



सत्यमेव जयते

File No.: J-11015/355/2006-IA-II(M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 07/02/2024



To,

Mukti Nath Jha
Jaiprakash Power Ventures Limited
Complex of Jaypee Nigrie Super Thermal Power Plant, Nigrie, Tehsil Sarai District Sarai, Dist.
Singrauli 486669 M.P. , SINGRAULI, MADHYA PRADESH, , 486669
mn.jha@jalindia.co.in

Subject: Expansion of Amelia (North) combined OC & UG coal mine with increase of production capacity from 3.36 MTPA to 3.92 MTPA in Mine Lease Area of 728.75 ha by M/s Jaiprakash Power Ventures Limited at Village Majhauri, Tehsil Deosar, District Singrauli (Madhya Pradesh) – Reconsideration for Environmental Clearance under OM dated 11.04.2022 (Stage-II expansion) reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/MP/CMIN/444292/2023 dated 14/09/2023 for grant of prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A0605MP5254155N
(ii) File No.	J-11015/355/2006-IA-II(M)
(iii) Clearance Type	Mining EC Under 5 Ha
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Expansion of production from 2.80 to 3.92 MTPA of Amelia (North) Coal Mine
(ix) Location of Project (District, State)	SINGRAULI, MADHYA PRADESH
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	No

3. Mining Plan of Amelia (North) Coal Mine with a capacity of 2.80 MTPA was approved by MoC vide letter no. 13016/3/2003-CA-I dated 14.11.2006 while the Mine Closure Plan was approved by MOC vide letter no. 34011-22-2010-

CPAM dated 18.05.2011. Administrative Approval of Central Government under Section 5(1) and / or Section 6 (1) of MMDR Act, 1957 was given by MOC vide letter no. 13016/3/2003-CA/CA-I dt 24.08.2007. Ministry of Environment & Forests, Government of India vide letter no. J-11015/355/2006-IA-II(M) dated 20.07.2007 had granted 'Environment Clearance' for 2.8 MTPA capacity in respect of Amelia (North) Coal Mine. The mine started production from the year 2013-14. The Supreme Court of India through its Judgment dated 25th August 2014 read with its order dated 24th September 2014 had canceled the allotment of 204 coal blocks including Amelia (North) Coal Mine. Subsequently, auctions were held and the successful bidder for Amelia (North) Coal Mine became Jaiprakash Power Ventures Limited (JPVL) to whom the mine was vested vide Order No. 104/9/2015/NA dt. 23.03.2015 and CMDPA has been executed between Nominated Authority, Ministry of Coal and JPVL for the coal block on 02.03.2015 as per the provisions of Coal Mines (Special Provisions) Act 2015. Thereafter, the earlier EC was transferred to JPVL vide letter dated 13.05.2015.

4. Proposal was considered by the EAC in its meeting held on 27.09.2023, 16.11.2023 & 22.12.2023, Project Proponent alongwith the QCI NABET accredited consultant (Centre for Envotech & Management Consultancy Pvt Ltd) made the detailed presentation and provided the following information to the committee:

(i) The project area is covered under Survey of India Topo Sheet No. 63 L/8 (R.F.1: 50,000) and is bounded by the geographical coordinates ranging from Latitudes (N): 24° 07'32" to 24° 08'37" and Longitude (E): 82° 24'25" to 82° 26'45". Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance. Nearest SPA is Singrauli at 11.6 km E as certified by Madhya Pradesh Pollution Control Board, Bhopal vide their letter no. 2745/तक./प्रनबि/2023 dated 27.10.2023.

(ii) Coal linkage of the project is proposed for Jaypee Nigrie Super Thermal Power Plant, Village Nigrie, District Singrauli. Total mining lease area as per block allotment is 728.75ha. Mining Plan (for 2.8 MTPA) has been approved vide MoC letter no. 13016/3/2003-CA-I dated November 14, 2006. Mine Closure Plan has been approved vide MoC letter no. 34011-22-2010-CPAM dated 18.05.2011. JPVL Board approved for 3.92 MTPA on 05.11.2022 (including mine closure plan) as per the provisions of Clause 1.3 (B) of the "Guidelines for Preparation, Formulation, Submission, Processing, Scrutiny, Approval and Revision of Mining plan for the coal and lignite blocks" (F.No. 34011/28/2019-CPAM) dated 29th May 2020. The land usage pattern of the project is as follows:

Premining landuse details:

Land use pattern	Within ML Area	Outside ML Area	Total
Forest land	728.75	0.00	728.75
Agricultural Land	0	0.00	0
Waste Land	0	0.00	0
Surface water Body	0	0.00	0
Grazing Land	0	0.00	0
Settlements	0	0.00	0
Total	728.75	0.00	728.75

Post mining landuse details

Sl. No.	Description of area	Land use (Ha.)				
		Plantation	Water body	Public use	Undisturbed	Total
I.	ML Area					
a	External OB Dump	162	0.00	0.00	0.00	162
b	Top soil dump	0.00	0.00	0.00	0.00	0.00
c	Excavation	380.88	94.22	0.00	0.00	475.1
d	Roads	5.5	0.00	0.00	0.00	5.5
e	Built up area	4.00	0.00	0.00	0.00	4.00
f	Greenbelt	11	0.00	0.00	0.00	11
g	Undisturbed Area	0.00	0.00	61.15	0.00	61.15
h	Safety Zone / Rationalization Area	0	0	0	0	0
i	Diversion / Below River / Nala / Canal	0	0	0	0	No diversion
j	Water Body	10	0.00	0.00	0.00	10

(iii) 728.75 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980. FC was obtained vide File No. 8-08/2007-FC dated 30.11.2012 and transferred to the PP on 11.05.2015. No

National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones fall within 10 km boundary of the project. Wildlife conservation plan for schedule – I species has been submitted to competent authority and approved vide letter no. F-5-2/2010/10-3/2591 issued on 01.11.2012. Water requirement for the project is 1010 KLD. The ground water level has been reported to be varying between 5.44 to 30.80 meter (Pre-Monsoon) below ground level (m bgl) and 3.25 to 30.26 meter (Post-Monsoon) below ground level. NOC no. for Ground Water Clearance by Central Ground Water Authority is CGWA/NOC/MIN/REN/3/2023/8124 dated 17/08/2023 valid upto 30/12/2024

(iv) Total geological reserve reported in the mine lease area is 99.23 MT with 73.98 MT mineable reserve. Out of total mineable reserve of 73.98 MT, 70.28 MT are available for extraction. Grade of coal varies from D to G (~G9-G14) in seam VII & VIII (to be mined), stripping ratio 7.26:1 (Cum:Tonne), while gradient is 3 to 10 degree. Method of mining operations envisaged by Opencast mechanized method. The project has 2 external OB dumps in an area of 162 ha with 100m height. Total quarry area is 475.10 ha out of which backfilling will be done in 380.88 ha while final mine void will be created in an area of 94.22 ha with a depth of 130 m. Backfilled quarry area of 380.88 ha shall be reclaimed with plantation. Final mine void will be converted into a water body. Kanchanmunda nala is flowing through boundary of lease. The nala will not be diverted.

(v) Life of mine is 14 years for opencast and 23 years for underground mining. Transportation of coal has been proposed by railway wagon loading through rapid loading system at CHP, and from mine pit to CHP by road through trucks/tippers.

(vi) Public hearing for the project of 2.80 MTPA capacity in an area of 728.75 ha was conducted on 20.03.2007 at Gram Panchayat Majhauri, Tehsil Deosar, District Sidhi, Madhya Pradesh under the Chairmanship of Additional Collector, Sidhi Mr. Z.U. Sheikh and representative of M.P Pollution Control Board, Dr. R.S. Prahar. Major issues raised in the public hearing include medical facilities, air pollution control, noise pollution and vibration due to blasting, environment protection measures, employment education etc. Commitment made by the Project Proponent to address the Public Hearing concerns in lieu of Corporate Environment Responsibility (CER) has been mentioned.

(vii) Consent to Operate for the existing capacity was obtained from the Chhattisgarh Environment Conservation Board vide Letter No. 6558/TS/CECB/ 2021 Nava Raipur Atal Nagar, Raipur, Dated 22/11/2023 valid till 31/10/2024. No court cases with respect to the environment and forest, no violation cases are pending against the project of the present PP.

(viii) Total cost of the project is Rs. 120 crore. Cost of production was Rs 2063 /- per tonne for FY 2022-23, the expenses incurred under CSR activities for FY 2022-23 was Rs. 66.30 Lakh and further proposal of Rs. 75.00 Lakh for FY 2023-24 proposed CSR activities. Environment Management Cost is Rs. 350.55 Lakh capital & Recurring 175.73 lakhs per year. Following are the project benefits:

(i) Social: Direct and Indirect employment generation and development of social infrastructure facilities under CSR activities in nearby villages.

(ii) Financial: Income generation to employee and associated persons, revenue generation to state etc.

Environmental: Remediation of potential environmental impacts, afforestation of backfilled and dump areas, 100% reuse of mine seepage water, use of cross country pipe conveyor for evacuation of Coal.

5. The project was earlier considered for 20 to 40% expansion by the EAC on 27.09.2023, 16.11.2023. and 22.12.2023. EAC during the meeting deliberated on the project proposal submitted on the PARIVESH portal and as presented by the PP. EAC after detailed deliberations on the technical aspects, PH held for 2.8 MTPA, court case pending before Supreme court related to the C.A. No. 6233/2019 vis-a-vis protection plan for Kanchan river, CCR dated 27.07.2023 and other technical aspects related to mining. EAC after detailed deliberations **recommended** the proposal for expansion of Amelia (North) combined OC & UG coal mine with increase of production capacity from 3.36 MTPA to 3.92 MTPA (Stage II) under Ministry's OM dated 11.04.2022 in total ML area of 728.75 ha by M/s Jaiprakash Power Ventures Limited at Village Majhauri, Tehsil Deosar, District Singrauli (Madhya Pradesh) under the provisions of Environment Impact Assessment Notification, 2006 and its amendments therein with additional specific conditions

6. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords Environment Clearance for the instant proposal to M/s Jaiprakash Power Ventures Limited for expansion of Amelia (North) combined OC & UG coal mine with increase of production capacity from 3.36 MTPA to 3.92 MTPA (Stage II) under Ministry's OM dated 11.04.2022 in total ML area of 728.75 ha by at Village Majhauri, Tehsil Deosar, District Singrauli (Madhya Pradesh) under the provisions of Environment Impact Assessment Notification, 2006 and its amendments therein with additional specific conditions **Annexure (1)**

7. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not

tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

09. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC (**Annexure II**).

10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

11. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.

12. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.

13. General Instructions:

- The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.
- The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.
- The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
- Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
- Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- The Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

14. This issue with an approval of the Competent Authority.

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Integrated Regional Office, E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal – 462016.
3. The Chairman, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
4. The Regional Director, Central Ground Water Board, North Central Region, Block-1, 4th Floor, Paryawas Bhawan

Area Hills, Jail Road, Bhopal - 462011, Madhya Pradesh

5. The Chairman, Madhya Pradesh Pollution Control Board, E-5, Main Rd No. 3, Ekant Park, Arera Colony, Bhopal, Madhya Pradesh 462016
6. The Member Secretary, Madhya Pradesh Pollution Control Board, E-5, Main Rd No. 3, Ekant Park, Arera Colony, Bhopal, Madhya Pradesh 462016
7. The District Collector, Singrauli,, Government of MP
8. PARIVESH Portal

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions:

S. No	EC Conditions
1.1	<i>PP shall obtain the CTO for the production capacity upto 3.92 MTPA.</i>
1.2	<i>PP shall obtain modification of EC in case of change of mine plan as approved by MoC respective mine lease by the State.</i>
1.3	<i>PP shall comply the direction/ outcome of court case pending before Hon'ble Supreme court related to the C.A. No. 6233/2019 "M/s Jaiprakash Power Ventures Ltd. Vs Human Right Redemption Social Welfare Association of India and Ors".</i>
1.4	<i>PP should complete the plantation upon the nearest dump area to the Kanchan river during the monsoon of 2024.</i>
1.5	<i>PP shall submit the status of expenses as noted as per the above para no. 5.5.3 (vi) of the Minutes to IRO, MoEF&CC.</i>
1.6	<i>PP shall complete the eco-park development within 11 ha with native species before January 2025.</i>
1.7	<i>PP should construct dedicated road for the transportation of coal within the ML area and outside ML area till National Highway and adopt measures for mitigation air pollution including green belts, wind barriers and fog cannons.</i>
1.8	<i>PP shall submit the status of expenditure plan for the already allocated Public Hearing Budget including the amount that has been spent already or going to spend in future.</i>
1.9	<i>PP shall implement the EMP budget (as per the para no. 5.5.3 (vii) of the Minutes) and shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A log book to be maintained by PP on "Public Grievance Redressal and Monitoring System.</i>
1.10	<i>Top soil should be stored separately at marked area for spreading over the reclaimed dumps (both</i>

S. No	EC Conditions
	<i>internal & external) and necessary vegetation shall be raised and maintained to avoid any entrainment of dust.</i>
1.11	<i>Mining of coal shall be carried out only by surface miners for the project (as proposed) and silo loading till railway siding through in-pit conveyor should be installed to avoid road. No road transportation shall be conducted.</i>
1.12	<i>PP to upload the monitoring data of 4 nos of continuous ambient air quality with server of CPCB and SPCB. The real time data so generated shall be uploaded on company website. In addition, data should also be displayed digitally at entry and exit gate of mine lease area for public display.</i>
1.13	<i>PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.</i>
1.14	<i>PP shall display the CAAQMS data at entry and exit gate of mine office and shall be share with the SPCB/CPCB.</i>
1.15	<i>PP should install fixed Fog cannons within the ML area and movable fog cannons to be deployed for the Mines, haul road, CHP area and other required area.</i>
1.16	<i>PP shall strictly implement the recommendation of Riverine/Riparian Ecosystem conservation & Management Plan.</i>
1.17	<i>PP shall install fixed fog cannon (mist sprayer) all along the haul road till CHP, Railway siding and OB Dump area and accordingly sufficient number of fog cannons (not less than 10 nos.) with 40 mts jet length shall be installed within 6 months. It should be ensured that air pollution level confirm to the standards prescribed by the MOEFCC/CPCB.</i>
1.18	<i>PP to develop an ECO park with separate area of 5 ha for medicinal and herbal species within two years.</i>
1.19	<i>Progressive backfilling of mine and progressive reclamation by conducting tree plantation of OB dump shall be done.</i>
1.20	<i>Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.</i>
1.21	<i>PP should implement the mitigation measures in order to protect Kanchan river and Kanchan reservoir from the existing OB dumps from any kind of contamination to River/Stream.</i>

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project
1.2	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
1.3	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.4	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. TThe implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
1.5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
1.6	The project proponent shall obtain the necessary permission from the Central Ground Water Authority
1.7	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.
1.8	Permission of power supply to be taken from the concerned authority for meeting power demand of the project site.
1.9	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.
1.10	Validity of EC is as per life of the mine mentioned in EC letter or 30 years as per EIA Notification, 2006 and its amendments therein

2. Air Quality Monitoring And Mitigation Measure

S. No	EC Conditions
2.1	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO ₂ and NO _x . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB
2.2	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals

S. No	EC Conditions
	such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
2.3	Transportation of coal, to the extent if permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ Fog cannon /mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
2.4	Major approach roads shall be black topped and properly maintained.
2.5	PP to install solar lights along the road used for transportation of coal to avoid the accidents at night and also seek its maintenance.
2.6	The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.
2.7	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
2.8	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
2.9	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.
2.10	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.
2.11	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.
2.12	Post environmental closure third party monitoring by reputed instituted in air quality, water, land & soil etc shall be carried out and analysed with EMP measures at regular interval. A suitable recommendation in this regard, shall be furnished to IRO, MoEF&CC for compliance. The data used for analysis shall be obtained from continuos AQMS, site specific water regime. Also third party shall analyses the implementation of river diversion, meeting to the requirement of project report.

3. Water Quality Monitoring And Mitigation Measures

S. No	EC Conditions
3.1	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
3.2	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
3.3	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
3.4	Monitoring of water quality upstream and downstream of river including ponds, lakes, tanks shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
3.5	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
3.6	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
3.7	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff
3.8	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly
3.9	Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
3.10	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.

S. No	EC Conditions
3.11	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
3.12	The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.
3.13	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction by installing a RO plant with proper supply line and Taps within 2 years
3.14	No obselete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.

4. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
4.1	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
4.2	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

5. Mining Plan

S. No	EC Conditions
5.1	5- Star Rating is mandatory to obtaine certification as per guidelines of Mininstry of Coal
5.2	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
5.3	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).

S. No	EC Conditions
5.4	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
5.5	Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.
5.6	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
5.7	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.
5.8	Transportation by Railway Siding shall be developed to avoid transportation by Road

6. Land Reclamation

S. No	EC Conditions
6.1	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
6.2	Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
6.3	Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
6.4	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
6.5	A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.
6.6	Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.

S. No	EC Conditions
6.7	Native tree species shall be selected and planted over areas affected by subsidence.
6.8	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

7. Public Hearing And Human Health Issues

S. No	EC Conditions
7.1	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
7.2	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
7.3	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
7.4	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
7.5	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
7.6	Implementation of the time bound action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the time bound action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
7.7	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
7.8	PP to conduct need based assessment survey of the area to for in order to decide the activities to be carried under the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.
7.9	PP should conduct epidemiology study to (analysis of the distribution, patterns and determinants of health and disease conditions in defined populations).

S. No	EC Conditions
7.10	Permanent Health care facilities of Hospital should be established within 5 km of project boundary for the local people.
7.11	PP must ensure an emergency action plan during pandemic in order to provide assistance to the nearby villages located within the 10 km radius buffer zone (If required)
7.12	PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone with time bound action plan
7.13	PP to take measure for installation of Renewable Energy sources in nearby area falling within 10 km radius

8. Corporate Environment Responsibility

S. No	EC Conditions
8.1	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
8.2	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
8.3	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
8.4	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
8.5	PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority

9. Miscellaneous

S. No	EC Conditions
9.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language

S. No	EC Conditions
	within seven days and in addition this shall also be displayed in the project proponent's website permanently.
9.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
9.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
9.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
9.5	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
9.6	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
9.7	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9.8	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
9.9	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
9.10	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
9.11	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
9.12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
9.13	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
9.14	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with

S. No	EC Conditions
	their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
9.15	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
9.16	Compensation of the land acquired for the project shall be settled as per the R&R Policy. Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.
9.17	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
9.18	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours

Additional EC Conditions

N/A



Annexure II

A) Budgetary provision for Safety barrier for protection of Kanchan River are as under: -

S.No.	Particulars	Amount (Rs.)
1.	Construction of Toe wall (RR Masonry Retaining wall)	7,23,08,793
2.	Construction of Settling ponds	17,23,516
3.	Construction of culverts	36,61,555
	Total	7,76,93,864

B) Budgetary provision for EMP:

Sl. No.	Particulars	Capital Cost, Rs. lakhs	Annual Recurring Cost, Rs. lakhs
1	ENVIRONMENTAL EXPENSES		
	Plantation related purchases for celebration of occasion, media for WTP, Continuous Ambient Air Quality Monitoring Station, Peizometer construction with telemetric device	56	28.02
	Environmental Monitoring (Air, Noise, Water & Waste water, Soil, DG Stack, DG Noise, O&M STP & ETP)		
2	PLANTATION		
	Seed, fertiliser, plants, bags, cutters, fawda, pots & other horticulture items	4	19.83
	Water tanker hiring, tractor hiring		
3	MINING RESTORATION ACTIVITIES		
	Construction of minor structures, purchase of PC & its parts	290.55	127.88
	Water sprinkler O&M, AMC charges, hiring of machines, diesel charges, lab costs, etc		
	TOTAL	350.55	175.73