details of mining methods, technology, equipment to be used, etc., rationale for selection of that method, technology and equipment proposed to be used vis-vis potential impacts.

Impacts on Water Balance, Hydrology & Hydrogeology

(xviii). Impact of mining on hydrology, modification of natural drainage, diversion and channelling, construction of bund/embankment of the existing rivers/water courses flowing though the ML and adjoining the lease and the impact on the existing users and impacts of mining operations thereon.

(xix). Detailed water balance along with flow chart of water use for mining operation should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. Details of STP in colony and ETP in mine. Recycling of water to the maximum possible extent.

(xx). Source of water for various uses in mine, sanction of the competent authority in the State Govt. and impacts vis-vis the competing users.

Impact of mining and water abstraction/use in mine on the hydrogeology and groundwater regime within the core zone and 10km buffer zone including long term modelling studies on groundwater regime.

Impacts on Air and Noise

(xxi). Impact of blasting, noise and vibrations

(xxii). Impacts of mining on the AAQ, predictive modelling using the ISCT-3 (Revised) or latest model.
Indicate isopleths overlaying the toposheet and with wind roses showing the areas of habitation and sensitive areas such as forest, etc.

(xxiii). Examine various options for mineral transportation vis-vis the impacts on air quality.

(xxiv). Impacts of mineral transportation within and outside the lease along with flow-chart indicating the specific areas generating fugitive emissions. 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. Details of various facilities to be provided in terms of parking, rest areas, canteen, and effluents/pollution load from these activities.

Impacts of Solid Waste Generation

(xxv). Details of waste generation OB, topsoil as per the approved calendar programme, and their management shown in figures as well explanatory chapter with tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use. Slope stability studies in case of large dumps (90m or above). Sections of dumps (ultimate) (both longitudinal and cross section) with relation to the adjacent area should be shown.

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

The EMP should broadly contain the following:

- Landuse - Change/modification of Natural drainage.
- Water, Hydrology and Hydrogeology including details of rainwater harvesting and measures for recharge of groundwater should be reflected.
- Air and Noise
- Management of Solid Waste (OB)
- Generation, Land reclamation and Mine Closure (Progressive and Final)
- Ecology including Habitat Restoration and Preservation of Biodiversity
- Socio-Economic Issues
- Other Issues.

LAND

(xxvi). Management of wastes and issues of rehandling and backfilling and progressive mine closure and reclamation.

(xxvii). Progressive Green belt and afforestation plan (both in text, figures as well as in tables prepared by MOEF) and selection of species (local) for the afforestation/plantation programme base don original survey/landuse.

(xxviii). Final Mine closure issues, post mining land use and restoration of land/habitat to pre-mining.

ECOLOGY

(xxix). Conservation Plan for the endangered/endemic flora and fauna found in the study area and for safety of animals visiting/residing in the study area and also those fauna using the study area as a migratory corridor.

(xxx). Including cost (capital and recurring) of EMP and for progressive and final mine closure plan in the project cost.

(xxxi). Integrating in the Environmental Management Plan with measures for minimising use of natural resources - water, land, energy, etc.

Socio-Economic

(xxxii). Details of R&R. Detailed R&R Plan with data on the existing socio-economic status 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 the schedule of the implementation of the Project specific R&R Plan. Details of provisions (capital & recurring) for the project specific R&R Plan.

(xxxiii). Details of CSR Activities and cost provisions (capital and recurrent per annum over the life of the project)

(xxxiv). Public Hearing should cover the details of notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

Monitoring

(xxxv). In built mechanism of self-monitoring of compliance of environmental regulations.

(xxxvi). Status of any litigations/ court cases filed/pending on the project.

(xxxvii). Copy of the Environmental Clearance letter and status of compliance of EC conditions in cases where EC has been granted.

(xxxviii). Copy of the EIA-EMP Report of the project for which EC was granted.

OTHER ISSUES

(xxxix). Occupational health issues. Baseline data on the health of the population and measures for occupational health and safety of the personnel and manpower for the mine.

(xxxx). Disaster Management and Risk Assessment

SUGGESTED PROFORMA FOR PREPARATION OF TOR FOR UNDERGROUND MINES OF CIL WHICH HAVE NOT OBTAINED EC

CASES OF UG MINES WHICH ARE ELIGIBLE

1. UG Mine started/yet to start on old abandoned workings*
2. Resumption of production in a bandoned mines of CIL of pre-nationalisation*
3. Cluster of small UG mines*
4. Mining in areas where there are fires such as Jharia Coalfields* (MLs where the coals seams are on fire will not submit applications. For applications where there are fires in the 10km buffer zone but not within the core zone (project for which application has been made), prior permission of DGMS shall be obtained for consideration of grant of EC).

Details of mine operations adjoining the MLs also should be provided (plan in one A2 sheet).

Guideline for preparation of TOR for UG Mining Projects

Structure of EIA-EMP Report

(i) An EIA-EMP Report would be prepared for _____MTPA rated capacity based on the generic structure specified in Appendix III of the EIA Notification 2006.

(ii) The EIA-EMP Report should be prepared for a peak capacity of _____ MTPA addressing the impacts of the project including the aspects of mineral transportation and issues of impacts on hydrogeology, plan for conservation of flora/fauna and afforestation/ plantation programme. Baseline data collection can be for any season except monsoon.

(iii) 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 air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modelling for _____ MTPA of coal production based on approval of project/Mining Plan.

Maps

(iv) A map of the toposheet of Study area (core zone and 10km area of the buffer zone) in addition to delineating the major topographical features such as the land use, drainage, locations of habitats, major construction including railways, roads, pipelines, major industries/mines an d other polluting sources, which shall also indicate the migratory corridors of fauna, if any and the areas where endangered fauna and plants of medicinal and economic importance are found in the area.

(v)Recent Landuse Map based on satellite imagery showing the core zone delineating the agricultural land (irrigated and unirrigated, uncultivable land (as defined in the revenue records), forest areas (as per records) and grazing land and wasteland.

(vi) Contour map at 3m interval along with Site plan of the mine 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 are to be left undisturbed along with details of natural drainage adjoining the lease and modification of thereof in terms of construction of embankments/bunds, proposed diversion/rechannelling of the water courses, etc., highways, passing through the lease.

(vii) Map of the study area (core and buffer zone) clearly delineating the location of various monitoring stations (air/water/soil and noise each shown separately) superimposed with location of habitats, wind roses, other industries/mines, polluting sources. 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 will be drawn and Prediction Modelling of AAQ (ISCT-3 (Revised) or latest available modelling) will be carried out. Monitoring should be as per CPCB guidelines. Parameters for water testing for both ground as per ISI standards and surface water as CPCB guidelines.

EIA-EMP Report

(viii) Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area Impacts of project, if any on the landuse, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease and acquired for mining operations.

* For mines acquired from pre-nationalization period for which records of status of land/lease details are not available, status of the mine at the time of acquisition by the respective coal company may be presented.

(ix) 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 zone and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna. Since the project is an existing one, the flora and fauna details should be furnished separately for the core zone and buffer zone. The report and the

list should be authenticated by the concerned institution carrying out the study and the names of the species along with the classification under the Wild Life Protection Act should be furnished.

(x) 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 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. Geological maps should also be included.

(xi) Collection of one-season (non-monsoon) primary base-line data on environmental quality air (SPM, RSPM, SOx and NOx), noise, water (surface and groundwater), soil. Baseline data on coal characteristics based on a recent sample analysis should also be provided

(xii)Study on subsidence, measures for mitigation/prevention of subsidence, modelling subsidence prediction and its use during mine operation, safety issues.

(xiii)Risk assessment and Disaster Prevention and Management Plan.

(xiv)Impact of mining on hydrology, modification of natural drainage, diversion and channelling of the existing rivers/water courses flowing though the ML and adjoining the lease and the impact on the existing users and impacts of mining operations thereon.

(xv) Impact of mining and water abstraction and mine water discharge in mine on the hydrogeology and groundwater regime within the core zone and 10km buffer zone including long term modelling studies on the impact of mining on the groundwater regime. Details of rainwater harvesting and measures for recharge of groundwater should be reflected.

(xvi) Detailed water balance should be provided. The break up of water requirement as per different activates 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- -vis the competing users.

(xvii) Impact of choice of selected use of machinery - and impact on air quality, in mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations.

(xviii) Impacts of mineral transportation within and outside the lease. 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 fugitive

emissions can arise and the specific pollution control/mitigative measures proposed to be put in place. Examine the adequacy of roads existing in the area and if new roads are proposed, the impact of their construction and use particularly if forestland is used.

(xix) Details of various facilities to be provided in terms of parking, rest areas, canteen, and effluents/pollution load from these activities. Examine whether existing roads are adequate to take care of the additional load of mineral and their impacts.

(xx) Examine the number and efficiency of mobile/static water sprinkling system along the main haul roads within the mine, approach roads to the mine/stockyard/ siding, and also the frequency of their use in impacting air quality.

(xxi) Impacts of CHP, if any on air and water quality. A flow chart of water use and whether the unit can be made a zero-discharge unit.

(xix) Conceptual mine closure plan along with the fund requirement for the detailed activities proposed there under. Impacts of change in land use of agricultural land for mining operations and whether the land can be restored for agricultural use post mining.

(xxiii) Conservation Plan for the endangered flora and fauna or species of economic importance found in the study area or if the area falls in the elephant corridor/elephant migratory corridor, along with comments of the State Government (Wildlife). In case of the project falling within a Migratory corridor or within an ecologically sensitive area, permission of the National Wildlife Board would require to be taken.

(xxv) Integrating in the Environmental Management Plan with measures for minimising use of natural resources water, land, energy, raw materials/mineral, etc.

(xxvi) The specific costs (capital and recurring) of each pollution control/mitigative measures proposed in the project until end of mine life and a statement that this is included in the project cost

Socio-Economic

(xxv) Details of R&R. Detailed R&R Plan with data on the existing socio-economic status 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 the schedule of the implementation of the Project specific R&R Plan. Details of provisions (capital & recurring) for the project specific R&R Plan.

(xxvi) Details of CSR Activities and cost provisions (capital and recurrent per annum) over the life of the project.

(xxvii) Public Hearing should cover the details of notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

Monitoring

(xxviii) In built mechanism of self-monitoring of compliance of environmental regulations.

(xxix) Status of any litigations/ court cases filed/pending on the project.

(xxx) Copy of the Environmental Clearance letter and status of compliance of EC conditions in cases where EC has been granted.

(xxxi) Copy of the EIA-EMP Report of the project for which EC was granted.

OTHER ISSUES

(xxxii) Occupational health issues. Baseline data on the health of the population and measures for occupational health and safety of the personnel and manpower for the mine.

GENERAL POINTS FOR BOTH OC AND UG MINES

The following general points should be noted:

i. All documents should be properly indexed, page numbered.

ii.Period/date of data collection should be clearly indicated.

iii. Authenticated English translation of all material provided in Regional languages.

iv. 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 take necessary action for obtaining environmental clearance under the provisions of the EIA Notification 2006.

v. The letter/application for EC should quote the MOEF file

vi. 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. 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.

After the preparation of the draft EIA-EMP Report as per the aforesaid TOR, and the public Hearing conducted as prescribed in the EIA Notification 2006 and the proponent will take necessary action for obtaining environmental clearance under provisions of the EIA Notification 2006.

GENERAL INSTRUCTIONS FOR SUBMISSION & CONSIDERATION OF TOR APPLICATIONS OF COAL SECTOR PROJECTS

I. TOR APPLICATION

1. Proponents should clearly specify the date of application, location (village, coalfield, Tehsil, District, State), production capacity (MTPA) and lease/project area (in ha), in the application and in the forwarding letter. (In case the lease area does not cover all aspects of the mining activities /operations such as infrastructure, buildings, roads, ext. OB dumps, etc., then the total project area should be given which includes the lease area and area falling outside the lease for mining activities/operations). In case of expansion projects, in case of expansion in production from _____ MTPA to _____ MTPA or for ML/ project area from ____ ha to ____ ha should be given.

2. Production capacity should indicate both normative and peak capacity. TOR and EC applications should be on this basis.

3. The application should be signed by a person of the Company or someone authorised by the company and the name of the signatory and the position in the company should be clearly stated in the forwarding letter and in the application (Form-I).

4. In case the Ministry of Coal has allocated the Coal Block to one or more companies, and the Allotment letter stipulates constitution of a Joint Venture, then the application for EC (TOR and EC based on TOR) must be made by the concerned JV only.

5. Such application must include the following: (i) The MOC Allotment Letter, (ii) Copy of constitution of the JV under the Companies Act, (iii) Letter of Power of Attorney to the company and to the concerned person (by name) making the presentation for TOR/EC, in case one of the companies of JV is making the presentation on behalf of the JV.

6. All the sections in the Form-I should be filled in. No section should be left blank.

7.The applications (Form-I and the pre-feasibility report) should be photocopied back-to-back while submitting to the Ministry and while circulating to the EAC members.

8.The Application for TOR should be made only when toposheet of the study area has been procured.

9. A CD (soft form) of the TOR Application containing the Form-I and the Pre-feasibility report) should be submitted to the MOEF and to the EAC members at the time of Circulation.

10. The Application for TOR should be made only after the geological report of the coalmine project has been completed for the project area for which the coal mining project is being formulated and is being sought TOR.

11. No change can be made in the application (Form-I and the pre-feasibility Report) at the time of circulation to EAC members. In case the details provided in Form-1 and the pre-feasibility Report require changes, then a formal letter from the company along with the revised application should be made indicating the specific changes made. The revised application should state at the top of the Form-I (Revised along with date). Only after obtaining prior permission from MOEF, the revised application can be circulated for presentation before the Committee.

12. In case of new projects, it is desirable to submit applications for TOR when the Mining Plan is under finalisation/draft stage, the details of which can be provided in the pre-feasibility report).

13. In case of applications under Section 7.2 (ii) for expansion projects with prior EC for the project of a lesser production capacity/lease area/both and the present application is for expansion in production/ lease area/ both/ modernisation, the application (Form-I) should be submitted under Section 7 (ii) of the EIA Notification 2006, enclosing the following: (i) a copy of the EC letter, (ii) a copy of the EIA-EMP Report of the earlier EC, (iii) copy of the proceedings of Public Hearing conducted on the project of earlier EC (and authorised English translation in case the P.H. is not in English) and status of implementation of issues raised therein, (iv) An Addendum EIA-EMP Report of not more than 25-30 pages which will form part of the pre-feasibility report of the expansion project report covering all aspects of EIA-EMP for the proposed expansion - status of env. quality, specific issues on which impacts are anticipated and the proposed EMP/ mitigative measures proposed for the expansion project vis-vis the project for which EC was obtained.

In addition, a detailed compliance report on the earlier EC along with status of implementation of R&R (in case the project involved an R&R) should be also furnished in the Addendum EIA-EMP Report.

14.Applications for expansion Projects having a baseline data of more than 3 years will require fresh generation of baseline data.

15.If a captive coal washery is proposed to be constructed within the lease/project area or in the vicinity of the proposed (new) coalmining project for which TOR application is being made, then for such cases, an application for TOR for the integrated coalmine-cum-washery unit should be submitted.

16. Production capacities of coal mining as well as for the washery should be in ROM.

17. Circulation of the application should be made so as to reach the EAC members at least 10 days before the scheduled date of the meeting.

II. TOR PRESENTATION TO THE EAC COMMITTEE

18. A senior level representative of the Company who is of a level of decision maker should appear before the Committee. If the company so desires, the senior representative could be accompanied by his team along with consultants.

19. Land use maps (1: 50,000 scale) based on recent satellite imagery indicating the topographical and land use features of the study area (10km buffer zone surrounding the core zone) should be furnished. In case of ecologically sensitive areas as defined in the EIA Notification 2006 - Appendix I Form 1 - III Sensitivity of (for eg. areas near Wildlife Sanctuaries/Tiger Reserves/National Parks/Archaeological monuments, areas falling near/within elephant habitats/migratory corridors), a 15km map of the buffer zone should be presented. Satellite imagery per se is not required.

20. Map of the study area (core zone and buffer zone) on the topo sheet (1: 50,000 scale) indicating the broad topographical features such as the land use (agricultural land, forestland, grazing land, wasteland and surface water bodies) of the core zone and buffer zone should be furnished. The maps should also contain the other features such as major roads, Highways, Railway lines, other mines and industries, habitations, etc.

In case the features are not clear in the toposheet, map of the study area (core zone and buffer zone) superimposed on the topo sheet (1: 50,000 scale) preferably on Computer-Aided-Design (CAD) should be presented.

21. A landuse map based on toposheet of the study area (1: 50,000 scale) indicating the hydrological features (rivers, canals, streams, nallas, water tanks, etc.) within the core zone and buffer zone should be separately provided.

22. A more detailed area drainage contour map of the core zone and 2-5 km of the buffer zone (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 a separate map.

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.

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.

23. A separate map of the core zone indicating the proposed locations of quarry area, ext. OB dumps, and other mining operations should be shown on the map. For projects where the Mining Plan is under finalisation, the progressive mine development and final mine closure plan should also be shown as figures.

24. All presentation slides and maps should be clear and legible with proper indexing and colour as per standard colour codes.

25. TOR application should contain details of secondary data, the method of collection of the baseline data, along with met. data of nearest station of IMD along with wind roses along with proposed locations of monitoring stations shown on the study area map (Core zone and buffer zone), etc should be furnished. Similarly details of proposed locations of stations for water quality monitoring and noise levels should also be provided.

26. Hard copies of Presentation made on TOR during the meeting should be page numbered and photocopied back-to-back (except for maps which should be in A3 size).

27. Hard copy of the presentation should contain the following information on its cover:

a. Name of the Project & Location (village, Tehsil, District, State)

b. Name of the Company

c. Production capacity (in Million tonnes per annum) (MTPA) (in ROM)

d. Lease/project area (in ha)

e. If it is a case of expansion, then from MTPA to . MTPA or from . ha to .. ha.

f. Date of presentation (if comes for further consideration, that should be indicated along with the date in addition to the above).