

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/2018/ 910

To the Director

Ministry of Environment, Forest & Climate Change

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

Shyamli Colony

Ranchi - 834002

1 5. 1 346 B

Date:- 15.05.2018

to 31st March 2018 on

Sub: six monthly report for the period from 1st Oct 2017 to 31st March 2018 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 has not started yet.

Project Officer 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

C. J. Constant Server

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Six Monthly Compliance Report of EC order of Cluster-XII for the period from 1st October 2017 to 31st March 2018

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| All I HIG DICULULA TIALI DE WITHIN THE COME MINING I Chell he committed | XII | The production shall be within the same mining | Shall he complied |
| The production shall be within the same mining lease area. Shall be complied. | ,,,,, | | Silali be compiled. |

| XIII | Regular monitoring of subsidence movement on | · |
|--------|---|---|
| | the surface cover and around the working area | Shall be complied. |
| | 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 | Shall be complied. |
| - | limits, the land owners shall be adequately | Shall be complied. |
| | compensated with mutual agreement of the | |
| | land owners. | |
| XV | Mining shall be carried out as per statute at a | Mining shall be done as per DGMS |
| | safe distance from river / nallah falling adjacent | statute. |
| | to the lease boundary at the time of depillaring | |
| | protective bunds and garland drains shall be | |
| | provided so that no water from the surface | |
| V() (I | enters the subsidence area and the shaft. | |
| XVI | Sufficient coal pillars shall be left unextracted | Shall be complied. |
| | around the air shaft (within the subsidence | - 10 mg |
| | influence area) to protect from any damage due | |
| XVII | to subsidence, if any. | |
| AVII | Solid barriers shall be left below the roads | Shall be complied. |
| | falling within the blocks to any damage to the roads. | i i i i i i i i i i i i i i i i i i i |
| XVIII | | ol Wi |
| 7,0,11 | the competent authority. | Shall be complied. |
| XIX | Coal extraction shall be optimized in areas | 11. 11.1 |
| | where agriculture production is continuing. | It will be done as per the statute and |
| | Some pillars shall be left below the agricultural | DGMS guidelines. |
| | land. No depillaring and coal extraction shall be | |
| | carried out below habitation, HT lines & | 그는 그릇들빛 일곱다 하나 나무 걸다. [편] |
| | beneath road, water bodies, railway track. | |
| XX | The mined out land should be used for | Shall be servelled |
| | agriculture purpose. | Shall be complied. |
| XXI | Safety measures and health issues need to be | Shall be complied |
| | addressed for workers and surrounding | Shall be complied. |
| | villagers. | |
| | a Bara. | |
| 22 | Proponent shall implement all the related safety | It will be done as per the statute and |

| 7 | | | |
|---|----|--|---|
| | 23 | At the time of establishing the CHP, it is proposed to establish mist spray arrangements | Shall be complied. |
| | | and also enclosing the ground level bunkers up to the level of gantry. | |
| | 24 | An afforestation plan to be prepared for implementation after stabilization of subsidence. | Shall be complied. |
| | 25 | Water spraying arrangements at loading points and mist spray arrangements are to be provided. | Shall be complied. |
| | 26 | No additional land, manpower and equipment and water shall be used for the expansion project. | Shall be complied. |
| | 27 | Mine closure activity include sealing of incline mouth, dismantling of haulage system, cleaning and afforestation of coal stock area, plantation on barren land and old abandoned mine. | Mine closure plan will be formulated as per the guidelines of Ministry of Coal Gol. |
| | 28 | 3-tier plantation should be developed 2 Km stretch of road from the mine using native species. | Shall be complied. |
| | 29 | Garland drains around the safety area 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 site. Sump capacity shall also provide adequate retention period to allow proper setting of silt material. | It will be done as per EMP. |
| | 30 | 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. | Shall be complied. |
| | 31 | 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 FDO / agriculture department. | Shall be done. EMP and mine closure plan will be followed. |
| | 32 | Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and construction of | It will be complied. At present CMPDI is working to establish a network of piezometer well. |

| | new piezometers. The monitoring for quality shall be done four times a year, in May, August, November and January seasons and for quality in May. | |
|----|---|--|
| 33 | Acid water Treatment Plant, volume of water to be treated and disposal of brine should be provided. | Shall be provided if acid water treatment 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. | Environmental parameters are being monitored by CMPDI, as per the MoEFCC standards. |
| 36 | Sewage treatment plant shall be installed in the township. ETP shall also be provided for workshop and CHP effluents. | Shall be provided. |
| 37 | 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. | Presently a time series map of vegetation cover in the Jharia coal field is being 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 scale 1:5000. |
| 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. | Shall be done. |
| 39 | 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. |
| 40 | Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to confirm to prescribed levels before discharge into the natural environment. | Environmental parameters are being monitored by CMPDI, as per the MoEFCC standards. |
| 41 | The Company shall put up artificial groundwater recharge measures for augmentation of | It will be provided and regular monitoring shall be done. |

| T | | 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 | It will be complied, however, BCCL has |
| | | checkup of their workers, 10% of the workers | engaged NIOH for other cluster of BCCL |
| 1 | | identified from workforce engaged in active | to health checkup for occupational |
| 1 | | mining operations shall be subjected to health | diseases and hearing impairment and |
| 1 | | checkup for occupational diseases and hearing | work will be started shortly. |
| - | | 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. | |
| | 43 | The mining in the existing mines should be | Agreed, and shall be complied. |
| | | phased out after expiry of of the current mining | |
| W. | | lease and after reclamation of mined out area. | |
| | | The operating mines may be analysed and | Action of the Control |
| | | monitored for compliance of conditions, bearing | |
| | | with movement of wildlife and until such time | |
| | | they are closed / phased out. | and the second s |
| | 44 | Project specific CSR for an amount of Rs 5 per | It will be done as per the CSR policy of |
| | | tonne of coal production, as per the annual inflation, should be provided for the CSR | organization. |
| | | 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 | i i |
| | | periodically. | |
| | 45 | A final Mine Closure Plan along with details of | Shall be complied. |
| _ | | Corpus Fund shall be submitted to the Ministry | |
| |) | of Environment, Forest & Climate Change, 5 | |
| | | years in advance of final mine closure for | A |
| | | approval. Corporate Environment Responsibility: | |
| | | a) The company shall have a well laid down | Pharat Coking Cool ltd is a subsidiant of |
| | | Environment policy approved by the | Bharat Coking Coal Ltd is a subsidiary of |
| | | Board of Directors. | Coal India Ltd which is having a well laid down Environmental Policy. |
| | | b) The Environment Policy shall prescribe | It is being complied. |
| | | for standard operating procedures to | To a sample complication of the same same same same same same same sam |
| | | bring into focus any infringement / | |
| | | deviation / violation of the | |
| | | environmental or forest norms / | |

| 1 | | | |
|---|---|---|--|
| | | 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 and/or shareholders at large. | It already exists within the company. It will be done, if any. |
| Ì | | B. General Conditions : | |
| 1 | 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. |

| 1 | | |
|----|--|---|
| | environment. Workers engaged in blasting and drilling operations, operations of the state of the | |
| | drilling operations, operation of HEMM, etc. | |
| | shall be provided with ear plug / muffs. | · · |
| 6 | Industrial wastewater (workshop and | |
| | Wastewater from the min to the mi | Shall be complied. |
| | wastewater from the mine) shall be properly | |
| | collected, treated so as to confirm to the | |
| | 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 | |
| 7 | discharge of workshop effluents. | |
| ' | Vehicular emissions shall be kept under control | Shall be complied. |
| | and regularly monitored. Vehicles used for | |
| | transporting the mineral shall be covered with | |
| 8 | tarpaulins and optimally loaded. | |
| | Monitoring of environmental quality | Environmental parameters are being |
| | parameters shall be carried out through | monitored as per NAAQS standards which |
| | establishment of adequate number and type of | is having CSIR laboratory. |
| | pollution monitoring and analysis equipment in consultation with the State Pollution Control | Monitoring stations have been finalized |
| | Board and data got analyzed through a | with Jharkhand State Pollution Control |
| | laboratory recognized under EPA rules, 1986. | Board, Ranchi. |
| 9 | | Shall be complied. |
| - | protective respiratory devices and they shall | Silan be complied. |
| | also be provided with adequate training and | |
| | information on safety and health aspects. | |
| 1 | Occupational health surveillance programme of | Shall be complied. |
| | the workers shall be undertaken periodically to | , |
| | observe any contractions due to exposure to | No. 1 |
| 1 | dust and to take corrective measures, if needed | 1 1 2 1 |
| | and records maintained thereof. The quality of | |
| 3 | environment due to outsourcing and the health | |
| | and safety issues should be addressed by the | |
| | company while outsourcing. | |
| 1: | A separate environmental management cell | A full-fledged environment department |
| | with suitable qualified personnel shall be set up | headed by a HoD (Environment) along |
| 1 | under the control of a senior executive, who will | with a suitable qualified multidisciplinary |
| } | 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 |
| | | methods, etc. |
| 12 | The funds earmarked for environmental | Shall be complied. |

| | 1 | | |
|-----|-----|--|--|
| 1 | | protection measures shall be kept in separate | |
| | | account and shall not be diverted for other | |
| | | purpose. Year wise owner the | |
| | | purpose. Year wise expenditure shall be | |
| | | reported to this ministry and its concerned regional office. | |
| H | 13 | | |
| | 13 | The project authorities shall advertise at least in | It is complied. |
| | | in the spapers widely circulated around | |
| | | which shall he in the | |
| 1 | | vernacular language of the locality concerned | |
| | | within seven days of the clearance letter | |
| | | informing that the project has been accorded | |
| 1 | | environmental clearance and a copy of the | <u> </u> |
| | | clearance is available with the State Pollution | |
| 1 | | 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, | |
| | | 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 | A STATE OF THE STA |
| | | letter shall also be displayed on the company's | |
| | | website. | 1 |
| | 15 | A copy of the environmental clearance letter | It is complied. |
| | | shall also be displayed on the website of the | |
| | | concerned State Pollution Control Board. The EC | <u> </u> |
| | | letter shall also be displayed at the regional | |
| | | office, district industry sector and collector's | to the second of |
| | 1.0 | office for 30 days. | |
| | 16 | The clearance letter shall be uploaded on the | It is complied. |
| | | company's website. The compliance status of | The monitoring data of environmental |
| | | the stipulated environmental clearance | parameters to be displayed at project |
| | | condition shall also be uploaded by the project | premises shall be complied once the |
| | | authorities on their website and updated once | project starts. |
| | | at least in every six months so as to bring the | |
| | | 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 | |
| - 1 | | entrance of the project premises and mine | |
| | | office and in corporate office and on company's website. | |
| - 1 | | Mensite. | |

| 17 | The project proponent shall submit six monthly compliance report on status of | |
|----|---|-----------------------|
| 1 | compliance report on state | It is being complied. |
| 1 | compliance report on status of compliance of the stipulated environmental clearance | Samplied. |
| 1 | conditions (both in the conditions (both in the conditions) | |
| | conditions (both in hard copy and email) to the | n. |
| | | |
| 18 | - The sective 2011al Office of CDCB and the coop | |
| 15 | THE REGIONAL OFFICE OF this ministry leasted at | It is being complied. |
| | Should be shall monitor compliance of the | it is being complica. |
| | supulated conditions. The project authorities | |
| | strail extend full co-operation to the office(s)of | |
| | the regional office by furnishing the requisite | |
| | data / information /monitoring report. | |
| 19 | The Environment Statement for each financial | It is being complied. |
| | year ending 31 st 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 email. | |
| | C. Other Conditions by MoEF: | |
| 4 | The proponent shall abide by all the | Agreed. |
| | commitments and recommendations made in | * |
| | the EIA / EMP reports so also during their | |
| | presentation to the EAC. | St. III. Surelemented |
| 5 | The commitment made by the proponent to the | Shall be implemented. |
| | issue raised during Public Hearing shall be | |
| | implemented by the proponent. | Agreed. |
| 6 | The proponent is required to obtain all | Agreed. |
| | necessary clearances / approvals that may be | 15 |
| | required before the start of the project. The | |
| | ministry or any other competent authority may | / |
| | stipulate any further condition for | |
| | environmental protection. | Agreed. |
| 7 | The ministry or any other competent authority | Agreed. |
| | may stipulate any further condition for | |
| | environmental protection. | It will be done. |
| 8 | The proponent shall set up an Environment | It will be dolle. |
| | Audit cell with responsibility and accountability | |
| | to ensure implementation of all the EC | 三十四十年的成立作 化化二氯甲基 |
| | conditions. | |

| 10 | 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. The above conditions will be enforced inter-alia, under the provisions of Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) 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 ground water and surface water, and occupational and other disease due to the mining operations. | Agreed. Shall be complied. |
|----|---|-----------------------------|
| 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. | Agreed. |
| | | |

Project Officer

Kapuria Project

BCCL