

No. J-11015/177/2014 -IA-II (M)
Government of India
Ministry of Environment, Forest & Climate Change
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi-110003
Dated: 6th July, 2015

To,

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

Email: envbccl@gmail.com

Sub. : Patherdih NLW Coal Washery (2.5 MTPA in an ML area 17.5 ha; Latitude 23° 40' 30" & 23° 40' 50" N and Longitude 86° 26' 10" & 86° 26' 30" E) of M/s Bharat Coking Coal Ltd., located at dist. Dhanbad, Jharkhand – Environmental Clearance - reg.

Sir,

This is with reference to letter no. 43011/11/2014-CPAM dated 20th June, 2014 with the application for Terms of Reference (TOR) and this Ministry's letter dated 30.09.2014 granting TOR. Reference is also invited to the letter dated 06.04.2015 and subsequent letters dated 08.05.2015 and 14.05.2015 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment, Forest & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Patherdih NLW Coal Washery (2.5 MTPA in an ML area 17.5 ha; Latitude 23° 40' 30" & 23° 40' 50" N and Longitude 86° 26' 10" & 86° 26' 30" E) of M/s Bharat Coking Coal Ltd., located at dist. Dhanbad, Jharkhand**. The proposal was considered in the **35th EAC meeting held on 14th -15th May, 2015**. The proponent has informed that:

- i. Proposed Patherdih NLW Coal Washery, covering an area of about 17.5 Ha, is located South-east of Jharia Coalfield in the Dhanbad district of Jharkhand. It will be built in place of **existing washery** after dismantling the same.
- ii. It is adjacent to proposed Patherdih NLW coal washery (5 MTPA normative capacity with a peak capacity of 6.5 MTPA in an area of 12 Ha for which EC has been granted by MOEFCC vide J-11015/240/2010-IA.II(M).
- iii. The washery project is proposed to be established on "Build-Operate & Maintain" basis.
- iv. The Washery is to be operated for washing coal from adjacent mines of BCCL i.e. from Gondudih OCP & Dhansar/Industry/Kusunda/KhasKusunda Mines of Jharia Coalfields of BCCL.
- v. The quantity of water required for the proposed washery is about 1162.5 KLD which is proposed from Jealgora 7 pit mine water about 5 km from the proposed washery site.


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- vi. MOU have been signed with M/S Monnet Ispat & Energy Ltd and Keerthi Industries Ltd as qualified bidders for disposal of process rejects produced. The rejects will be sent to railway siding by conveyor from where it will be dispatch by rail to third parties to be utilized for power generation in FBC based TPP.
- vii. Washery rejects generated from the coal beneficiation process will be stored in a 4000 te capacity storage bunker for its disposal to the consumers
- viii. The project was accorded TOR vide letter no. Letter No.- J-11015/432/2013-IA.II (M) on 30.12.2014.
- ix. The latitude and longitude of the project are 23° 40' 30" & 23° 40' 50" N and 86° 26' 10" & 86° 26' 30" E respectively.
- x. Joint Venture: There is no joint venture.
- xi. Coal Linkage: Gondudih OCP (1MT), Dhansar/ Industry/ Kusunda/ KhasKusunda Mines (1.5MTPA).
- xii. Employment generated/to be generated: Washery will be manned with 31 BCCL employees and 90 employees from operating company.
- xiii. Benefits of the project:
 - a. The Washery will produce environmental friendly clean coal to minimize the pollution levels.
 - b. It will reduce volume of coal transportation which will reduce pollution.
 - c. The rejects will be utilized for power generation in Fluidized Bed Combustion plants.
 - d. The project will create employment opportunities both for skilled and semiskilled persons in the area
 - e. Business opportunity in Secondary & Tertiary sectors will increase.
 - f. The Washery will produce metallurgical grade coal to be used in steel plants thus resulting in savings to the national exchequer
 - g. CSR activities will improve social infrastructure in the area
- xiv. **The land usage of the project:**

Land requirement

Sl. No.	DESCRIPTION	AREA(ha)
a	Plant Facilities	4.18
b	Effluent treatment plant	0.50
c	Approach roads	0.75
d	Green belt and 3-tier Plantation	7.64
e	Others (specify)	0.43
	i) Stores	
	ii) Security post	
	iii) Canteen	
	iv) Parking	

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	v) Electrical Switch Yard	
	vi) Administrative building	
	vii) First Aid Center	
f	Rejects Storage	4.00
	Total	17.50

- xv. The total estimated water requirement is approx. 0.25 MGD KLD as make up water & air pollution control sprinkling.
- xvi. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xvii. Economical life of the washery has been taken as 18 years.
- xviii. Transportation: Raw coal intake and product dispatch will be through conveyor at railway siding existing besides the proposed washery.
- xix. There is no R & R involved. There are no PAFs.
- xx. Cost: Total capital cost of the project is Rs. 278.91 Crores. CSR Cost Rs. Rs. 2/- per Tonne of coal production. R&R Cost Nil. Environmental Management Cost (capital cost Rs. 226 Lakhs, annual recurring cost Rs. 45 Lakhs).
- xxi. Water body: Damodar River flows at a distance of 3.5 Km from the project area.
- xxii. Approvals: Board's approval obtained on 30.08.2008.
- 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 forest area involved.
- xxv. There are no court cases/violation pending with the project proponent.
- xxvi. Public Hearing was held on 27th March, 2015. The issues raised in the PH includes employment to local villagers especially employees of old washery after dismantling; water spraying to control fugitive emission; repair of Kulatand school and facilities such as school bus, drinking water, medical and sport facilities for the school children; etc. The PP has given a commitment to meet the above requirements and informed adequate funds for the same has been provided under CSR.

3. The proposal was reconsidered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in **35th EAC meeting held on 14th -15th May, 2015** for granting Environmental Clearance. The Ministry of Environment, Forests and Climate Change hereby accords Environmental Clearance for the above-mentioned **Patherdih NLW Coal Washery (2.5 MTPA in an ML area 17.5 ha; Latitude 23⁰ 40' 30" & 23⁰ 40 '50" N and Longitude 86⁰26' 10" & 86⁰ 26'30" E) of M/s Bharat Coking Coal Ltd., located at dist. Dhanbad, Jharkhand** 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. There shall be no transportation of coal by road. Coal transportation shall be only by rail.
- ii. Raw coal intake and product dispatch will be through conveyor at railway siding existing besides

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the proposed washery.

- iii. Raw coal (-200 mm) from designated collieries, namely, Gondudh OCP and Godhur U/G (Dhansar / industry / Kusunda / Khas) shall be transported by rail from KDS-Siding and KDS-K Siding and
- iv. Raw coal shall be received at the proposed Patherdih Coal Washery (2.5 MTPA) by rakes of BOBR Wagons and shall be unloaded into a 4500 Ton capacity receiving track hopper.
- v. Washed coal, from each coal washery unit, shall be transported by a belt conveyor and stored in Washed Coal storage bunker (4000 Tons capacity).
- vi. A travelling Tripper on top of the storage bunker shall distribute the washed coal into the bunker.
- vii. The mine water shall be used for washery and other purposes after appropriate treatment.
- viii. Catchment area / check dams be constructed for rain water harvesting and the water there from the utilized and after adequate treatment
- ix. Green belt shall be developed using local species all along the periphery of the site, along the areas such as the crushing units and stockyards, transfer and loading points. The development of green belt shall be monitored and six monthly report shall be submitted to regional office.
- x. Detailed plan for reclamation of land after dismantling of old washery shall be submitted within six months.
- xi. Waste Water shall be effectively treated and recycled completely either for washery or maintenance of green belt around the plant.
- xii. The assurances given during the Public Hearing and as per the Action Plan developed by the proponent should be implemented
- xiii. Three-tier green belt should be developed along the washery boundary and along transfer and loading points and railway siding to mitigate/check dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, near washery, storage yards, loading points and transfer points and along internal roads and main approach roads.
- xiv. Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- xv. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned with mechanical sweepers.
- xvi. Records of quantum and ash content of raw coal being washed, and clean coal and coal rejects produced from every batch of washing shall be maintained and details thereof uploaded on the company website.
- xvii. No groundwater shall be used for the Plant Operations. Any additional water requirement envisaged shall be obtained by recycle/reuse to the maximum extent and from rainwater harvesting measures.
- xviii. Socio-economic and welfare measures for the local communities for the adjoining villages shall be implemented under CSR. Activities under CSR activities to be undertaken for the adjoining villages shall be identified in consultation with the local authorities, the details of status of implementation of CSR and expenditure thereon which should be annually updated on the company website.
- xix. Heavy metal content in raw coal, and washed coal shall be analysed once in a year and records maintained thereof.

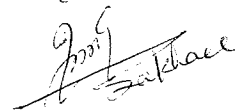
- xx. The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.
- xxi. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.
- xxii. 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

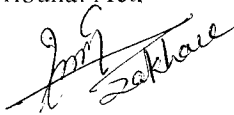
- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment, Forests & Climate Change.
- ii. No change in the calendar plan of production for quantum of mineral coal shall be made.
- iii. Four ambient air quality monitoring stations shall 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 MoEF&CC 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.


(P R Sakhare)
Deputy Director (S)

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-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



(P R Sakhare)
Deputy Director (S)