

No. J-11015/184/2012-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: 10th December, 2014

To,

The General Manager (E&F)
M/s Bharat Coking Coal Ltd.,
Koyala Bhawan, Dhanbad,
Jharkhand

Sub.: Cluster -XII of Kapuria UG Mine (2.4 MTPA normative with a peak capacity of 3.12 MTPA in an ML area of 809.60 ha; Latitude 23°44'30" N to 23°46'25" N and Longitude 86°16'50" E to 86°19'55" E) of M/s Bharat Coking Coal Ltd. located in Jharia Coalfields, Dist. Dhanbad, Jharkhand - Environmental Clearance - reg.

Sir,

This is with reference to letter no. 43011/13/2012-CPAM dated 30.05.2012 with the application for Terms of Reference (TOR) and this Ministry's letter dated 26.12.2012 granting TOR. Reference is also invited to the letter no CIL/DLI/EMP-TOR/2014/05 dated 26.02.2014 and subsequent letter nos. dated 02.07.2014; 19.08.2014 and 08.09.2014 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 -XII of Kapuria UG Mine (2.4 MTPA normative with a peak capacity of 3.12 MTPA in an ML area of 809.60 ha; Latitude 23°44'30" N to 23°46'25" N and Longitude 86°16'50" E to 86°19'55" E) of M/s Bharat Coking Coal Ltd. located in Jharia Coalfields, Dist. Dhanbad, Jharkhand.** The proposal was considered in the 15th EAC meeting held on 27th -28th June, 2014 and 21st EAC meeting held on 18th -19th September, 2014. The proponent has informed that:

- i. The project was accorded TOR vide letter no. J-11015/184/2012 -IA.II (M) dated 26.12.2012.
- ii. The latitude and longitude of the project are 23°44'30" N to 23°46'25" N and 86°16'50" E to 86°19'55" E respectively.
- iii. The land usage of the project will be as follows:

Pre-mining land use of core zone:

Sl. No.	Type of land use	Pre-mining land use (in Ha)
1.	Road/Rail	26.77
2.	Scrubs	218.64
3.	Fallow land	47.96
4.	Social Forestry	8.70
5.	Water Body	15.23
6.	Settlements	97.72
7.	Barren land	394.58
	Total	809.60



Post-mining land use of core zone:

Sl. No.	Description of area	Land use (ha.)				
		Plantation	Water body	Public use	Undisturbed	Total
1	Air Shaft	1				1
2	Project Office, Canteen, Parking etc.			1.18		1.18
3	Monorail			1.12		1.12
4	Longwall sheds & Open storage	5.71				5.71
5	Substation	0.48				0.48
6	Stores, Workshop, etc.	1.05				1.05
7	Filter Bed	0.25				0.25
8	Nitrogen Plant, etc.	1.2				1.2
9	CHP	1				1
10	Internal roads, etc.			1.51		1.51
11	Waste dump	1.5				1.5
12	Washery	4				4
13	Diversion / Laying of Roads			26.86		26.86
14	Plantation	91				91
	Total Disturbed	107.19	0	30.67	0	137.86
	Area indirectly affected	579.7				579.7
	Area untouched				92.04	92.04
	Total	686.89	0	30.67	92.04	809.6

- iv. The total geological reserve is 146.175 MT. The mineable reserve 123.308 MT, extractable reserve is 37.49 MT. The per cent of extraction would be 30.40 %.
- v. The coal grade is ST-I, ST-II, W-I to W-IV. The stripping ratio is not applicable. The average Gradient 1 in 4.5 and 1 in 5. The general dip of formation is 10° to 15° with the exception in southern region in the vicinity of the boundary fault where the seams are steeply dipping to the extent of even 70° at few places. There will be seven seams with thickness ranging upto 3.22 - 8.38 m.
- vi. The total estimated water requirement is 931 m³/day. The level of ground water ranges from 2-15 m.
- vii. The Method of mining would be by Longwall retreat method with powered supports.
- viii. There are neither external nor internal OB dump as it is underground mining.
- ix. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- x. The life of mine is 30 Years.
- xi. **Transportation:** Coal produced from the mine will be directly loaded into a CHP at the incline top. From the CHP at incline top coal will be transported to the proposed Kapuria Coal Washery linked to the mine by covered conveyor system of length of 250m. Washed coal from the washer will be transported by conveyor to the railway siding and loaded into the wagons by CHP.
- xii. There is **R & R** involved. There are 5453 PAFs.
- xiii. **Cost:** Total capital cost of the project is Rs. 792.83 Crores. CSR Cost: As per the CIL's Policy, the company will spend 5% of the retained earning of the previous year subject to a minimum of Rs. 5/- per tonne of coal production. (Rs. 1.2 crores). R&R Cost Rs. 24315.33 Lakhs. Environmental Management Cost: Initial capital investment - Rs. 2 Crores approximately while the recurring expenditure during the stage of production is envisaged as Rs. 83.53 Lakhs per year.
- xiv. **Water body:** The Katri Nala and Khudia Nala flow through the cluster and joins Damodar river in the

south of the cluster. Jarian Nala flows along the eastern boundary of the cluster.

- xv. **Approvals:** Ground water clearance applied is in process, Approved mine plan vide letter no. BCCL/Dy-GM(Env.)/F-EMP/14/699 dated 19.08.2014.
- xvi. **Board's approval:** Approved in BCCL Board in 279th Meeting on 03.07.2011 & finally by Coal India Board in 272th Meeting on 12th August 2011. DPR is approved by BCCL after the scrutiny of CMPDIL.
- xvii. **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xviii. **Forestry issues:** No forest area is involved for mining.
- xix. **Flora and Fauna:** The mixed flora consists of the following species: - Asan, Karam, Guri, Sidha, Mahua, Gamhar, Bid, Semal, Piar, Bel, Dhatura, Salai, Kusum, Sisam, Palash etc. Various kinds of ecosystems were observed from scrub patches, grass lands to man-made agro-ecosystems of crop lands and plantations. Domesticated species like Goat (*Capra aegagrus*); Buffalo (*Bubalus bubalis*); Cow (*Bos primigenius*); and Dog (*Canis lupus familiaris*) were found in farm lands and villages.
- xx. Green Belt around facilities & roads (20 ha), Facilities (9.69 ha), waste dump (1.5 ha), washery (4.0 ha) indirectly affected areas (580.7 Ha) and other areas (71 ha) Density of tree plantation 2500 trees/ ha of plants.
- xxi. There are no **court cases/violation** pending with the project proponent.
- xxii. **Public Hearing** was held on 20.12.2013 at Ruddi Ground, Kapuria, Post Bhela Tand, district Dhanbad. The issues raised in the PH includes plantation; Provision of water sprinkling; noise pollution; Employment; Compensation of land ;Free education etc. The proponent has made Commitment to comply to all the issues raised in the Public Hearing.
- xxiii. Cluster-XII consist of one mine named Kapuria UG (2.4 MTPA normative with a peak capacity of 3.12 MTPA in an ML of 809.60 Ha) only. The leasehold of BCCL is divided into 17 clusters with 15 clusters in Jharia coalfield and 02 in Raniganj Coalfields based on environmental rational. Approval of Cluster concept for mines of Jharia Coalfield (clusters 1 to 15) is granted vide File No. J-11015/24/2009-IA.II(M) dated 2-12-2009. Cluster-XII (Kapuria UG) is under this approval. Though the nomenclature of Cluster-XII didn't fit in subject of TOR issued, but has figured in various other pages of TOR. Hence project name has been Cluster-XII (Proposed Kapuria UG Coal Mine Project).
- xxiv. The proponent has submitted that in the TOR condition number (i) it was mentioned that: "An EIA-EMP report for cluster VI consisting of Kapuria mines consisting 1 UG of production capacity of 3.12 MTPA with a peak capacity of 7.631 MTPA in a ML area of 809.60 Ha based on the generic structure specified in Appendix III of EIA Notification 2006". This may be rectified as: An EIA-EMP report for cluster XII consisting of 1 UG Kapuria mine of production capacity of 2.4 MTPA with a peak capacity of 3.12 MTPA in a ML area of 809.60 Ha based on the generic structure specified in Appendix III of EIA Notification 2006.
- xxv. Thick green belt shall be developed around proposed washery within the Cluster-XII lease area and plantation shall be undertaken along NH-32. BCCL is also in process of instituting Source Apportionment Study which will clearly show sources of background pollution levels.
- xxvi. To monitor effect on groundwater, piezometers shall be installed in bore wells.
- xxvii. Further subsidence study shall be taken up with reputed scientific agency like Central Institute of Mining and Fuel Research (CIMFR) Dhanbad as per stipulation by DGMS.
- xxviii. Plantation shall be taken up under environmental head.
- xxix. It is clarified that the various CSR works includes education, healthcare, water supply etc.

3. The proposal was re-considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 21st EAC meeting held on 18th -19th September, 2014 for granting Environmental Clearance. Factual Correction in the ToR letter at condition number (i) is corrected as (i) An EIA-EMP report for cluster XII consisting of 1 UG Kapuria mine of production capacity of 2.4 MTPA with a peak capacity of 3.12 MTPA in a ML area of 809.60 Ha based on the generic structure specified in Appendix III of EIA Notification 2006. The Ministry of Environment, Forests & Climate Change hereby accords environmental

clearance for the above-mentioned **Cluster –XII of Kapuria UG Mine (2.4 MTPA normative with a peak capacity of 3.12 MTPA in an ML area of 809.60 ha; Latitude 23°44'30" N to 23°46'25" N and Longitude 86°16'50" E to 86°19'55" E) of M/s Bharat Coking Coal Ltd. located in Jharia Coalfields, Dist. Dhanbad, Jharkhand** under the provisions of the Environmental Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general 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. A separate team for subsidence monitoring and surface mitigation measures be constituted and continuous monitoring and mitigation measures be carried out.
- iii. The validity of the EC is for the life of the Mine or as specified in the EIA Notification, 2006, whichever is earlier.
- iv. The coal transportation from the mine to the siding shall be by conveyor belt and coal transportation from to the washery shall be by rail.
- v. Piezometers be installed upto the depth of mining to facilitate monitoring of ground water.
- vi. Water sprinkler be used for coal dust suppression along the haul roads.
- vii. Thick green belt shall be developed around proposed washery within the Cluster-XII lease area and plantation shall be undertaken along NH-32.
- viii. Subsidence study shall be taken up with reputed scientific agency as per stipulation of DGMS.
- ix. Various CSR works that will be carried out shall include education, healthcare water supply etc.
- x. The project should have ecologist/social scientists to monitor the project.
- xi. Coal produced from the mine will be directly loaded into a CHP at the incline top. From the CHP at incline top, coal will be transported to the proposed Kapuria Coal Washery linked to the mine by covered conveyor system of length of 250m. Washed coal from the washer will be transported by conveyor to the railway siding and loaded into the wagons by CHP.
- xii. The production shall be within the same Mining Lease area.
- xiii. 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 clay soil/suitable material.
- xiv. If subsidence is found exceeding the permitted limits, then the land owners shall be adequately compensated with mutual agreement of the landowners.
- xv. Mining shall be carried out as per statuette at a safe distance from river/nalla following within adjacent to the lease boundary at the time of depillaring, protective bunds and garland drains shall be provided so that no water from the surface enters the subsidence area and the shaft.
- xvi. Sufficient coal pillars shall be left unextracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- xvii. Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.
- xviii. Diversion of Land shall be done with approval of the Competent Authorities.
- xix. Coal Extraction shall 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, railway track.
- xx. The mined out land should be used for agriculture purpose.
- xxi. Safety measures and health issues need to be addressed for workers and surrounding villagers.
- xxii. Proponent shall implement all the related safety measures with safety equipments.
- xxiii. At the time of establishing the CHP, it is proposed to establish mist spray arrangements and also enclosing the ground level bunkers up to the level of gantry.

- xxiv. An afforestation plan to be prepared for implementation after stabilization of subsidence.
- xxv. Water spraying arrangements at loading points and mist spray arrangements are to be provided.
- xxvi. No additional land, manpower and equipment and water shall be used for the expansion project.
- xxvii. Mine closures activities include sealing of incline mouth dismantling of haulage system, clearing and afforestation of coal stock area, plantation on barren land and old abandoned mine.
- xxviii. 3-tier plantation should be developed 2 km stretch of road from the mine using native species
- xxix. 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.
- xxx. 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.
- xxxi. A progressive afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township etc., by planting native species in consultation with the local DFO/Agriculture Department.
- xxxii. 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.
- xxxiii. Acid Water Treatment Plant, volume of water to be treated and disposal of brine should be provided.
- xxxiv. High root density tree species shall be selected and planted over areas likely to be affected by subsidence.
- xxxv. Monitoring of drinking water should be carried out regularly.
- xxxvi. Sewage treatment plant shall be installed in the township. ETP shall also be provided for treating workshop and CHP effluents.
- xxxvii. 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 Regional office at Bangalore.
- xxxviii. If the water quality parameters such as F, pH, heavy metals, etc. exceed the prescribed limits, suitable measures by the proponent be taken to ensure that the local communities are provided alternate source of water for their livelihood
- xxxix. Medical camps should be organized in the area for regular check-up of workers/ villagers/population. Detailed prevalent disease pattern in the area should be documented and details of medical facilities provided for the same be made available to the MoEF&CC
 - xl. 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.
 - xli. The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource, in case water table shows a declining trend. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
 - xl.ii. 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 agency such as NIOH, Ahmadabad within a period of one year and the results reported to this Ministry and to DGMS.
 - xl.iii. 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.
 - xliv. Project specific CSR for an amount of Rs5/Tonne of coal production, as adjusted as per the annual inflation, should be provided for the CSR activities undertaken and the progress made thereon shall be uploaded



- annually on the company website. Monitoring of the impacts of activities under CSR shall be carried out periodically.
- xliv. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forests & Climate Change 5 years in advance of final mine closure for approval.
- xlvi. 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.

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

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

6. 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.

7. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

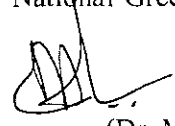
8. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

9. 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.


10. 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.

11. 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 Jharkhand, Secretariat, Ranchi.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar – 751023.
4. Member-Secretary, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), H.E.C., Dhurwa, Ranchi – 834004.
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, Dhanbad, Government of Jharkhand.
9. Monitoring File 10. Guard File 11. Record File. 12. Notice Board


(Dr. Manoranjan Hota)
Director