



27/11
30/11/13

20

BHARAT COKING COAL LIMITED
(A Subsidiary of Coal India Limited)
Office of the General Manager, Western Jharia Area
PO: Moonidih, Dist: Dhanbad - 823 129 (Jharkhand)
Ph: 0326-2273483, 2273445; Fax: 0326-2273445; E-Mail: gm.wj@bcl.co.in

SPEED POST

Date: 17/12/2013

24

Regd. No. DGM/2013 5819

To

The Director(s),

Ministry of Environment & Forest, Govt. Of India

Eastern Region Office

A/3, Chandrashekharpur, Bhubaneswar-751023

Subject: Submission of 6 monthly report on implementation of environmental measures for the period from April'13 to September'13 in respect of cluster XIII group of mines of ECCL.

Ref: EC Order No- J-11015/11/2010- I.A.II(M) DATED 06/06/2013.

Dear Sir,

Please find enclosed herewith the six monthly report on implementation of environmental protection measure, for the period from April'2013 to Sep'2013 in respect of Cluster XIII group of mines of BCCL. We hope you will find in order.

Thanking You,

Encl. As Above

J.K. Singh AM (LEG M).

17/1/14

Yours faithfully
General Manager
WJ Area

CC to:- 1. Dr. Sunita Aulock, Director, 1A Monitoring Cell, Paryaveeran Bhawan, CGO Complex, New Delhi-110003 (By speed Post)

2. HOD (Envr.), BCCL, Koyla Bhawan, Dhanbad.

3. Project Officer, Lohapatti and 20/21 Pits Murudih colliery

4. Nodal Officer (Envr.), WJ Area, Lohapatti and 20/21 pits Murudih colliery

23/1/14

ENVIRONMENTAL CLEARANCE COMPLIANCE OF
CLUSTER XIII (GRANTED VIDE J-
1015/11/2010-IA.II (M) Dated 06.06.2013).

(April, 2013 to September, 2013)

Specific Conditions by MOEF:	Compliance
<p>no mining shall be undertaken in/under the forest land until prior forestry clearance has been obtained under the provisions of FC Act, 1980.</p> <p>Mineral rights granted to Muruhidih 20/21 pits (20/21 MTTPA and a peak production of 2214 MTTPA in an MLL area of 571.32 ha</p>	<p>Stage -I Forest Clearance of 6.41 ha of forest land of Muruhidih and Mohada mine is issued by MOEF vide letter ref. no. 5-JFC/188/2010-BHU dt. 5.3.13. Compliance report for the same was submitted vide letter ref. no. 3CCL/MND/WJA 2013 dt. 17.8.13 demanding for stage -II forest clearance for the same while doing payment of Rs. 71,769,43.17 to MOEF a/c through RTGS. D.F.O. Dhanbad again directed to pay extra amount of Rs. 6,41,000/- to MOEF while putting up enhancement of N.P.V. rate. Notesheet no. WJA/MND/AM(Plg)12/260 dt 26.10.13 was initiated for the same.</p>
<p>The maximum production in the cluster shall not exceed beyond that for which environmental clearance has been granted for the cluster XIII as per given below:</p>	<p align="center">Agreed</p>
<p>The measure identified in the environmental clearance for cluster - XIII group of mine and the condition given in this environmental clearance letter shall be dovetailed to the implementation of Jharia Action Plan</p>	<p align="center">Agreed</p>
<p>As there is no fire in cluster XIII but the measure should be adopted proponent to avoid spread of neighbouring fire to this cluster XIII. The proponent shall prepare time series maps of Jharia Coal field through NRSA to monitor & prevent fire problems in this Jharia Coalfield by Isothermal mapping / tagging and monitoring temperatures of the coal seam (whether they are closed 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</p>	<p align="center">Agreed</p>

residual fresh spread fire in other areas including in mines of cluster – XIV shall be undertaken.	
Underground mining should be taken up after completion of reclamation of O/C mine area after two years.	Agreed
Fire fighting shall be undertaken where underground fires continue. Measure shall be taken to prevent/check such fire including in the OB dump areas where the fire could start due to presence of coal/shale with sufficient oxygen content.	Agreed
There shall be no external OB dump. OB dump in each O/C mine shall be contained. At the end of mining there shall be no void and the entire mind out area shall be reinstated. Areas where opencast mining has been carried out and completed shall be reclaimed immediately thereafter.	Agreed
A detailed calendar plan of production with provision for OB dumping and back filling (for open cast mines) and reclamation and final closure plan for each mine of cluster XIV shall be drawn up & implemented.	Agreed
For coal in Nalas, Area shall be converted in to a reservoir of maximum depth of 15-20 m in post mining stage and shall be gently sloped and upper benches of the reservoir shall be fertilized with plantation and periphery of the reservoir fenced. The abandoned pits and voids should be backfilled with (XII) & biologically reclaimed with plantation and or may used for pisciculture. Mining shall be carried out as per statuette from the streams/nalas flowing within the lease area.	Complied and will be complied.
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 water bodies in OC shall be protected to the extent feasible and the embankment provided along water body shall be strengthened with stone pitching. The OB dumps near water body and rivers should be rehandled for back filling hand mined mine voids. However, those which have been biologically reclaimed need not be disturbed.	Agreed

thick green belt shall be developed along undisturbed areas, mine boundary and in mine reclamation. During post mining stage, a total of 5000 ha would be reclaimed and offsetted by planting native species in consultation with local DFO/Agriculture department with the relevant discipline. The density of the trees should be around 2500 plants per ha.

Agreed.

The roads should be provided with avenue plantation on both sides as trees act as sink of carbon and other pollutant.

Agreed

Specific mitigative measures identified for the Jharia Coalfields in the Environmental Action Plan prepared for Dhanbad as a critically polluted area and relevant for Cluster XII shall be implemented.

Will be implemented

The locations of monitoring stations in the Jharia Coalfields should be finalised in consultation with the Jharkhand State Pollution Control Board. The Committee stated that smoke/dust emission vary from source to source (fuel wood, coal, diesel from TPPs, silica from natural sand etc.) and a Source Apportionment study should be got carried out for the entire Jharia Coalfields. Mineralogical pollution study should be undertaken to the composition of the suspended particulate matter (PM10 and PM2.5) in Jharia Coalfields and also quantified. These studies would help ascertain source and extent of the air pollution, based on which appropriate mitigative measures could be taken.

At B.C.C.I. level work is under progress.

No ground water shall be used for mining activities. Additional water required, if any, shall be met from mine water or by recycling / re-use of the water from the existing activities and from rain water harvesting measures.

Agreed.

	The project authority shall meet water requirement of nearby village (s) in case the village wells go dry to dewatering of mine.	
xviii.	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 Arsenic and Fluoride during the month of May. Data thus collected shall be submitted to the Ministry of Environment & Forest 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.	Agreed
xix.	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.	Agreed
xx.	ETP shall also be provided for workshop, and CHP, if any. Effluents shall be treated to conform to prescribed standards in case discharge into the natural water course.	Agreed
xxi.	Regular monitoring of subsidence movement on the surface over and around the working area and impact natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case observation of any high rate of subsidence movement, appropriate effective corrective measure shall be taken to avoid loss of life and material.	Agreed

	Cracks shall be effectively plugged with ballast and clayey soil / suitable material.	
XXII	Sufficient coal pillars shall be left un extracted around the air shaft (within subsidence influence area) to protect from any damage from subsidence, if any.	Agreed
XXIII	High root density tree species shall be selected and planted over areas likely to be affected by subsidence.	Agreed
XXIV	Depression due to subsidence resulting in water accumulating within low lying areas shall be filled up or drained out by cutting drains.	Agreed
XXV	Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the road.	Agreed
XXVI	No depillaring operation shall be carried out below the township/colony.	Agreed
XXVII	The transportation plan for conveyor – cum – rail for cluster XIII should be dovetailed with Jharia Action Plan. Road transportation of coal during phase I should be by mechanically covered trucks, which should be introduced at the earliest. The plan for conveyor – cum – rail for cluster XIV should be dovetailed with Jharia Action Plan. The road transportation of coal during phase I should be by mechanically covered trucks.	Agreed. Action is also taken by the concerned authorities.
XXVIII	A study should be initiated to analyze extent of reduction in pollution load every year by reducing road transport.	Agreed
XXIX	R & R of 2187 nos. of PAF's involved. They should be rehabilitated at cost of Rs. 11199.80 lacs as per the approved Jharia Action Plan	Agreed
XXX	Details of transportation, C.S.R, R&R and implementation of environmental action plan for each of the 17 clusters should be brought out in a booklet for and submitted to Ministry	for chapter XIV

<p>10. The mine's NR action plan shall be prepared for cluster XIII group of mines. Specific activities shall be implemented in CSR of Rs. 20.25 crores for the cluster of coal production as per the following expenditure. The area within the cluster XIII Mine that would be reserved for the land will not be being used for any other purpose. The mine's CSR shall be developed with the aim of restoring the ecosystem for the local communities. Third party contractors may be not carried out for the purpose of the project. The implementation of activities under CSR in the project area under CSR shall be the part of the working plan. It shall also be integrated with activities of the mine under CSR. The details of the activities along with necessary provisions for the village shall be prepared and the report thereon shall be uploaded on the company website every year. The mine shall give priority to capacity building both within the company and to the local youth, who are motivated to work in the work in future.</p>	<p>Agreed</p>
<p>11. 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 the State and its Regional office at Bhubaneswar.</p>	<p>Agreed</p>
<p>12. Final Mine Closure Plan along with details of Corros Fund shall be submitted to the Ministry of Environment & Forests five year before mine closure for approval. Habitat Restoration Plan of the mine area shall be carried out using a mix of native species found in the original ecosystem, which were conserved in-situ and ex-situ in an identified area within the lease for reintroduction in the mine during mine reclamation and at the post mining stage for habitat restoration.</p>	<p>Agreed</p>
<p>13. 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 company for implementing environment policy and action - economic issues and the</p>	<p>A full-fledged Environment Department, headed by a HoD (Environment) along with a suitable qualified multidisciplinary team of executives (12 nos) which includes Environment, Mining, Excavation, Civil, Survey, Electrical & mechanical, Forestry disciplines executives and technicians (4 nos) has been established in</p>

	capacity building required in this regard.	Headquarters. They are also in place in every restoration, sustenance development, improved harvesting methods etc. All the projects have an Executive in each area and the Project Director. Project Director is entrusted with the responsibility of observance of environmental environment protection measures, ensuring compliance with all the environmental norms/conditions with all the stakeholders. The Project Director is also responsible for the implementation of the project. The Project Director is also responsible for the implementation of the project. The Project Director is also responsible for the implementation of the project.	
xxxv	Implementation of final mine closure plan for cluster XIII, subject to obtaining prior approval of the DCMS in regard to Mines Safety issues.		Agreed
xxxvi	Corporate Environment Responsibility:		Agreed
9)	The Company shall have a well laid down Environment Policy approved by the Board of Directors.		Agreed
10)	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.		Agreed
11)	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.		Agreed
12)	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.		Agreed
Sl. No	B. General Conditions Conditions by MOEF:		Compliance
1	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.		Agreed

ii.	No change in the calendar plan of production for quantum of mineral coal shall be made.	The fixing up of calendar plan of production for Jharia Coalfields has been decided by the State Pollution Control Board.
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, SO 2 and NOx 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.	The work of monitoring of ambient air quality shall be done through Central Institute of Mining and Fuel Research (CIMFR), Dhanbad who has been given the laboratory recognition under the EPA rules, 1986.
iv.	Data on ambient air quality (PM 10, PM 2.5, SO 2 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 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 EPA rules, 1986 shall be furnished as part of 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	It shall be complied.
vi.	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSE 422 (I) 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.	The fixing up of effluents of workshop effluents for Jharia Coalfields has been decided by the State Pollution Control Board. The work of monitoring of effluents of workshop effluents shall be done through Central Institute of Mining and Fuel Research (CIMFR), Dhanbad who has been given the laboratory recognition under the EPA rules, 1986.
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.	It shall be 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	It shall be complied.

	<p>a laboratory recognised under EPA Rules.</p> <p>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</p>	
x.	<p>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.</p>	<p>Being Complied. Vocational training is being carried out through a separate Human Resource Development cell. The company is also conducting regular training programmes for safety and health aspects.</p>
x.	<p>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</p>	<p>Initial Medical Examination (IME) and Periodic Medical Examination (PME) of all the workers are being carried out as per the Statutes and International Standards Mines Safety (DGM) & guidelines.</p>
xi.	<p>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>	<p>A full-fledged Environment Department headed by HoD (Environment) along with staff of 12 persons in multidisciplinary team of expertise. (1) Geology, (2) Mining, (3) Ecology, (4) Environmental Engineering, (5) Electrical & mechanical, (6) Safety, (7) Health and technicians. (8) noise has been established at Headquarters. They are also engaged in restoration, sustainable development, afforestation, harvesting methods etc. at the open cast mines. Executive in charge are as follows:- Project Nodal Officer (Environment) entrusted with the responsibility of ensuring the observance of the environmental laws, compliance with environment protection and pollution control norms. monitored on regular basis at mine, open cast mines and levels. GM (Environment) is the nodal officer who co-ordinates with all the concerned agencies (Technical) and in turn he reports to the Managing Director company. The team is multi-disciplinary and is motivated under the guidance of the Project Nodal Officer (Technical) and GM (Environment) as the nodal officer of corporate and operating teams in the company.</p>
iii.	<p>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 Bhubaneswar.</p>	<p>It is being complied. Agreed to create a separate</p>

iii.	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at www.envfor.nic.in	It has been complied
iv.	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.	Complied
v.	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.	Complied
vi.	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, PM2.5, SO2 and NOx (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	Complied

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 Offices of CPCB and the SPCB.	
xviii	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.	
xix	The Environmental statement for each financial year ending 31 March in Form-V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF by e-mail.	
7	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	
8	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.	
9	The above conditions will be enforced under the 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.	

The Environmental Clearance is subject to the outcome of the Writ Petition filed by M/S Bharat Coking Coal Limited (BCCCL) in response to the closure orders issued by the Jharkhand State Pollution Control Board which is pending in the Jharkhand High Court.

Project officer, Sohaphati colliery

Project officer, 2003

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 & Forest, Chandrasekharpur, Bhubaneswar - 751024.
4. Chairman, Jharkhand State Pollution Control Board, T.A. Division Building, (Ground Floor), U.P.C., Dhanuwa, Ranchi - 834001.
5. Chairman, Central Pollution Control Board - BD-cum-Office Complex, East Arjun, Saket, New Delhi - 110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Ground Floor, Park Road, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. District Collector, dist. Dhanbad Government of Jharkhand.
8. HOD Environment BCCCL, Koyla Bhawan.
9. Office copy.