

Bharat Coking Coal Limited
(A Subsidiary of Coal India Limited)
Office of the Project Officer
Kapuria Project, Mahuda, Dhanbad.

Ref No :-BCCL/PO/KAPURIA/Env/2017/ $\uprescript{$\otimes$}\ \upgamma$

Date: - 10.11.2017

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To the Director

Ministry of Environment, Forest & Climate Change

Regional Office (ECZ), Bungalow No. A-2

Shyamli Colony

Ranchi – 834002

Sub: six monthly report for the period from 1st April 2017 to 30 th September 2017 on Compliance to Environmental Clearance from MoEF, Govt of India for Cluster – XII of Kapuria UG Project, M/s Bharat Coking Coal Limited.

Dear Sir

Enclosed herewith please find the six monthly report on Compliance to Environmental Clearance from MoEF, Govt of India vide letter no J-11015/184/2012-IA. II(M), dated 10th Dec 2014 for Cluster-XII of Kapuria UG of M/s Bharat Coking Coal Limited for your kind perusal and further needful action please. It is also to bring to your kind notice that the project has been delayed due to the delay in physical possession of land. The work was just started but again stopped due to villagers protest.

Project O

Kapuria Project

Encl: as above.

Copy to:

- 1. Director, IA, Monitor Cell, Paryavaran Bhawan, CGO Complex, New Delhi 110003.
- 2.GM W.J.A.BCCL
- 3.Dy GM (Env), BCCL
- 4. Office Copy

Six Monthly Compliance Report of EC order of Cluster-XII for the period from 1st <u>April</u> 2017 to 30 th September 2017

| SI | Specific Condition | Action |
|------|---|---|
| No | | • |
| 1 | The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC. | Project has not started yet. Land acquisition is under process. This condition shall be complied as the production starts. |
| II | A separate team for subsidence monitoring and surface mitigation measures be constituted and continuous monitoring and mitigation measures be carried out. | Shall be complied. Project is under construction phase. |
| Ш | The validity of EC is for the life of the mine or as specified in the EIA notification, 2006, whichever is earlier. | Agreed. |
| IV | The coal transportation from the mine to the siding shall be by conveyor belt and coal transportation from siding to washery shall be by rail. | Shall be complied. |
| V | Piezometers be installed upto the depth of mining to facilitate monitoring of ground water. | The work of monitoring of ground water is being carried out by CMPDI. |
| VI | Water sprinkler be used for coal dust suppression along the haul road. | Shall be complied. |
| VII | Thick green belt shall be developed around proposed washery within the cluster-XII lease area and plantation shall be undertaken along NH-32. | Shall be complied. |
| VIII | Subsidence study shall be taken up with reputed scientific agency as per stipulation of DGMS. | Shall be complied. |
| IX | Various CSR works that will be carried out shall include education, healthcare, water supply etc. | Shall be complied. |
| X | The project should have ecologist / social scientist to monitor the project. | BCCL is following the roadmap prepared by FRI, Dehradun to restore ecology in the region and conducting the work of ecological restoration in the mined out areas. BCCL has also got facilitated by the guidance of Prof. C R Babu, CEMDE, University of Delhi. |
| XI | Coal produced from the mine will be directly loaded into a CHP at the incline top. From the | Shall be complied. |
| | CHP at incline top, coal will be transported to the proposed Kapuria coal washery linked to the mine by covered conveyor system of length 250m. Washed coal from the washery 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. | Shall be complied. |

| XIII | Regular monitoring of subsidence movement on the surface cover 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. | |
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| XIV | If subsidence is found exceeding the permitted limits, the land owners shall be adequately compensated with mutual agreement of the land owners. | Shall be complied. |
| XV | Mining shall be carried out as per statute at a safe distance from river / nallah falling 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. | Mining shall be done as per DGMS statute. |
| XVI | Sufficient coal pillars shall be left unextracted around the air shaft (within the subsidence influence area) to protect from any damage due to subsidence, if any. | Shall be complied. |
| XVII | Solid barriers shall be left below the roads falling within the blocks to any damage to the roads. | Shall be complied. |
| XVIII | Diversion of land shall be done with approval of the competent authority. | Shall be complied. |
| XIX | Coal extraction shall be optimized in areas where agriculture production is continuing. Some pillars shall be left below the agricultural land. No depillaring and coal extraction shall be carried out below habitation, HT lines & beneath road, water bodies, railway track. | It will be done as per the statute and DGMS guidelines. |
| XX | The mined out land should be used for agriculture purpose. | Shall be complied. |
| XXI | Safety measures and health issues need to be addressed for workers and surrounding villagers. | Shall be complied. |
| 22 | Proponent shall implement all the related safety measures with safety equipment | It will be done as per the statute and guidelines of DGMS. |

| 23 | At the time of establishing the CHP, it is | Shall be complied. |
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| | proposed to establish mist spray arrangements | |
| | and also enclosing the ground level bunkers up | |
| 2.1 | to the level of gantry. | |
| 24 | An afforestation plan to be prepared for | Shall be complied. |
| | implementation after stabilization of | |
| 25 | subsidence. | |
| 25 | Water spraying arrangements at loading points | Shall be complied. |
| | and mist spray arrangements are to be | |
| 20 | provided. | |
| 26 | No additional land, manpower and equipment | Shall be complied. |
| 25 | and water shall be used for the expansion | |
| 27 | project. | |
| 27 | Mine closure activity include sealing of incline | Mine closure plan will be formulated as |
| | mouth, dismantling of haulage system, cleaning | per the guidelines of Ministry of Coal Go |
| | and afforestation of coal stock area, plantation | , |
| 20 | on barren land and old abandoned mine. | |
| 28 | 3-tier plantation should be developed 2 Km | Shall be complied. |
| | stretch of road from the mine using native | |
| 20 | species. | |
| 29 | Garland drains around the safety area such as | It will be done as per EMP. |
| | 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 | and a |
| | the mine site. Sump capacity shall also provide | |
| | adequate retention period to allow proper | |
| 30 | setting of silt material. | * |
| 30 | Water sprinkling system shall be provided to | Shall be complied. |
| | check fugitive emissions from loading | |
| | operations, conveyor system, haulage roads, | |
| | transfer points etc. Major approach roads shall | |
| 31 | be black topped and properly maintained. | |
| 31 | A progressive afforestation plan shall be | Shall be done. EMP and mine closure plan |
| | prepared and implemented over the mine lease | will be followed. |
| | 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 | |
| 32 | with the local FDO / agriculture department. | a , a s |
| 52 | Regular monitoring of ground water level and | It will be complied. At present CMPDI is |
| | quality shall be carried out by establishing a | working to establish a network of |
| | network of existing wells and construction of | piezometer well. |

| 33 | new piezometers. The monitoring for quality shall be done four times a year, in May, Augus November and January seasons and for quality in May. | у |
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| | be treated and disposal of brine should be provided. | is required. |
| 34 | High root density tree species shall be selected and planted over areas likely to be affected by subsidence. | Shall be provided. |
| 35 | Monitoring of drinking water should be carried out regularly. | monitored by CMPDI, as per the MOFFCC |
| 37 | Sewage treatment plant shall be installed in the township. ETP shall also be provided for workshop and CHP effluents. | standards. Shall be provided. |
| | 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 till the end of the mine life shall be prepared once in 3 years (for any particular season which is consistent in the time series), and the report submitted to MoEF& CC and its regional Office at Bangalore. | carried out through CMPDI Ranchi using satellite imagery for every 3 years and is being uploaded on the official website of company. 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 series. |
| 38 | If the water quality parameter 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. | 1 : 5000. Shall be done. |
| | Medical camps should be organized in the area for regular checkup of workers / villagers / population. Detailed prevalent disease pattern in the area should be documented and detail of medical facilities provided for the same be made available to the MoEF&CC. | It is being done. |
| i i | monitored, particularly for TDS and treated to confirm to prescribed levels before discharge nto the natural environment. | Environmental parameters are being monitored by CMPDI, as per the MoEFCC standards. |
| L I | he Company shall put up artificial groundwater li | t will be provided and regular monitoring hall be done. |

| | groundwater resource, in case water table shows a decline trend, the project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine. | |
|----|---|--|
| 42 | Besides carrying out regular periodic health checkup of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health checkup 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. | It will be complied, however, BCCL has engaged NIOH for other cluster of BCCL to health checkup for occupational diseases and hearing impairment and work will be started shortly. |
| 43 | The mining in the existing mines should be phased out after expiry of of the current mining lease and after reclamation of mined out 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. | Agreed, and shall be complied. |
| 44 | Project specific CSR for an amount of Rs 5 per tonne of coal production, 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 impact of activities under CSR shall be carried out periodically. | It will be done as per the CSR policy of organization. |
| 45 | A final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest & Climate Change, 5 years in advance of final mine closure for approval. | Shall be complied. |
| | 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 procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / | Bharat Coking Coal Ltd is a subsidiary of Coal India Ltd which is having a well laid down Environmental Policy. It is being complied. |

| | 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 – compliance / violations of environmental norms to the Board of Directors of the company | It already exists within the company. It will be done, if any. |
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| | and/or shareholders at large. | |
| | B. General Conditions : | |
| 1 | No change in mining technology and scope of working shall be made without prior approval of the MoEFCC. | Shall be complied. |
| 2 | No change in the calendar plan of production for quantum of mineral / coal shall be made. | Shall be complied. However, production and calendar plan may vary due to land acquisition problem. |
| 3 | Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM 10, PM2.5, SO2 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. | Shall be complied. |
| 4 | Data on ambient air quality (PM10, PM2.5, SO2 and NOx) 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 Bhubaneshwar and to the state pollution control board once in six months. Random verification of samples through analysis from independent laboratory recognized under the EPA rules, 1986 shall be furnished as part of compliance report. | Shall be complied. |
| 5 | Adequate measures shall be taken for control of noise levels below 85 dBA in the work | Shall be complied. |

| | environment. Workers engaged in blasting and | |
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| | drilling operations, operation of HEMM, etc. | |
| | shall be provided with ear plug / muffs. | |
| 6 | Industrial wastewater (workshop and | CL III |
| | wastewater from the mine) shall be properly | Shall be complied. |
| | collected, treated so as to confirm to the | |
| | standards prescribed and a CSD 100 (7) | |
| | standards prescribed under GSR 422 (E) dated | |
| | 19 th May 1993 and 31 st December 1993 or as | |
| | amended from time to time before discharge. | |
| | Oil and grease trap shall be installed before | |
| <u> </u> | discharge of workshop effluents. | |
| 7 | Vehicular emissions shall be kept under control | Shall be complied. |
| | and regularly monitored. Vehicles used for | and a complicu. |
| | transporting the mineral shall be covered with | |
| | tarpaulins and optimally loaded. | |
| 8 | Monitoring of environmental quality | Emilianus |
| | parameters shall be carried out through | Environmental parameters are being |
| | establishment of adequate number and type of | monitored as per NAAQS standards which |
| | pollution monitoring and analysis | is having CSIR laboratory. |
| | pollution monitoring and analysis equipment in | Monitoring stations have been finalized |
| | consultation with the State Pollution Control | with Jharkhand State Pollution Control |
| | Board and data got analyzed through a | Board, Ranchi. |
| 9 | laboratory recognized under EPA rules, 1986. | ************************************** |
| 9 | Personnel working in dusty areas shall wear | Shall be complied. |
| | protective respiratory devices and they shall | |
| | also be provided with adequate training and | |
| | information on safety and health aspects | |
| 10 | Occupational health surveillance programme of | Shall be complied. |
| | the workers shall be undertaken periodically to | Shan be complied. |
| | observe any contractions due to exposure to | 9 |
| | 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 should be addressed by the | |
| | company while outsourcing. | |
| 11 | A senarate environmental | |
| | A separate environmental management cell | A full-fledged environment department |
| , | with suitable qualified personnel shall be set up | headed by a HoD (Environment) along |
| | under the control of a senior executive, who will | with a suitable qualified multidisciplinary |
| 2 | report to the head of the company. | team of executives has been established |
| | | in the headquarters. They are trained in |
| | | ecological restoration, sustainable |
| | | development, rainwater harvesting |
| | | ropinion, raniwater narvesting |
| | | methods, etc. |

| | protection measures shall be kept in separate | |
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| | account and shall not be diverted for other | |
| | purpose. Year wise expenditure shall be | 7 |
| | reported to this ministry and its concerned | |
| - 1 | regional office. | |
| 13 | The project authorities shall advertise at least in | It is complied. |
| - | 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 | 9 |
| | informing that the project has been accorded | |
| | environmental clearance and a copy of the | |
| | clearance is available with the State Pollution | £ 8 |
| | Control Board and may also be seen at the | |
| 1 | website of the ministry of Environment & forest. | |
| 14 | A copy of the environmental clearance shall be | It is complied. |
| | marked to concerned panchayat / zilla parishad, | it is complied. |
| | 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. | |
| 15 | A copy of the environmental clearance letter | It is complied. |
| | shall also be displayed on the website of the | it is complied. |
| | concerned State Pollution Control Board. The EC | * |
| | letter shall also be displayed at the regional | , |
| | office, district industry sector and collector's | i |
| | office for 30 days. | |
| 16 | The clearance letter shall be uploaded on the | It is complied. |
| | company's website. The compliance status of | • |
| | the stipulated environmental clearance | The monitoring data of environmental |
| s 2 2 | condition shall also be uploaded by the project | parameters to be displayed at project premises shall be complied once the |
| | authorities on their website and updated once | |
| - | at least in every six months so as to bring the | project starts. |
| | same in public domain. The monitoring data of | |
| | environmental parameter (air, water, noise and | |
| | soil) and critical pollutants such as PM10, | * * |
| | PM2.5, SO2 and NOx (ambient) and critical | * |
| | sector parameters shall also be displayed at the | |
| | entrance of the project premises and mine | , |
| | | 4 2 |
| | office and in corporate office and on company's website. | |
| | website. | |

| 9 | Concealing factual data or submission of false / | Agreed. |
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| | 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 | 4 2 ' |
| | (Protection) Act, 1986. | |
| 10 | The above conditions will be enforced inter-alia, | Shall be complied. |
| 5 | under the provisions of 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 | |
| *a 0 | ground water and surface water, and | |
| | occupational and other disease due to the | A A SA |
| | mining operations. | |
| 11 | Any Appeal against this environmental | Agreed. |
| | clearance shall lie with the National Green | * |
| 9 | Tribunal, if preferred, within a period of 30 days | |
| | as prescribed under Section 16 of the National | |
| | Green Tribunal Act, 2010. | |
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| | | |

Project Officer

Kapuria Project

BCCL