

No. J-11015/490/2008-IA.II (M)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi-110003

Dated: 20<sup>th</sup> May, 2014

To,

General Manager (Env. & Forests)  
M/s Central Coalfields Ltd.,  
Darbhanga House,  
RANCHI

**Sub.: Expansion (Under 7(ii) of EIA Notification, 2006) of Govindpur Ph-II OC Coal Mining Project of (from 1.5 MTPA to 1.875 MTPA in an ML area of 229.867 ha (274.95 ha - 45.083 ha = 229.867 ha; Latitude 23<sup>0</sup> 48' 30'' to 23<sup>0</sup> 49' 30'' N and Longitude 85<sup>0</sup> 51' 15'' to 85<sup>0</sup> 52' 45'' E) of M/s Central Coalfields Ltd. dist. Hazaribag, Jharkhand. – Environment Clearance - reg.**

Sir:

This is with reference to letter no. DGM(E&F)/2013/1126 dated 09.07.2013 with the application and subsequent letter no. dated 14.11.2013; 18.12.2013; 12.02.2014; 20.02.2014 and 04.03.2014 for Environmental Clearance for Expansion under 7(ii) of EIA Notification 2006 for the above-mentioned project.

2. The Ministry of Environment & Forests has considered the application. It is noted that the proposal is for grant of Environmental Clearance for Expansion (Under 7(ii) of EIA Notification, 2006) of Govindpur Ph-II OC Coal Mining Project of (from 1.5 MTPA to 1.875 MTPA (being 25% of 1.5 MTPA) in an ML area of 229.867 ha (274.95 ha - 45.083 ha = 229.867 ha;) Latitude 23<sup>0</sup> 48' 30'' to 23<sup>0</sup> 49' 30'' N and Longitude 85<sup>0</sup> 51' 15'' to 85<sup>0</sup> 52' 45'' E) of M/s Central Coalfields Ltd. dist. Hazaribag, Jharkhand. The proposal was considered in the 7<sup>th</sup> EAC held on 12<sup>th</sup> -13<sup>th</sup> December, 2013 & 12<sup>th</sup> EAC meeting held on 27<sup>th</sup> - 28<sup>th</sup> February, 2014. The proponent has informed that:

- i. It was noted that EC was granted for Govindpur Ph-II Opencast Project is an operating coal mine under Kathara Area of CCL, which was started after obtaining Environmental Clearance vide letter no J-11015/490/2008-IA.II(M) dated 18.01.2011 for a normative capacity of 1.20 MTPA & peak capacity of 1.50 MTPA within lease area of 274.95 Ha. Now application submitted under 7(ii) of EIA Notification, 2006 for expansion.
- ii. M/s CCL is requesting for expansion in production capacity from 1.5 MTPA to 1.875 MTPA in ML area 274.95 ha under 7(ii) of EIA Notification 2006 with 25 % expansion.
- iii. The latitude and longitude of the project are 23<sup>0</sup> 48' 30'' to 23<sup>0</sup> 49' 30'' N and 85<sup>0</sup> 51' 15'' to 85<sup>0</sup> 52' 45'' E respectively.
- iv. The land usage of the project will be as follows:

a. Pre mining land use (in Ha.)

Sl.No.	Particulars	Total land (in Ha)
1	GMK Land	45.00
2	Tenancy land	101.67
3	Forest Land to be diverted for mining purpose	58.52
4	Forest Land in safety zone (undisturbed) to be diverted	1.95
	GMK & Tenancy Land acquired earlier but not to be disturbed now	67.81
	<b>TOTAL</b>	<b>274.95</b>

b. Post Mining land use (in Ha.)

S No.	Description	Land-use (Ha)				
		Plantation	Water Body	Public use	Landscape Quarry Batter	Total
			(Lagoon)			
1	External OB Dump	87.00	0.00	0.00	0.00	87.00
2	Internal OB Dump	12.03	4.50	0.00	0.00	16.53
3	Backfilled Excavation	6.00	35.21	0.00	18.68	59.89
4	Roads	0.00	0.00	19.30	0.00	19.30
5	Built-up (Infrastructure)	3.12	0.00	0.00	0.00	3.12
6	Unworked Area & Safety Zone	89.11	0.00	0.00	0.00	89.11
Total		197.26	39.71	19.30	18.68	274.95

c. Core Area Land Use (in Ha)

S No.	Land use category	15th Year	20th Year
1	Quarry & Internal Dump	76.42	Mine Lagoon 35.21
			Plantation On Internal Dump 12.03
			Lagoon at Internal Dump Lower Benches 4.50
			Plantation 6.0
			Batter 18.68
2	OB Dump	87.00	Plantation
3	Infrastructure/ Workshop/ CHP	3.12	Plantation after dismantling
4	Road	19.30	Public Use
5	Unworked Area & Safety Zone	89.11	Plantation
Total		274.95	-

- v. The total geological reserve is 29.62 MT. The mineable reserve 19.53 MT, extractable reserve is 19.53 MT. The per cent of extraction would be 65.93 %.
- vi. The coal grade is E grade. The stripping ratio is 1.47 m<sup>3</sup>/tone. The average Gradient is 160 – 230. There will be seven composite seams with thickness ranging from 1.0 m to 23.00 m.
- vii. The total estimated water requirement is 910 m<sup>3</sup>/day. The level of ground water ranges from 3.77 m to 6.00 m. A void of area 39.71 ha at a depth of average 60-70 m (maximum 100 m) is proposed to

- be converted into a water body.
- viii. The Method of mining would be Opencast with Shovel – Dumper Combination.
  - ix. There are one external OB Dumps covering an area 87 ha. With the height upto 60 m. The quantity will be 24.00 Mm<sup>3</sup> out of total OB of 28.66 million m<sup>3</sup>. There is one internal dumps covering an area 16.53 ha. with the height upto 1.0 agl. The quantity will be 4.66 m<sup>3</sup>. The final void area 35.21 ha with a depth of 100 m.
  - x. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
  - xi. The **life of mine** is 12 Years.
  - xii. **Transportation:** Coal transportation in pit by dumper, Surface to Siding by trucks and siding to loading by wagon.
  - xiii. There is no R & R involved. There are no PAFs..
  - xiv. **Cost:** Total capital cost of the project is Rs. 142.11 Crores. CSR Cost Rs. 5.00 per tonne. R&R Cost Rs 252.52 Crores. Environmental Management Cost (Rs. 43.33 Crore; Revenue expenditure Rs. 19.15 per tonne of coal produced).
  - xv. **Water body:** River: The south-easterly flowing Konar river marks the western limit of mining area and also forms the main drainage of the area. It lies more than 400m away from mine edge. Nallah: Montico nallah flowing from north to south marks the eastern limit of mine and joins Konar River towards South of the Project. It is 60-70 m away from mine edge.
  - xvi. **Approvals:** Ground water clearance has not been obtained. Board's approval obtained on 23.12.2009. Mining plan approval obtained on 23.12.2009. Mine Closure Plan obtained on 23.12.2009.
  - xvii. **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
  - xviii. **Forestry issues:** The total forest land is 193.25 ha. The proponent does not have FC for 45.083 ha. FC has been granted for diversion of 148.167 Ha of forest land vide No. 8-28/2003-FC, dated 02.03.2009 by MoEF.
  - xix. Total **afforestation** plan shall be implemented covering an area of 197.26 ha at the end of mining. Green Belt over an area of 89.11 ha. Density of tree plantation 2500 trees/ ha of plants.
  - xx. There are no **court/violation** cases pending with the project proponent.

3. The RO has submitted compliance report vide, letter no. 106-102/EPE dated 15.07.2013, and subsequently vide letter no. 103-392/08/EPE dated 21.02.2014. as desired by the EAC. The Proponent has submitted the final certified compliance to EC conditions vetted by RO, Bhubaneshwar, MOEF vide letter no. 103-392/08/EPE dated 21.02.2014. Detailed action plan along with the budgetary provision has been submitted which are as following:

- i. Sumps are created to take care of entire catchments area. The sump capacity is 12.75 lakh cub mtr. Adequate time is given for settlement of silt. Every year sump is being shifted as quarry progresses. Sump dimension: 500m x 60m and 600m x 75m.
- ii. The collected water is being utilized for watering the mine area, roads, green belt development. Regular drain cleaning is being done approximate expenditure = 2.50 lakh before break of monsoon
- iii. Garland drains in appropriate dimensions are being maintained. Sump capacity (mentioned above) is adequate for proper settling of silt materials.
- iv. Length of garland drains = 300 mtrs. Total expenditure = Rs.2 lakh; Toe wall (Expenditure: Rs. 17.90 lakhs) has been constructed and 200m Toe wall (Expenditure: Rs.8.49 lakhs) is under construction.
- v. Stone pitching (Expenditure: Rs.3.18 lakhs) has already been done to check run-off and siltation based on the rainfall data.
- vi. Mineral (Coal) is transported from mine to Jarangdih Railway Siding by black topped road

- (9.10 Km). Green belt, 30m wide all along the transportation road is maintained by afforestation.
- vii. Proposal for Pipradih Railway Siding is under process.
  - viii. One water sprinkler each of 28 kl & 10 kl already deployed in the Project. Fund provision made / committed: Rs. 17.00 lakh.
  - ix. Wet drilling is undertaken.
  - x. Control blasting is under taken under supervision of the blasting officer, proper blast design is prepared to control ground vibration and arrest fly rocks and boulders. Blasting is done with the use of shock tubes.
  - xi. The density of plantations under taken is 2500 plants per ha. So far 314.53 ha. of area has already been planted in the nearby areas. Plantations, as stipulated, will be under taken time to time. Total plantation = 314.53 ha. (including area of Sawang Colliery) and 24 km along road. Species of plants are sisam, gambhar, bakain, mahua, bambu, karange, sal, kathal, mango etc. However after post mining stage afforestation shall be done on backfilled areas, ext. OB dump etc.
  - xii. A provision for an amount of Rs. 31.12 Crore has been approved for Mine closure plan for Govindpur Ph-II OCP.
  - xiii. No ground water (bore well) is used for mining operations.
  - xiv. Rain water harvesting structures including check dams for recharge of ground water is under process. An estimate of Rs. 2.56 lakhs has been proposed for rainwater harvesting. There is no requirement of additional water for mining purpose.
  - xv. The details of seasonal variation of water level changes at individual wells have not been submitted. Project also has not constructed any new peizometers for monitoring ground water levels. No details regarding water quality parameters have been submitted.
  - xvi. A water treatment plant of 0.6 MGD caters to colony demand.
  - xvii. The capacity is proposed to be increased to 0.8 MGD.
  - xviii. Water is supplied to nearby villages by pipe line and hired water tanker by the project authority. In addition to this 02(two) nos. deep boring also has been done for the purpose of water supply.
  - xix. At colony sewage is treated by septic tank and soak-pit method. An adequate treatment is being done at workshop for which ETP has been functioning and clear water is recirculating for washing
  - xx. Efforts will be made to reschedule completion of STP to about 450 days to comply with the observation of EAC on 27.02.2014
  - xxi. established periodical medical examination system with occupational health check facilities initial medical examination for occupational diseases is done at the time of new recruitment and periodical medical examination of 1/5 total manpower is done every year.
  - xxii. Compensation paid to land losers as per approved CIL R&R policy.
  - xxiii. Rs. 5/te. of coal is earmarked for CSR for life of project. The total proposed expenditure of CSR is 1.50 crore during year 2013-14.
  - xxiv. CMPDI environmental laboratory is monitoring the environmental parameters of all CCL projects. The lab. is pursuing for its accreditation through NABL and final audit which was due in Feb'14 was conducted by NABL on 22nd & 23rd February, 2014. Accreditation is awaited. Final Audit has been done.
  - xxv. Independent environment officers be appointed/ engaged for monitoring environmental activities.
  - xxvi. Details of the environmental laboratory submitted along with its NABL accreditation.
4. Out of the total area of 274.95 ha, the total forest land is 193.25 ha. The proponent does not have FC for 45.083 ha. FC has been granted for diversion of 148.167 Ha of forest land vide MoEF letter no. 8-28/2003-FC, dated 02.03.2009 . Therefore the total area that should be granted EC is for 229.867 ha i.e.

(274.95 ha - 45.083 ha = 229.867). The extent of forest land in the project is 193.25 ha. In this regard, you are required to follow the guidelines issued by the FC Division of the Ministry of Environment & Forests vide no. 11-362/2012-FC dated 01-02-2013 "Guidelines for diversion of forest land for non-forest purposes under the Forest (Conservation) Act 1980. Submission of proposals to obtain forest land located within the mining lease and grant of environment clearance to mining projects" addressed to the Principal Secretary (Forests), Principal Secretary (Environment) of all the States/UT Govts. and copy to concerned Government Departments/Organisations which prescribes, inter-alia, the following:

“ (iii) As regards Environment Clearance (EC) cases of existing mining operations, where approval under the FC Act for the full forest area in the mining lease area is not available, granting of EC may be considered and the following process will be adopted for processing such cases:

- i Grant of EC may be considered only for the non-forest area plus the forest area within the mining lease for which FC is available. No mining activities will be allowed in forest area for which the FC is not available; and
- ii The project proponent will seek and obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years from the date of issue of these guidelines, failing which the mining lease area will be reduced to the non-forest area plus the forest area for which the project proponent has been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.”

5. The proposal was reconsidered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 12<sup>th</sup> EAC meeting held on 27<sup>th</sup> - 28<sup>th</sup> February, 2014 for granting Environmental Clearance. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Expansion (under 7(ii) of EIA Notification, 2006) of Govindpur Ph-II OC Coal Mining Project of (from 1.5 MTPA to 1.875 MTPA (being 25% of 1.5 MTPA) in an ML area of 229.867 ha (274.95 ha - 45.083 ha = 229.867 ha; Latitude 23<sup>o</sup> 48' 30'' to 23<sup>o</sup> 49' 30'' N and Longitude 85<sup>o</sup> 51' 15'' to 85<sup>o</sup> 52' 45'' E) of M/s Central Coalfields Ltd. dist. Hazaribag, Jharkhand** under provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below. You will need to seek and obtain approval under the FC Act for diversion of the entire forest land located within the mining lease within a period of two years from the date of issue of these guidelines (i.e. 01 February, 2013), failing which the mining lease area will be reduced to the non-forest area plus the forest area for which you have been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, you will need to get a revised mining plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.

#### **A. Specific Conditions:**

- i. The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.
- ii. No mining operations shall be undertaken in 45.083 ha of forestland until prior clearance has been obtained under the provisions of FC Act, 1980.
- iii. Mining shall be carried out as per statuette from the streams/nallahs flowing within the lease and maintaining a safe distance from River Konar flowing along the lease boundary.

- iv. No washery shall be established within the ML without prior environmental clearances from this Ministry.
- v. Topsoil shall be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used for reclamation and development of green belt.
- vi. The commitment and action plan submitted by the proponent shall be complied within one year from the date of the issue of the EC and report be submitted to the MoEF. The EAC shall review the compliance report.
- vii. Fixed sprinkler system shall become operational from June 2014.
- viii. The proponent shall ensure that colony people are supplied with treated drinking water.
- ix. Piezometers should be installed and made functional by June, 2014.
- x. The Sewage Treatment Plant shall be operational in 300 days from the issue of the EC..
- xi. The baseline survey and evaluation of projects for CSR be completed within one year.
- xii. Monitoring of land use pattern shall be carried out and report submitted within one year.
- xiii. Monitoring of AAQ shall be done every month and report be submitted to the SPCB and the RO, MoEF concerned.
- xiv. PM<sub>2.5</sub> shall be monitored from April 2014.
- xv. Environment Officers exclusively for environment related works be posted for monitoring and mitigation purpose.
- xvi. Coal transportation in pit shall be by dumper, Surface to Siding by trucks and siding to loading by wagon.
- xvii. The production of coal shall be within the same Mining Lease area.
- xviii. The OB shall be completely re-handled at the end of the mining.
- xix. Final mine void depth will not be more than 40 m. The void area will be converted into waterbody. The rest of the area will be back filled upto the ground level and covered with about a meter thick top soil and put to use.
- xx. Garland drains shall be provided.
- xxi. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.
- xxii. The land after mining shall be brought back for agriculture purpose.
- xxiii. Mine water should be treated for discharge into the lagoon. The quality of lagoon water shall be regularly monitored and mitigation measures taken.
- xxiv. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xxv. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.
- xxvi. Dust mask to be provided to everyone working in the mining area.
- xxvii. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xxviii. People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.
- xxix. The mining area should be grounded by green belt having thick closed thick canopy of the tree cover.
- xxx. The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- xxxi. There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.
- xxxii. OB shall be stacked at one earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its concerned Regional office on yearly basis.

- xxxiii. Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.
- xxxiv. Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.
- xxxv. Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- xxxvi. Drills shall be wet operated.
- xxxvii. The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads,
- xxxviii. Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.
- xxxix. A Progressive afforestation plan shall be implemented covering an area of 197.26 ha at the end of mining, which includes reclaimed External OB dump area (87 ha), Internal OB dump area (18.03 ha), industrial infrastructure (3.12 Ha).and Green belt (89.11 ha) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and a 3-tier avenue plantation along the main approach roads to the mine.
- xl. An estimated total 28.66 Mm<sup>3</sup> of OB will be generated during the entire life of the mine. Out of which 24.00 Mm<sup>3</sup> of OB will be dumped in one external OB Dumps an earmarked area covering 87 ha of land with height of 60 m. 4.66 Mm<sup>3</sup> of will be one internal OB dump in covering an area of 16.53 ha with height of 0-10m above ground level. The maximum height of external OB dump for hard OB will not exceed 90 m and that for soft OB shall not exceed 60 m. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self- sustaining and compliance status shall be submitted to MOEF and its Regional Office on yearly basis.
- xli. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- xlii. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- xliii. The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.
- xliv. No groundwater shall be used for mining operations. Rainwater harvesting structures including check dams for recharge of ground water shall be erected within and around the ML in case the water table shows a declining trend. Additional water if any required during mining operations shall be met from mine sump water or from rainwater.
- xlv. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- xlvi. Of the total quarry area of 76.42 ha. the backfilled quarry area of 18.03 ha shall be reclaimed with plantation and a void of 39.71 ha at a depth of 30-40 m which is proposed to be converted into a water body shall be gently sloped and the upper benches shall be terraced and stabilised with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- xlvii. Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity shall be done four

times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.

- xlvi. The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- xlix. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
  - 1. Besides carrying out regular periodic health check-up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, through a specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
  - ii. A project specific R&R prepared for the project shall be implemented. R&R for a cost of not less than Rs. 252.52 lakhs crores shall be completed within an agreed time schedule. Land oustees shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher.
  - iii. For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its concerned Regional office
  - liii. A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within 6 months of grant of Environmental Clearance.
  - liv. The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.
  - lv. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.
  - lvi. Corporate Environment Responsibility:
    - a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
    - b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
    - c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
    - d) To have proper checks and balances, the company shall 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.

## **B. General Conditions**

- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- ii. No change in the calendar plan of production for quantum of mineral coal shall be made.
- iii. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.



- iv. Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EPA rules, 1986 shall be furnished as part of compliance report.
- v. Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
- vi. Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.
- vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- viii. Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules, 1986.
- ix. Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.
- x. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.
- xi. A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.
- xii. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- xiii. The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>.
- xiv. A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.
- xv. A copy of the environmental clearance letter shall be shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.
- xvi. The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.
- xvii. The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office s of CPCB and the SPCB.

- xviii. The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- xix. The Environmental statement for each financial year ending 31 March in For –V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF by e-mail.
6. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.
7. The proponent is required to 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.
8. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
9. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.
10. This EC supersedes the earlier EC, vide letter no. J-11015/490/2008-IA.II (M) dated 18.01.2011, for an expansion in production from 1.20 MTPA to 1.50 MTPA in mining lease area of 274.95 ha.
11. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12. The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. And also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.
13. 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.

(Dr. Manoranjan Hota)  
Director

**Copy to:**

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi.

3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A/3 Chandrashekarapur, Bhubaneswar 751023.
4. Member-Secretary, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi.
5. Member-Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. Dr. R.K. Garg, Advisor, Coal India Limited, SCOPE Minar, Core-I, 4t Floor, Vikas Marg, Laxmi Nagar, New Delhi.
8. District Collector, Hazaribag, Government of Jharkhand.
9. IG (Wild life), Ministry of Environment and Forests, New Delhi
10. Monitoring File    11.    Guard File    12.    Record File.    13. Notice Board

(Dr. Manoranjan Hota)  
Director