



BHARAT COKING COAL LTD.

A Maharatna Company

(A Subsidiary of Coal India Ltd.)

REGD. Office: Koyla Bhawan, Koyla Nagar, Dhanbad-826005
CIN No. U10101JH1972GO1000918

OFFICE OF THE GENERAL MANAGER
BARORA AREA

Ref No. GM/AR-1/SURVEY/3031/2014

Dated: -12.11.2014

13

To
The Director
Ministry of Environment & Forest
Chandrasekharpur
Post-Rail Vihar
Bhubneshwar- 751023



Sub: - Six monthly Compliance report of Environmental Clearance of Cluster - I group of mines for the period from Apr'14 to Sept'14.

Ref:-EC order no.-I-11015/93/2009-IAII(M)

Dear Sir,

Please find enclosed herewith six monthly compliance of the conditions of environmental clearances granted to Cluster-I group of mines of BCCL for the period from Apr'14 to Sept'14.

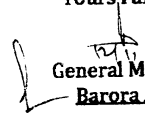
With Regards

Encls: As above

C.C. to:

1. Sri Sundeep Scientist-D,
Central Pollution Control Board
Southern Enclave, Block 502, 5th & 6th floor
1582, Rajdanga Main Road, Kolkata-700107.
2. Member Secretary,
Jharkhand State Pollution Control Board,
TA Divn. Building, HEC Dhurwa, Ranchi.
3. Dy.G.M. (Env.), Koyla Bhawan, Dhanbad.
4. Addl. G.M., Barora Area.
5. Area Manager (Plg.), Barora Area.
6. Nodal Officer, (Env.), Barora Area.
7. Project Officer, Damoda Colliery.
8. Office File.
9. Master File.

Yours Faithfully


General Manager
Barora Area


S. H. Kumar
18/11

**Compliance of Conditions of Environmental Clearance Granted by
MoEF for Cluster-1 (April 14 to Sept.14)**

EC Order No. J-11035/93/2009-IA.II (M)

A. Specific Conditions by MOEF:	compliance
Production shall not exceed beyond that for which environmental clearance has been granted for the 3 mines of cluster-1, as given below:	The production for the cluster is within the limit for which environment clearance has been granted.
The measures identified in the environmental management plan for Cluster-I group of mines and the conditions given in this environmental clearance letter shall be dovetailed to the implementation of the Jharia Action Plan.	Master Plan is dovetailed with environmental clearance conditions.
(a) The proponent shall prepare time-series maps of the Jharia Coalfields through NRSA in the Jharia Coalfields by Isothermal mapping/imaging. (b) And monitoring temperatures of coal seams (whether they are close to spontaneous ignition temperatures) and based on which, areas with potential fire problems shall be identified. Measures to prevent ingress of air (ventilation) in such areas, to prevent re-start fresh/spread fires in other areas including in mines of cluster-I shall be undertaken.	Work to monitor fire is being done by NRSC (earlier NRSA). Final report has been submitted. As per report of NRSC the fire area has decreased during the period 2006 to 2012 from 9 Km ² to 2.18 Km ² respectively. To delineate fire completely further actions is being taken up.
No mining shall be undertaken where underground fires continue. Measures shall be taken prevent/check such fires including in old OB dump areas where fire could start due to presence of coal/ shale with sufficient carbon content.	There is no fire where underground mining is being done. There is no fire in OB dump.
There shall be no external OB dumps. OB from the 2 patches shall be backfilled. At the end of the mining there shall be no void and the entire mined out area shall be re-vegetated. Areas where opencast mining was carried out and completed shall be reclaimed immediately thereafter.	Backfilling is being done at old quarry of Albion OCP. Up to Sept. 14, 4.50 hectare of land is backfilled/reclaimed up to surface level.
vi A detailed calendar plan of production with plan for OB dumping and backfilling (for OC mines) and reclamation and final mine closure plan for each mine of cluster-1 shall be drawn up and implemented	Calendar plan has been prepared. Mine closure plan has been prepared.
vii Mining shall be carried out as per statuette from the streams/nalas flowing within the lease and maintaining a safe distance from the Nalas flowing along the lease boundary. A safety barrier of a minimum 60m width shall be maintained along the nalas/water bodies. The small water bodies in Damoda (Albion Section) OC shall be protected to	It is being followed. Embankments have been constructed as specified in EC

	the extent feasible and the embankment proposed along water body shall be strengthened with stone pitching.	
viii	Thick green belt shall be developed along undisturbed areas, mine boundary and in mine reclamation. A total area of 237.79 ha shall be reclaimed and afforested.	Green belt of 6.00 Ha. Exists in Damoda lease hold area and Eco restoration of 6.68 Ha. has been already developed and being maintained properly.
ix	Specific imitative measures identified for the Jharia Coalfields in the Environmental Action Plan prepared for Dhanbad as a critically polluted area and relevant for Cluster-1 shall be implemented.	Dhanbad Action Plan is being implemented. The salient actions of this cluster are as under: 1. Covered transportation of coal 2. Water sprinkling 3. Plantation.
x	A detailed CSR Action Plan shall be prepared for Cluster-I group of mines. Specific activities shall be identified for CSR for the budget of Rs 13.75 crores provided for CSR for 2010-11 and Rs 5/T of coal as recurring expenditure. The 190.51 ha of area within Cluster-I ML existing as waste land and not being acquired shall be put to productive use under CSR and developed with fruit bearing and other useful species for the local communities. In addition to afforesting 237.79 ha of are at the post-mining stage, the 204.67 ha of fallow/abandoned land and 40.64 ha waste land/barren land within Cluster-I ML shall berehabilitated/reclaimed as forest/agricultural land under CSR Plan in consultation with local communities. Third party evaluation shall be got carried out regularly for the proper implementation of activities undertaken in the project area under CSR. Issues raised in the Public Hearing shall also be integrated with activities being taken up under CSR. The details of CSR undertaken along with budgetary provisions for the village-wise various activities and expenditure thereon shall be uploaded on the company website every year.	It is being complied. BCCL is implementing CSR activities. A detailed project specific CSR Action Plan shall be formulated and for this purpose, BCCL has approached TATA INSTITUTE OF SOCIAL SCIENCES, MUMBAI which is also the focal agency of the National CSR Hub. TISS,Mumbai has taken up the work and the work is in progress.
xi	Mine discharge water shall be treated to meet standards prescribed standards before discharge into natural water courses / agriculture. The quality of the water discharged shall be monitored at the outlet points and proper records maintained thereof and uploaded regularly on the company website.	Mine water is being stored at sump of Albion OCP and this water is being used for domestic purpose through Pressure filter. A work order has been issued to CIMFR Dhanbad. They have taken the work and the work is in progress.
xii	No groundwater shall be used for the mining activities. Additional water required, if any, shall be met from mine water or by recycling/reuse of the water from the existing	Surface mine water is being used for industrial purpose and for villages and nearer community. Surface mine water is

	activities and from rainwater harvesting measures. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	being delivered through the filtration by pressure filter. Two nos. pressure filter of capacity 10,000 liter /day already installed at Damoda Colliery.
xiii	Continuous monitoring of long-term impacts of dumping of fly ash (for life of the mine) and leaching of heavy metals on soil and water quality of the study area shall be undertaken and the details of which shall be submitted to the Central Ground Water Board, SPCB and to the Regional Office of this Ministry at Bhubaneswar, as part of the compliance report. Permanent monitoring arrangements such as peizometers shall be established in and around mine areas covering potential impact zone for contamination of heavy metals due to leachates from fly ash. In case of increasing levels of heavy metals detected in groundwater, further dumping of fly ash shall be stopped immediately. Independent third party monitoring of impacts of dumping of fly ash shall also be undertaken and reported to the regulatory authorities and uploaded on the company website. In case, the disposal of fly ash into the de-coaled voids is not found to be an environmentally suitable option, the balance void shall be converted into water reservoir of a maximum depth of 35m which shall be gently sloped. The upper benches of the reservoir shall be stabilized with plantation and the periphery of the reservoir fenced.	At present there is no fly ash is being dumped.
xiv	Regular monitoring of groundwater level and quality of the study area 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 including As and F during the month of May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board/SPCB quarterly within one month of monitoring. Rainwater harvesting measures shall be undertaken in case monitoring of water table indicates a declining trend.	Work of monitoring the ground water level and quality is being done by CIMFR, Dhanbad and Final report yet to be submitted. The monitoring stations for this purpose has been finalized with the consultation of Jharkhand State Pollution Control Board.
xv	ETP shall also be provided for workshop, and CHP, if any. Effluents from the mines shall be treated to conform to prescribed standards if is discharged into any water course outside the lease area. The quality of effluent/water discharged shall be monitored at outlet points. Proper records shall be maintained thereof and uploaded regularly	Construction of ETP/ Oil grease Trap is being taken-up.

	on the company's website.	
xvi	For monitoring the land use pattern and 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 to the end of mine life, shall be prepared once in 3 years (for anyone particular season which is consistent in the time series). The report shall be submitted to MOEF and its Regional office at Bhubaneswar.	Compiled Presently a time series map of vegetation cover in the Jharia Coal Field is being carried out through CMPDI Ranchi. Further CMPDI has been requested to prepare "Time series of land use maps based on satellite imagery of the core zone and buffer zone in the scale 1:5000 for 3 years. Work is under process.
xvii	A Final Mine Closure Plan along with a Plan for Habitat Restoration and with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests for approval before the final mine closure. The species selected for Habitat Restoration for post-mining land shall include a specific Plan for development of agro-forestry using a mix of native species found in the study area.	CMPDI, has prepare the "Final Mine Closure Plan along with a Plan for Habitat Restoration and with details of Corpus Fund". BCCL is being deposit the amount as specified in the mine closure Plan.
xviii	<p>Corporate Environment Responsibility: The Company shall have a well laid down Environment Policy approved by the Board of Directors'.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>A well-defined Corporate Environment Policy has already been laid down and approved by the Board of Directors. This is also posted on BCCL website.</p> <p>Complied.</p> <p>A hierarchical system of the company to deal with environmental issues from corporate level to mine level already exists.</p> <p>Being complied.</p>
B	General Conditions by MOEF::	
i	No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	It is being followed.
ii	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.	It is being followed.

iii	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM_{10} , $PM_{2.5}$, SO_x and NO_x . 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, in particulates shall be carried out at least once in a year.	Work of monitoring ambient air quality is being done by CIMFR, Dhanbad and Final report yet to be submitted.
iv	Data on ambient air quality (PM_{10} , $PM_{2.5}$, SO_x and NO_x and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar 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 EP Rules, 1986 shall be furnished as part of the compliance report.	It shall be complied.
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.	Work of monitoring noise levels is being done by CIMFR, Dhanbad and Final report yet to be submitted.
vi	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Proposal for construction of ETP is under process .A work order has been issued to CIMFR,Dhanbad. They have taken the work and the work is in progress.
vii	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.	It is being complied.
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 recognized under EP Rules, 1986.	A work order has been issued to CIMFR, Dhanbad. They have taken the work and the work is in progress.
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. Occupational health surveillance programme of the	Dust Mask has been issued to the employees for protection from dust. In safety and Occupation health aspects, Training is being provided through

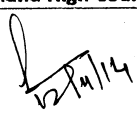


	workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	Vocational training center.
x	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.	<p>A full-fledged Environment Department, headed by a HoD (Environment) along with a suitable qualified multidisciplinary team of executives (17 nos.) which includes Environment, Mining, Excavation, Civil, Survey, Electrical & mechanical, Forestry disciplines executives and technicians (4 nos.) has been established in Headquarters. They are also trained in ecological restoration, sustainable development, rainwater harvesting methods etc. At the project level, one Executive in each area has also been nominated as Project Nodal Officer (Environment) and is also entrusted with the responsibility of compliance and observance of the environmental Acts/Laws including environment protection measures. The activities are monitored on regular basis at Area and at Head quarters levels. GM (Environment) at head quarter level, co-ordinates with all the Areas and reports to the Director (Technical) and in turn he reports to the CMD of the company.</p> <p>The team is multidisciplinary and very much motivated under the guidance of company's Director (Technical) and CMD. Further capacity building at both corporate and operating level is being done.</p>
xi	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 Regional Office at	It is being complied.




	Bhubaneswar.	
xii	The Project authorities shall advertise at least in two local newspapers that are 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	It has been complied.
xiii	A copy of the environmental clearance letter shall be marked to concerned 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 the company's website.	Complied.
xiv	A copy of the clearance letter shall 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 Centre and Collector's Office/Tehsildar's Office for 30 days.	Complied.
xv	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated 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 the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM ₁₀ , PM _{2.5} , and NO _x (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.	Complied.
xvi	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.	It is being complied.
xvii	The Regional Office of this Ministry located at Bhubaneswar 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.	Shall be complied.
xviii	The environmental statement for each financial year, ending	Being complied.

	31 st March, in Form-V to be submitted mandatorily by the project proponent to the State Pollution Control Board concerned as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently. This shall also be uploaded on to 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.	
C	Other Conditions by MOEF:	
i	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Agree.
ii	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and	Agree.
iii	The above conditions will be enforced <i>inter-alia</i> , 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. 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.	It is being complied.
iv	The Environmental Clearance is subject to the outcome of the Writ Petition filed by M/S Bharat Coking Coal Limited (BCCL) in response to the closure orders issued by the Jharkhand State Pollution Control Board which is pending in the Jharkhand High Court.	Agree.


 12/11/14
 Nodal Officer (Env),
 Barora Area


 12/11/14
 General Manager


 12/11/14
 General Manager