



IA-J-11015/18/2020-IA-II(M)

Government of India

Ministry of Environment, Forest and Climate Change

Impact Assessment Division

Indira Paryavaran Bhawan,

Jorbagh Road, N Delhi - 3

Email: lk.bokolia@nic.in Tel: 01124695301

Dated: 5th November, 2020

To,

The Chief Executive Officer
M/s Neyveli Uttar Pradesh Power Limited,
At Village, Chirudih, Kundapahari, Tehsil Gopikandar,
District Dumka - 226010 (Jharkhand)
Email: pachwara.south@nclindia.in

Sub: Pachwara South Coal Mine Project of 9 MTPA/13.50 MTPA (Normative/Peak) in an area of 715 ha. By M/s Neyveli Uttar Pradesh Power Limited located at Rajmahal Coalfield, District Dumka, (Jharkhand)- Term of Reference - reg.

Sir,

This has reference to your online proposal No. IA/JH/CMIN/168045/2020 dated 14th August, 2020 on the above mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of terms of reference to the project for Pachwara South Coal Mine Project of 9 MTPA/13.50 MTPA (Normative/Peak) in an area of 715 ha. by M/s Neyveli Uttar Pradesh Power Limited located at Rajmahal Coalfield, Dumka District (Jharkhand).

3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its 2nd meeting held on 28- 29 September, 2020. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-

- (i) Latitude and Longitude of the project: Latitude: 24° 29' 57.404" N-24° 31' 46.956" N (WGS84 45 R 2709584.08 N - 2712965.123 N). Longitude: 87° 27' 22.010" E-87° 29' 56.150" E (WGS84 45 R 546208.62 E - 550540.973 E).
- (ii) If a Joint venture, the names & addresses of the JV partners including their share: Pachwara South Coal Block was allotted to Neyveli Uttar Pradesh Power Ltd. (NUPPL)- a joint venture of NLC India Limited and Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited vide, allotment order no 13016/26/2004-CA-I/CA-III(Pt) (Vol.II), Dated 03.10.2016 by MoC, GOI. Share holding pattern of NLCIL & UPRVUNL 51:49. (iii) Joint venture cartel has been formed on 09.11.2012

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- (iii) Coal from this project is linked to Ghatampur Thermal Power Plant with a capacity of 1980 MW (3 X 660 MW) at Ghatampur Tehsil in Kanpur Nagar District, Uttar Pradesh.
- (iv) Whether the project is in the Critically Polluted Area (CPA): No
- (v) Cost of the project: Rs. 1795.01 crores
- (vi) Employment generation: Direct-1288 and indirect employment generation shall be more than 3000.
- (vii) Benefits of the project: The project is reported to be beneficial in terms of employment to local people directly and indirectly. Indirect employment will be in the form of service providers, shopkeepers, mechanic, drivers, transporters etc. The lessee will be responsible for providing better social infrastructure benefits such as drinking water, healthcare measures, educational facilities, promotion of culture and religious activities in surroundings as part of their CER activities. The proposed mine will bring economic benefits to the state by the way of Royalty. The linked power plant of 1980 MW will produce of 14743.08 MU of power which will help the Uttar Pradesh state to meet out the shortfall in power requirements.
- (viii) The project area as specified in the Mining Plan including Mine Closure Plan of Pachwara South Coal Mine is 715 ha. The Mining Plan including Mine Closure Plan has been submitted at MoC, Govt. of India for approval.
- (ix) Type of Mine: (Open cast/Underground/mixed): Open Cast; Capacity of the mine applied for: 9.00 MTPA (Normative); 13.50 MTPA (Peak Rated); ML Area: As per block allotment: 715 Ha.; As per approved mine plan: 715 Ha. (Mining plan is submitted at MoC, Govt. of India for necessary approval.) Date of Board's approval: NUPPL Board accorded approval for the Mining Plan and Mine Closure Plan in its 49th meeting held on 10th June 2020.
- (x) Any river/Nallha flowing near or adjacent to the proposed mine. If yes, please give details: No perennial river is passing through the block. However, Bansloi river is flowing parallel to the northern boundary of the block. Hence, a proposal has been made in Mining plan as well as in Pre-feasibility report for construction of an embankment parallel to the Bansloi river.
- (xi) Total estimated water requirement: 1660 KLD
- (xii) Geological Reserve: 415.02 Million Tonne (Gross Geological Reserve)
- (xiii) Technical Details
 - Total geological reserve: 373.52 Million Tonne (Net Geological Reserve); Mineable reserve: 269.58 Million Tonne; Extractable reserve: 262.84 Million Tonne; Per cent (%) of extraction: 70.37%
 - Range of ground water level: The proposed depth of Mining suggests intersection of ground water; hence a detail hydrogeological study will be carried out to investigate the range of ground water table level.

- (xiv) Details of Seams: No of seams: As per the Geological Report, there are nine Major Coal Seams – Seam-I to Seam-IX occurring in this block. However, including Splits and Local Coal Seams, total number of coal seams are 31 (Reserve estimation done). Seam L2 is not considered for mining for its limited intersection (3 no. of intersection) throughout the block; Thickness of seams to be worked on: 0.50 m.; Grade of coal: Avg. grade G10 (GCV 4300 to 4600); Stripping ratio: 3.25; Category of gaseousness: Not applicable (Not analyzed due to the open cast property.); Average gradient: 1 in 19 (4 to 6 degrees); Maximum thickness of seams: 19.43 m in Seam II; Method of mining: Mining will be carried out by opencast mechanized mining method.
- (xv) Life of mine: 38 years.
- (xvi) Whether ambient air quality seasonal data has been documented. If so, from which season to which season and whether the results are within the prescribed limits: Location for ambient air quality monitoring are identified within 10 km radius of Pachwara South Coal mine project. Monitoring will be carried out in post monsoon.
- (xvii) Details of O.B: External OB dumps: Yes; No of OB dumps: One; Area: 197.79 Ha; Height: 60 m from the surface.; Quantity (in MCum): 80.63 Mcum.; Year of back filling: Concurrent backfilling will commence from the 7th year from production commencement. Re-handling of the surface dump of the eastern part will commence from 7th year of the production commencement and proposed to be completed by 19th year from commencement of production.
- (xviii) Details of Internal Dumps: Number of internal dumps: One; Area: 523.62 Ha; Height: 360m from quarry floor and 60m from surface; Quantity: 853.27 Mcum.
- (xix) Details of final Mine Voids: Area: 120.14 Ha.; Depth: 320m
- (xx) Details of Quarry: Total quarry area: 643.76 Ha.; Backfilled quarry area will be of 523.62ha at the end of mine life; A void of 120.14 ha at a depth of 320m which is proposed to be converted into a waterbody.

(xxi) Details of Land usage

Landuse Details (Pre-mining)

S.N.	LANDUSE	Within ML Area (ha)	Outside ML Area (ha)	TOTAL
1.	Agricultural land	136.40	-	136.40
2.	Forest land	397.39	-	397.39
3.	Wasteland		-	
4.	Grazing land	12.20	-	12.20
5.	Surface water bodies	10.32	-	10.32
6.	Settlements	139.13	-	139.13
7.	Others (road etc)	19.56	-	19.56
	TOTAL	715.00	-	715.00

Landuse Details (Post- Mining)

Sr. No.	TYPE	Proposed Land use	Land use (End of Mine Life)
1	Excavation Area	643.76	
2	Backfilled Area		523.62
3	Excavated Void		120.14
4	Top Soil Dump	6.53	6.53
5	External Dump /surface Dump		
6	Safety Zone	10.84	10.84
7	Haul road between quarries	17.13	17.13
8	Road Diversion	3.31	3.31
9	Diversion/ Below River/Nala/ Canal		
10	Settling Pond	0.04	0.04
11	Road & Infrastructure	18.47	18.47
12	Rationalisation Area		
13	Garland Drain	4.89	4.89
14	Embankment	3.56	3.56
15	Greenbelt	3.06	3.06
16	Undisturbed/Mining Rights for UG	3.41	3.41
	Total	715	715

(xxii) Details of Forest issues

- Total forest area involved (in ha) for mining: 397.39 Ha.
- Status of Forest Clearance: Application will be submitted for seeking prior approval of Central Government under section 2 of the Forest (Conservation) Act, 1980 for Diversion of fresh forest area.
- Is there any National Park, eco-sensitive Zones, within 10 km radius? If so, give the details. No.
- If the project is within 10 KM of radius of the wildlife sanctuary, whether the Wild Life Management Plan has been prepared and approved. If so, pl give the status, date of approval with the budgetary provision. Not applicable.
- Extent of forest land in the project (including safety zone and all types of forest land) (in ha): Reserve Forest: 98.63 Ha.; CJB: 298.76 Ha.; Total: 397.39 Ha.
- Details of wildlife issues involved, if any. If so, whether WL management plan has been prepared and pl. indicate the status. Not applicable

(xxiii) Cost of the project: Total capital Cost: Rs.1795.01 Crore; Cost of Production: Rs.1071/tonne ; Sale Price: Captive use; CSR cost: As per F.No-22-65/2017-IA.III dated 1st May, 2018, Govt. of India, MoEF & CC, Impact Assessment Division, Corporate Environment Responsibility (CER) cost for the Green field project from Rs.1000 cores to

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Rs.10000 cores is 0.5% of Capital Investment. Hence, estimated CER cost for Pachwara South Coal block is coming around Rs.8.97 cores.

(xxiv) R&R Cost: At present, detailed SIA study is going on under the guidance of District Administration. More precise numbers of PAF's and PAP's along with estimated R&R cost will be informed after completion of the SIA study. ; No of PAFs:314

(xxv) Environmental Management cost: Capital Investment- Rs 185 lakh, Recurring Cost- Rs 118 lakh.

(xxvi) Details of transportation of coal:

- In pit: As proposed, Front end loader-dumper combination shall be deployed for Coal transportation from coal face to temporary coal stock yard. As the mine goes to depth, a steep angle conveyor system will be installed from mine face to temporary coal stock yard at later stage.
- Surface to siding: As proposed, Coal transportation from mine site to Pachwara Railway Siding will be done through conveyor system. However, in the initial few years, till the conveyor laying is completed, coal will be transported through road.
- Loading at Siding: As proposed, RLS and Bunkers will be installed for coal loading onto wagons.

(xxvii) Details of reclamation: Total Afforestation plan shall be implemented covering of mining. This will include:

- Reclaimed external OB dump (in ha): Concurrent backfilling will commence from the 7th year from production commencement. Re-handling of the surface dump of the eastern part will commence from 7th year of the production commencement and proposed to be completed by 19th year from commencement of production.
- Internal dump (in ha): Proposed back filled area will be 523.62 ha., out of which 122.29 ha shall be reclaimed with plantation.
- Green belt (in ha): Green belt development shall be carried out at 10.84 ha in safety zone and 17.13 ha along the haul road. (up to mine closure)
- Density of tree plantation (in no of plants): 1600 saplings/ Ha.
- Void (in ha) at a depth of (in m) which is proposed to be converted into water body:
- A void of 120.14 ha at a depth of 320m which is proposed to be converted into a waterbody.
- Others in ha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc).

(xxviii) Consultant: Name of the consultant who prepared the EIA/EMP report: Pre- Feasibility Report is prepared by Centre for Envotech and Management Consultancy Pvt. Ltd.

(xxix) Whether the consultant has been accredited by the QCI and NABL and whether it is accredited with Quality Council of India (QCI) /National Accreditation Board of

Education and Training (NABET) as per the MoEF OM dated 2nd December 2009: Yes,
QCI Accreditation Sl. No-26.

4. The Expert Appraisal Committee in its 2nd meeting held on 28 – 29 September, 2020 through Video Conferencing has recommended the project for grant of Terms of Reference. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Terms of Reference to the project for **Pachwara South Coal Mine Project of 9 MTPA/13.50 MTPA (Normative/Peak) in an area of 715 ha by M/s Neyveli Uttar Pradesh Power Limited located at Rajmahal Coalfield, Dumka District (Jharkhand)** and for preparation of EIA/EMP reports with public consultation, subject to compliance of all terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-

- (i) Public Consultation, including public hearing, shall be conducted through concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal.
- (ii) Cumulative Impact Assessment Study of the area shall be carried over by project proponent
- (iii) Stage-I clearance for the entire forestland involved the project shall be obtained.
- (iv) Clarification from District Forest Officer that mine does not fall under corridors of any National Park and Wildlife Sanctuary.
- (v) PP shall prepare Mine Plan including Mine Closure Plan for Peak production capacity as per latest guidelines of Ministry of Coal.
- (vi) PP shall construct embankment leaving 100 mtrs away from HFL of river or based on the scientific study by reputed institutes and the same shall be taken prior approval from DGMS. Study shall be carried out for safety of villagers due to embankment construction.
- (vii) Proper drainage system shall be prepared to avoid seepage of mining water to water bodies and seepage to ground water.
- (viii) No OB dumping shall be undertaken in the forest land, near the river and villages.
- (ix) Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ shall be planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area
- (x) Inpit conveyor belt with silo loading should be proposed and installed for transportation of coal till railway siding.
- (xi) PP shall explore the possibilities of utilization of OB material for different purposes (in construction of roads, manufacture of artificial sand, aggregates, use for farmers etc.) and accordingly Plan shall be included in EIA/EMP Report

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- (xii) Project proponent to prepare Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
- (xiii) Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.
- (xiv) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 30th September 2020 and based on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC.
- (xv) Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted
- (xvi) Heavy metals including other parameters in surface water quality (also of Ghagri river) shall be analyzed and provided in EIA Report.
- (xvii) The parameters Arsenic, Lead and Silica shall also be analyzed in ambient air quality
- (xviii) PP shall provide an integrated mine production and mine reclamation plan of which the systematic and post mining land form management / land scape management of mining area, internal, and external dump area will be integral. Both internal and external dumps shall be regraded and reshaped to reduce its height as close to the original surface level as possible for better land use post mining activities.
- (xix) PP shall propose progressive greenbelt yearwise and fund allotted for the same.

4.1 General Conditions

- (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 Ministry's file No. and also attach a copy of the letter prescribing the ToR.
- (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.
- (vii) General Instructions for the preparation and presentation before the EAC of ToR/EC projects of Coal Sector should be incorporated/followed.
- (viii) The aforesaid ToR has a validity of **four** years only.
- (ix) Grant of ToR does not necessarily mean grant of EC.
- (x) Grant of ToR to the present project does not necessarily mean grant of TOR/EC to the

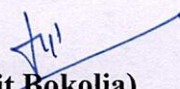
captive/linked project.

(xi) Grant of ToR to the present project does not necessarily mean grant of approvals under the Forest (Conservation) Act, 1980 or the Wildlife (Protection) Act, 1972.

(xii) Grant of EC is also subject to circulars issued under the EIA Notification 2006, which are available on the Ministry's website: www.envfor.nic.in

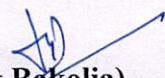
5. You are required to submit the final EIA/EMP prepared as per TORs to the Ministry within 4 years as per this Ministry's Notification S.O 751(E) dated 17th February, 2020 for considering the proposal for environmental clearance.

6. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc. vide Notification of the MoEF dated 19th July, 2013.


(Lalit Bokolia)
Director

Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi
3. The Additional Principal Chief Conservator of Forests, Regional office (ECZ), Ministry of Environment & Forests, Bungalow No. A-2, Shyamali Colony, Ranchi - 834002
4. The Chairman, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
5. The chairman, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
6. The District Collector, Chatra, Government of Jharkhand
7. Monitoring File/Guard File


(Lalit Bokolia)
Director

A. Generic TOR for an opencast / UG coalmine project

- (i) An EIA-EMP Report should 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/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.
- (ii) 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 baseline data and information, generation of baseline data on impacts for MTPA of coal production based on approval of project/Mining Plan.
- (iii) A Study area map of the core zone and 10km area of the buffer zone (15 km of the buffer zone in case of ecologically sensitive areas) delineating the major topographical features such as the land use, drainage, locations of habitats, major construction including railways, roads, pipelines, major industries/mines and 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.
- (iv) Map showing the core zone along with 3-5 km of the buffer 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 and water bodies.
- (v) Contour map at 3m interval along with Site plan of the mine (lease/project area with about 3-5 km of the buffer zone) 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/project and modification of thereof in terms of construction of embankments/bunds, proposed diversion/rechannelling of the water courses, etc., highways, passing through the lease/project area.
- (vi) 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/project and acquired for mining operations. Extent of area under surface rights and under mining rights.

S.N.	ML/Project Land use	Area under Surface Rights (ha)	Area Under Mining 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)	Forest Land	Agr. land	Wasteland	Settlements	Others
1.	Buildings						

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2.	Infrastructure						
3.	Roads						
4.	Others (specify)						
	TOTAL						

- (vii) 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. 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 scientific and common names) along with the classification under the Wild Life Protection Act, 1972 should be furnished.
- (viii) 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.
- (ix) 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.
- (x) Collection of one-season (non-monsoon) primary baseline data on environmental quality – air (PM₁₀, PM_{2.5}, 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.
- (xi) 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 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 water should be as per ISI standards and CPCB classification of surface water wherever applicable.
- (xii) 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 wherever the areas are declared dark/grey from groundwater development.
- (xiii) Study on subsidence, measures for mitigation/prevention of subsidence, modelling subsidence prediction and its use during mine operation, safety issues.
- (xiv) 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.
- (xv) 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.
- (xvi) Impacts of mineral transportation – within and outside the lease/project. 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.

- (xvii) 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.
- (xviii) Examine the number and efficiency of mobile/static water sprinkling system along the main mineral transportation road within the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality.
- (xix) 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.
- (xx) Conceptual Final Mine Closure Plan along with the fund requirement for the detailed activities proposed there under. Impacts of change in land use for mining operations and whether the land can be restored for agricultural use post mining.

Table 1 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.	1 st year										
2.	3 rd year										
3.	5 th year										
4.	10 th yr										
5.	15 th yr										
6.	20 th yr										
7.	25 th yr										
8.	30 th yr										
9.	34 th year (end of mine life)										
10	34-37 th Year (Post- mining)										

*As a representative example

- (xxi) 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 for the mine should be furnished.
- (xxii) Details of cost of EMP (capital and recurring) in the project cost and for final mine closure plan. 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.
- (xxiii) Integrating in the Env. Management Plan with measures for minimising use of natural resources – water, land, energy, raw materials/mineral, etc.
- (xxiv) R&R: 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.

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- (xxv) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project.
- (xxvi) **Public Hearing should cover the details as specified in the EIA Notification 2006**, and include notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments by the proponent made 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.
- (xxvii) Status of any litigations/ court cases filed/pending in any Court/Tribunal on the project should be furnished.
- (xxxvi) Submission of sample test analysis of: Characteristics of coal - this includes grade of coal and other characteristics – ash, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- (xxxviii) Copy of clearances/approvals – such as Forestry clearances, Mining Plan Approval, NOC from Flood and Irrigation Dept. (if req.), etc.

(A) Forestry Clearance

Total ML / /Project Area (ha)	Total Forest Land (ha)	Date of FC	Extent of forest land	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) Mining Plan / Project Approval: Date of Approval of Mining Plan/Project Approval: Copy of Letter of Approval of Mining Plan/Project Approval

(xxxviii) Corporate Environment Responsibility:

- The Company must have a well laid down Environment Policy approved by the Board of Directors.
- 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.
- 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.
- 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.