

No. J-11015/180/2011-IA-II(M)
Government of India
Ministry of Environment, Forests & Climate Change
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi-110003
Dated: 20th January, 2015

To,
The General Manager (E&F)
M/s Eastern Coalfields Ltd.,
Asansol, Dist. Burdwan,
West Bengal.
E-mail: envecl@yahoo.com

Sub.: Cluster No. 10 of 19 mines (expn. from 2 MTPA(Normative) to 7.2 MTPA (peak) in a combined ML area of 6349 ha; Latitude 23^o, 19', 55" N & 23^o, 25', 10" N and Longitude 87^o, 5', 32" E & 87^o, 14', 28" E) of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, Dist. Burdwan, West Bengal - Environmental Clearance - reg.

Sir:

This is with reference to letter no. 43011/30/2011-CPAM dated 21.07.2010 with the application for Terms of Reference (TOR) and this Ministry's letter dated 30.09.2011 granting TOR. Reference is also invited to the letter no CIL/DLI/EMP/2014/12 dated 12.09.2014 and subsequent letter nos. dated 24.11.2014 and 18.12.2014 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment, Forests & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Cluster No. 10 of 19 mines (expn. from 2 MTPA (Normative) to 7.2 MTPA (peak) in a combined ML area of 6349 ha; Latitude 23^o, 19', 55" N & 23^o, 25', 10" N and Longitude 87^o, 5', 32" E & 87^o, 14', 28" E) of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, Dist. Burdwan, West Bengal.** The TOR was granted to the project, vide letter no. J-11015/180/2011-IA.II(M) dated 30.09.2011. The Proponent submitted the EIA/EMP report on 12.02.2014. The TOR expired as per the earlier OM dated 22.03.2010 and project was delisted from pending list. However, in accordance to the OM no. J-11013/41/2006-IA-II(I) (Part) dated 22.08.2014, the proponent requested for consideration of proposal for EC. The proposal was considered in the 23rd EAC meeting held on 16th -17th October, 2014. The proponent has informed that:

- i. Title correction may be made as Cluster 10 (19 nos of Mines in place of 24 mines having 14 nos. of underground mines and 5 nos. Mixed Mines).
- ii. The mining covers 17 Geological Blocks of Jemehari, North Searsole, Kunustoria, Belbaid, Bansra, Bansra - Searsole, Jambad, Parasea, Nabakajora-Madharpur, Andal - Babuisole, Andal Central, Andal East, Lachipur, KhasKajora South, KhasKajora - Mukundarpur, Moira - Madhujore North & Moira - Madhujore South.
- iii. There are 17 existing underground mines, 1 OC Mine and 1 mixed mine. 5 opencast mines/patches proposed within the lease holds of existing Underground Mines.
- iv. The objectives to operate the OC patches/ mines are that the presence of old and water-

logged workings above the present UG workings throughout the Raniganj Coalfield. Vulnerable to illegal mining Proposal to undertake extraction of the upper seams by opencast method, wherever possible. Reduce possibilities of fire and inundation and ensuring safety of underground workings. Reduce future problems of unstable locations getting created due to population growth. Patches planned mainly in small, uninhabited areas, free from surface features and do not involve shifting of any village.

- v. The project was accorded TOR vide letter no. J-11015/180/2011-IA.II(M) dated 30/09/2011. Extension of TOR for one year vide letter no J-11015/180/2011-IA.II(M) dated 11-03-2014.
- vi. It is an expansion proposal. Present production from the cluster is 1.87 MTPA in 2012-13. It is proposed to achieve a peak capacity of 7.70 MTPA.
- vii. Cluster Mine Details: 17 Underground mines + 1 opencast mine + 1 mixed mine

Sl. No.	Name of Mine	Lease hold Area (Ha)	Peak Capacity (MTY)		Life (Years)
1	North Searsole UG	360	0.20	2.0	> 25
	North Searsole (East) OC Patch		0.90		6
	North Searsole (West) OC Patch		0.90		7
2	Kunustoria UG	383	0.24		> 25
3	Amrasota UG		0.15		> 25
4	Belbaid UG	384	0.48	0.48	> 25
	Belbaid OC Patch		0.20		5
5	Bansra UG	611	0.735	0.735	> 25
	Bansra OC Patch		0.15		1
6	Parasea UG	481	0.36	0.61	> 25
	Parasea OC Patch		0.25		3
7	Parasea 6 & 7 UG		0.06		> 25
8	Jambad OC	323	0.80		> 25
9	Jambad UG		0.24		> 25
10	Nabakajora UG	703	0.30	0.80	> 25
11.	Madhabpur OC Patch		0.50		15
12	Lachipur UG	570	0.06		> 25
13	Central Kajora UG	291	0.15		> 25
14	KhasKajora UG	188	0.35		> 25
15.	Moirra UG	455	0.12		> 25
16	Madhusudanpur UG	338	0.24		> 25
17	Madhujore UG	463	0.12		> 25
18.	Ghanshyam UG	451	0.12		> 25
19	Parascole East & West	348	0.39		> 25
		6349.00	7.70		

- viii. The latitude and longitude of the project are 23^o, 19', 55" N & 23^o, 25', 10" N and 87^o, 5', 32" E & 87^o, 14', 28" E respectively.
- ix. Joint Venture: No Joint Venture
- x. Coal Linkage :

- Kahalgaon Super Thermal Power Station (KhSTPP), Kahalgaon ,Bhagalpur ,Bihar.
- National Capital Power Station (NCPS) Or NTPC Dadri, GautamBudh Nagar, Uttar Pradesh.

- Vindhyachal Thermal Power Station, Singrauli, Madhya Pradesh.
- The West Bengal Power Development Corporation Limited (WBPCDCL).
- Sipat Super Thermal Power Station or Rajiv Gandhi Super Thermal Power Station at Sipat Bilaspur district Chhattisgarh.
- Farakka Super Thermal Power Plant Nabarun Murshidabad West Bengal.
- Simhadri Super Thermal Power Plant, Visakhapatnam, Andhra Pradesh.
- Mauda Super Thermal Power Station or NTPC Mauda, Nagpur, Maharashtra.

- xi. The land usage of the project will be as follows:
Pre-Mining & Post-Mining:

S.No	Type Land Use	Present Mining Land Use (ha)	Post-mining Land Use (ha)
1.	Running quarry	256.0	
	Backfilled		805.0 & brought under Plantation
	Not Backfilled		
2.	External OB dump	81.0	200.0 To be brought under Plantation
3.	Service building/ mine infrastructure	461.0	436.2 (undisturbed) + 21.0 ha under plantation
	Unstable habitations	3.8	3.8 Ha under Plantation
5.	Rail & Road	150.0	130.0 (20 Ha under plantation)
6.	Habitation (total)	608.0	564.8
	Unstable habitations	43.2	43.2 Ha under Plantation
7.	Other built-up areas	257.0	257.0
9.	Agriculture land	1778.0	1778.0
10.	Forest land	-	-
11.	Plantation / Natural Vegetation	185.25	2030
		555.75	
12.	River/nallah/pond	423.0	423.0
13.	Barren land	1018.0	350.0
14.	Vacant land for public purposes	380.0	380.0
15.	Others	196.0	196.0 Ha To be brought under Plantation
Total	6349.0	6349.0	

- xii. The total estimated water requirement is 10,940 m³/day. The level of ground water ranges in Pre-Monsoon 17m to 2.5 m (avg.7.93m) & Post-Monsoon 5.25m to 1.45m (avg. 2.91m).
- xiii. The Method of mining would be Bord & Pillar method for UG mines and Shovel-Dumper combination for OC mines.
- xiv. There is one external OB dump with Quantity of 1.92 Mbcm in an area of 7.60 ha with height of 60 meter above the surface level and internal dump with Quantity of 17.82 Mbcm in an area of 557 ha.
- xv. There will be no mine void. Total quarry area at present is 256 Ha. At the end of mining total quarry area will be 805 ha which will be reclaimed.
- xvi. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.

- xvii. **Transportation:** For Underground mine coal tubs at the faces are being hauled by Tugger Haulage. & Opencast mine coal at surface is transported to the nearby coal depot by colliery dumpers through tippler, Surface to Siding by Road transportation by 15 Tonne dumpers and loading at siding by Pay loaders onto wagons.
- xviii. There is **R&R** involved.
- xix. **Cost:** Total Cost of the Project is Rs. 1135.8274 Crore. CSR Cost will be as per CIL policy. R&R Cost and Environmental Management Cost (capital cost Rs 5437.00 Lakhs, annual The recurring cost shall be Rs 3804.00 Lakhs.
- xx. **Water body:** The cluster falls within the drainage basin of Damodar River, which flow 2 km south of the cluster. There is a seasonal Sangara nallah with its tributaries and controls a significant portion of the drainage of the cluster. The nallah flows from north-west to south-east inside the cluster and finally drained into Damodar River.
- xxi. **Subsidence Management:** No underground mining will be carried out below within 45 m of the Major Roads, Railway line and nallah flowing through the cluster. Coal pillars will be left intact vertically below and within the angle of draw of villages and other surface features. Depillaring done with sand stowing in all mines except Madhusudanpur & Moira UG mines. The mining method is adopted in consultation with DGMS and their approval. Surface vigil to be maintained to notice any ground movement. The subsided land will be levelled and any surface crack dozed and filled with appropriate soil material. The subsided areas will be reclaimed by planting deep rooted trees
- xxii. **Approvals:** All the existing mines within the cluster are taken over mines after nationalization. The mines of ECL has been grouped into 13 Clusters which has been approved by Competent authority of ECL on 10.09.2009 and subsequently accorded approval of Board of Directors of ECL in its Board Meeting held on 28.03.2011 for preparation of EIA/EMP of the cluster. Mine Closure Plan approval in December, 2013.
- xxiii. **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxiv. **Forestry issues:** There is no forests area involved in project area.
- xxv. Total **afforestation** plan shall be implemented covering an area of 1289 ha at the end of mining. Top-soil Dump (30 Ha); External Waste Dump (170 Ha); Excavation (805.Ha); Rail/Road (20 Ha); Mine Infrastructure (24.8 Ha); Subsided (43.2 Ha); Others (196 Ha).
- xxvi. There are no **court cases/violation** pending with the project proponent.
- xxvii. **Public Hearing** was held on 18.07.2014 at Tagore Memorial Hall beside Kunosthorlia area office of ECL, Dist- Burdwan. The issues raised in the PH includes basic infrastructure facilities; transportation of coal; long time demand of the local people; extensive plantation; environmental management plan and corporate social responsibility etc. All the commitments made during Public Hearing shall be implemented.
3. The proponent has responded to the issues raised by one of the NGOs which are as follows:
- i. **Water Pollution:** The mine discharges are collected and passed through sedimentation tank/pond to arrest the silt. This treated water is then utilized for mine site requirement and the surplus to supplement the water demand for domestic and agriculture use of villages if required or discharged into local nallah. Further, the analysis results of mine discharges from the mines within the cluster indicate that it's fit for outside discharge after settling and no further treatment is required.



- ii. It has also been proposed to install O & G traps for water discharged from workshops. There has been no ground water contamination due to coal mining. The area falls in the safe category as per CGWA norms.
- iii. **Air Pollution:** The Cluster 10 is located about 20 km from the Asansol – Burnpur industrial area which was considered critically polluted. However, Asansol is now out of the list of critically polluted areas. Concentration levels of PM₁₀ and PM_{2.5} are well within the limits prescribed for Specifically for Raniganj Coalfields.
- iv. **Project affected people:** Although no shifting of population is required for mining purpose, there are a number of unstable locations falling within the cluster boundary over which habitation has grown and these habitations are to be shifted to safer place as envisaged in the **Master Plan for Raniganj Coalfields** which has been approved by GoI and being implemented by ADDA (Asansol Durgapur Development Authority). An amount of Rs. 137.43 Cr has been earmarked for the rehabilitation of the estimated no. of about 2034 households falling within this cluster to be carried out in two phases within 10 years.

4. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 23rd EAC meeting held on 16th -17th October, 2014 for granting Environmental Clearance. The Ministry of Environment, Forests & Climate Change hereby accords environmental clearance for the above-mentioned **Cluster No. 10 of 19 mines (expn. from 2 MTPA (Normative) to 7.2 MTPA (peak) in a combined ML area of 6349 ha; Latitude 23^o, 19', 55" N & 23^o, 25', 10" N and Longitude 87^o, 5', 32" E & 87^o, 14', 28" E) of M/s Eastern Coalfields Limited, located in Raniganj Coalfields, Dist. Burdwan, West Bengal** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms and conditions mentioned below:

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. The validity of the EC is for the life of the Mine or as specified in the EIA Notification, 2006, whichever is earlier.
- iii. There shall be no mine void and no external dumps at the end of mining.
- iv. Adequate measures shall be taken to mitigate subsidence as per DGMS stipulations.
- v. The flyash that has been dumped during past operations shall be covered with one meter top soil. No further flyash dumping shall be done in mines in the cluster.
- vi. Adequate rain water harvesting and other facilities should be created for ground water recharge.
- vii. Surface run off must pass through the settling tank before discharging into the water body.
- viii. All safety measures shall be taken as per CMR, 1957 & related Circulars.
- ix. The production shall be within the same Mining Lease area.
- x. Coal shall be transported by rail only. Coal transportation from mine to siding should be by conveyor belt. The loading to siding by pay loaders into railway wagons.
- xi. Independent network of railway sidings inside cluster be developed. Railway sidings should be constructed at the earliest and till then proponent may use mechanically covered trucks for transportation of coal.
- xii. Three tier green belts shall be raised around the railway sidings and along the road sides to prevent dust and noise pollution.
- xiii. Stowing and depillaring shall be as per the recommendations of the DGMS.

- xiv. The proponent must comply with the Raniganj Action Plan. The unstable areas within the cluster will be brought under plantation after the population residing over these areas is rehabilitated under the Master plan for Raniganj Coalfield to be implemented by ADDA.
- xv. Trees with deep rooted system should be planted so as to prevent soil erosion.
- xvi. Proponent should plant additional 10 Ha/ year over the next 10 years at various locations in this Cluster.
- xvii. River/nallahs shall be desilted and restored back to functional state
- xviii. Wild life conservation plan be prepared and submitted to the MOEFCC with the approval of the State Govt.
- xix. Proponent shall use high resolution image of all clusters for evaluating land use, plantation etc
- xx. Separate drainage pattern be provided.
- xxi. Sand stowing must be used as recommended by CMPDI.
- xxii. Action plan for prevention and mitigation of subsidence be prepared and implemented.
- xxiii. The OC patches to be operated will be completely filled-up after exhaustion of reserves and reclaimed with plantation.
- xxiv. The OB shall be completely re-handled at the end of the mining.
- xxv. There shall be no residual OB dump after the mining.
- xxvi. After completion of mining activities, the subsided areas shall be graded and planted upon.
- xxvii. Coal Extraction shall also be optimised in areas where agricultural production is continuing. Some pillars shall be left below the agricultural land. No depillaring & coal extraction should be carried out below habitation, H.T. Lines & beneath road, water bodies
- xxviii. The land excavated after mining must be brought back to original condition for agricultural/plantation purpose.
- xxix. Water discharged from the mine should be as good as surface drinking water.
- xxx. Regular monitoring of subsidence movement on the surface over and around the working area and 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 movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.
- xxxi. If subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners.
- xxxii. Water sprinkling system shall be provided to check fugitive emissions from loading operations, conveyor system, haulage roads, transfer points, etc. Major approach roads shall be black topped and properly maintained.
- xxxiii. The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.
- xxxiv. The mining in the existing mines should be phased out after expiry of the current mining lease and after reclamation of mined over area. The operating mines may be analysed and monitored for compliance of conditions, bearing with movement of wildlife and until such time they are closed/phased out.
- xxxv. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.



- xxxvi. Dust mask to be provided to everyone working in the mining area.
- xxxvii. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xxxviii. 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.
- xxxix. The mining area should be surrounded by green belt having thick closed thick canopy of the tree cover.
 - xl. 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 an specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
 - xli. 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.
 - xl.ii. 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.
 - xl.iii. 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.
 - xl.iiii. Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas 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 sites. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.
 - xl.v. 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.
 - xl.vi. 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.
 - xl.vii. Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to conform to prescribed levels before discharge into the natural environment.
 - xl.viii. Drills shall be wet operated.
 - xl.ix. 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,
 - i. 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.
 - ii. A Progressive afforestation plan shall be implemented covering an area of 1289 ha at the end of mining, which includes reclaimed Top-soil Dump (30 Ha), Excavation area (805 Ha) External Waste Dump area (170 ha), Mine Infrastructure area (24.8 ha); Subsided (43.2 Ha) and Others land (196 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.

- lii. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- liii. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- liv. No groundwater shall be used for mining operations.
- lv. An estimated total 19.74 Mm³ of OB will be generated during the entire life of the mine. Out of which 1.92 Mm³ of OB will be dumped in one external dump covering area 7.60 Ha of land and 17.82 Mm³ in internal OB Dumps covering an area of 557 Ha of land. The OB dump height is upto 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&CC and its Regional Office on yearly basis.
- lvi. Of the total quarry area 805 ha, the backfilled quarry area of (805 Ha) shall be reclaimed with plantation 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.
- lvii. 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 & Climate Change and to the Central Pollution Control Board quarterly within one month of monitoring.
- lviii. 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.
- lix. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- lx. 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.
- lxi. 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&CC and its concerned Regional office
- lxii. A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest & Climate Change within 6 months of grant of Environmental Clearance.
- lxiii. 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.
- lxiv. 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, Forests & Climate Change.
- 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 PM₁₀, PM_{2.5}, SO₂ and NO_x 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 (PM₁₀, PM_{2.5}, SO₂ and NO_x) 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 19th May 1993 and 31st 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 & Climate Change 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 PM₁₀, PM_{2.5}, SO₂ and NO_x (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 MoEFCC by e-mail.

5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

6. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent

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 stipulate any further condition for environmental protection.

9. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

10. 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.



11. 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 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. 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.

12. 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, New Delhi.
2. Secretary, Department of Environment & Forests, Government of West Bengal, Secretariat, Kolkatta.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar – 751023, Orissa.
4. Member Secretary, West Bengal State Pollution Control Board, Paribesh Bhawan, 10A, Block LA, Sector-III, Salt Lake City, Kolkatta – 700098.
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, Purulia, Government of West Bengal.
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