



BHARAT COKING COAL LIMITED

(A Subsidiary of Coal India Ltd.)

Office of the General Manager

Govindpur Area No. III

PO- Sonardih, DHANBAD - 828125

**Contact No: 0326-2392162 email-
gmgovindpur.bccl@coalindia.in**

Ref: BCCL: AR.III: GM: 18: 242(A)

Dated: 28.11.2018

To
The Director
Ministry of Environment, Forest and Climate Change, Govt. Of India
Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony
Ranchi - 834002

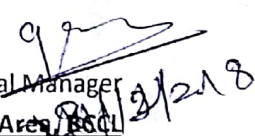
Sub: - Six monthly Reports on Implementation of environmental measures for the period from April 2018 to September 2018 in respect of Cluster III group of mines EC Order no. J-11015/213/2010-1 A.II (M) dated 06.02.13.

Ref: - EC order no. J - 11015/213/2010- IA. II (M), dated 06.02.2013

Dear Sir,

Pleased find herewith the enclosed six monthly report on implementation of environmental measures for the period from April 2018 to September 2018 in respect of Cluster III group of mines.

Yours faithfully,


General Manager
Govindpur Area, BCCL

Copy To:-

1. Director, IA monitoring cell,
Paryavaran Bhawan, CGO Complex, New Delhi - 110003.
2. Dy. General Manager (Env.) BCCL, Koyla Bhawan, Dhanbad.
3. Addl. General Manager, Govindpur Area.
4. Nodal Officer (Env.), Govindpur Area.

COMPLIANCE OF EC CONDITIONS: - CLUSTER-III

EC Letter No. J – 11015/213/2010- IA. II (M), Dated 06.02.2013

S. no.	A. Specific Conditions by MOEF:	Compliance
i	The maximum production from the two opencast sections in the cluster shall not exceed beyond that for which environmental clearance has been granted	The approved normative production and peak production from the two opencast sections are 2.10 MTPA & 2.73 MTPA respectively. The production from cluster is within limit for which the environmental clearance has been granted.
ii	The measure to identify in the Environmental Plan for Cluster- III groups of mine and the conditions given in this environmental clearance letter shall be dovetailed to the implementation of the Jharia Action Plan.	Master Plan activities are dovetailed with compliance of environmental clearance conditions.
iii	The proponent shall prepare time-series maps of the Jharia Coalfields through NRSA to monitor and prevent fire problems in the Jharia Coalfields by Isothermal mapping /imaging and monitoring temperatures of the 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 restart fresh/spread fires in other areas including in mines of cluster III shall be undertaken. Expertise available internationally could also be utilized for control of fire in Jharia Coalfields and for their reclamation and to further minimize time for fire and subsidence control. Isothermal mapping using thermal imaging has been got done by NRSA. Measures would be taken to prevent ingress of air (ventilation) in such areas, which may re-start fresh fires.	NRSC has been engaged for the purpose and NRSC has submitted their final report. Fire affected area has been reduced from 9.00 KM^2 (2006) to 2.18 KM^2 (2013). Annexure D- Copy of the letter regarding work-order given to NRSC
Iv	Underground mining should be taken up after completion of reclamation of Opencast mine area.	It shall be complied.
v	The OB material should be crushed like sand and be used for stowing in underground mines.	At present there is no requirement of stowing in cluster III.

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-III shall be drawn up and implemented. The schedule of backfilling should be clearly brought out and submit the same to MoEF.	Calendar plan has been prepared and enclosed as annexure-B.1 Mine closure plan as per the guidelines of Ministry of Coal is finalized and circulated by Regional Institute –II, Central Mine planning and Design Institute, Dhanbad. The financial provisions required for the implementation of mine closure plan are being kept in accounts.
vii	The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and Stabilized with plantation so as to withstand the peak water flow and prevent mine inundation.	It is being followed. Embankments have been constructed as specified in EC
viii	The rejects of washeries in Cluster –III should be send to FBC based plant.	Coal washery does not exist in cluster-III at present.
ix	No mining shall be undertaken where underground fires continue. Measure shall be taken to prevent/check such fire including in old OB dump areas where the fire could start due to presence of coal/shale with sufficient carbon content.	It shall be complied. Mining is being done as per the guidelines and permissions of Directorate General of Mines Safety (DGMS). No mine fire has been encountered during mine working in cluster III at present. However if any mine fire is encountered during mining; suitable actions shall be taken.
x	There shall be no external OB dumps. OB produce from the whole cluster will be 80Mm ³ . OB from 2 OCP in mixed mines 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. It was observed that most of the OBs are not reclaimed and abandoned. The proponent should dump all the OB material in abandoned mines.	It is being complied. Action is being taken as specified in EMP for Backfilling of OB concurrent with and reclaimed. Two backfilled sites have been changed into ecological restoration parks and the process is showing good results.
xi	Number of voids present in cluster – III at the end of mining should be backfilled up to ground level and no void should be left at the end of mining.	It shall be complied.
xii	A detailed calendar plan Of production with the plan for OB dumping and backfilling (for O/C mines) and reclamation and final mine closure plan for each mine of cluster-III shall be drawn up and implemented. The schedule of backfilling should be clearly bought out and submit the same to MoEF.	Calendar plan of production has been formulated and hereby enclosed in annexure – ‘B1,’ OB dumping and backfilling (for O/C mines) and reclamation is already under preparation and CMPDIL has prepared a final mine closure plan.
xiii	Mining shall be carried out as per statute 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 OC shall be protected to the extent feasible and the embankment proposed along water body shall be strengthened with stone pitching.	It is being followed. Embankments have been constructed as specified in EC

xiv	Active OB dumps near water bodies and rivers should be rehandled for backfilling abandoned mine voids. However, those which have been biologically reclaimed need not be disturbed.	No OB is being dumped near water bodies. The OB dumps created earlier already stabilized & further action has been taken for their eco-restoration work as per Road Map prepared by FRI, Dehradun and as per the action plan of Prof. CR Babu ,Professor Emirates CEMDE, Delhi University. Details of programme of eco-restoration are enclosed as annexure-C.
xv	Thick green belt shall be developed along undisturbed areas, mine boundary and in mine reclamation. A total area of 854.72 ha shall be reclaimed and afforested.	It shall be complied. Yearly plantation is being done for development of green belts as per EC.
xvi	Details of transportation, CSR, R&R and implementation of environmental action plan for the clusters-III should be brought out in a booklet form within a year and regularly updated.	It shall be complied.
xvii	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 III shall be implemented.	Dhanbad Action Plan has been prepared in consultation with Jharkhand Pollution Control Board for entire BCCL and not cluster wise. It is being implemented comprehensively for all the mines of BCCL. Some of the salient actions of this cluster are as under: 1. Construction of pucca road 2. Construction of water reservoir for mine water utilization 3. Plantation. 4. Transportation of coal in covered vehicles. 5. Regular water sprinkling in dust prone areas.
xviii	The locations of monitoring stations in the Jharia Coalfields should be finalized in consultation with the Jharkhand State Pollution Control Board. The Committee stated that smoke/dust emission vary from source to source (fuel wood, coal, fly ash from TPPs, silica from natural dust, etc.) and a Source Apportionment Study should be got carried out for the entire Jharia Coalfields. Mineralogical composition study should be undertaken on the composition of the suspended particulate matter (PM ₁₀ and PM _{2.5}) 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.	As per the MoU "Sustainable Coal Mining in Coal India Limited" entered between CIL and NEERI, NEERI Nagpur was approached for conducting Source Apportionment Study BCCL for compliance of EC conditions. The proposal regarding Conducting the Source Apportionment Study has been submitted by NEERI. Work Order had already been issued to NEERI Nagpur on 12.05.2018. And work has been started in September 2018.
xix	The Plan for conveyor-cum-rail for Cluster-III should be dovetailed with Jharia Action Plan. The Committee desired that road transportation of coal during Phase-I should be by mechanically covered trucks, which should be introduced at the earliest. Coal dispatch shall be diverted from the present rail sidings to Rapid Loading System (RLS) soon after the construction and commissioning of the RLS at	At present transportation is being done by covered vehicle with a tarpaulin cover. The feasibility of mechanically covered trucks is being studied.

	Maheshpur is completed. The railway siding order issued and same would come in 3 years. The details of same should be provided to ministry. The mode of transportation of coal by truck till Railway Siding should be by mechanically covered trucks	
xx	3756 nos. of PAF's should be rehabilitated at cost of Rs 27012.66 Lakhs as per the approved Jharia Action Plan.	It is being followed as per the approved Jharia action plan.
xxi	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.	The work of monitoring of ambient environment including ground water monitoring is being done by Central Mine Planning and Design institute (CMPDIL). Monitoring stations have been set up and Central Mine Planning and Design institute (CMPDIL) has been keeping a constant check. Tender was done on 28.04.2017. Only one bidder applied who could not fulfil the eligibility criteria. Hence, that tender was cancelled and retendering in process. Groundwater quality report for cluster-III is attached in annexure-C.
xxii	Regular monitoring of subsidence movement on the surface over 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 clayey soil/suitable material.	At present, only one depillaring district is operational at Maheshpur UG in Cluster III and others are development districts. Regular monitoring of subsidence over depillared area is being done as per stipulation.
xxii i	Sufficient coal pillars shall be left un-extracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.	Sufficient coal pillars have been left around air shafts as per the statutes and DGMS guidelines.
xxi v	High root density tree species shall be selected and planted over areas likely to be affected by subsidence.	Identification of high root density Plant and its plantation in subsidence prone area is in the process. The plantation programme will include such plants.
xxv	Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.	It shall be complied.
xxv i	Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.	It is being followed. Sufficient barriers are left for saving the surface installation and infra structures as per the statute and DGMS guidelines.
xxv ii	No depillaring operation shall be carried out below the township/colony.	It is being followed.
xxv iii	A detailed CSR Action Plan shall be prepared for Cluster III group of mines. Specific activities shall be identified for CSR for the budget of Rs 139 Lakhs per year@ Rs 5/T of coal provided for CSR for 2012-2013 and Rs. 5/T of coal as recurring expenditure. The	BCCL is implementing CSR activities. The details of activities are as enclosed in Annexure-E. A detailed project specific CSR Action Plan shall be formulated and for this purpose.

	491.91ha of area within Cluster III 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. Third party evaluation shall be got carried out regularly for the proper implementation of activities undertaken in the project area under CSR. Issue 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. The company must give priority to capacity building both within the company and to the local youth, who are motivated to carry out the work in future. The gap/space available between the entire mine area should be suitably planted with native species. Plantation should also be made in vacant area and along the road side so as to reduce dust pollution.	
xxi x	Central recreation park with herbal garden should be developed for use of all inhabitants.	Being complied. Action has already been taken for identification of land for development of herbal garden for the inhabitants/ nearby society under the CSR activity of the company.
xxx	The mine water should be treated properly before supply to the villager.	Mine water is being used for drinking purposes after being filtered.
xxx i	Details of transportation, CSR, R&R and implementation of environmental action plan for each of the clusters-III should be brought out in a booklet form within a year and regularly updated.	It shall be complied.
xxx ii	Central recreation park with herbal garden should be developed for use of all inhabitants.	Being complied. Action has already been taken for identification of land for development of herbal garden for the inhabitants/ nearby society under the CSR activity of the company.
xxx iii	The mine water should be treated properly before supply to the villager.	Mine water is being used for drinking purposes after being filtered.
xxx iv	Details of transportation, CSR, R&R and implementation of environmental action plan for each of the clusters-III should be brought out in a booklet form within a year and regularly updated.	It shall be complied.
xxx v	Mine discharge water shall be treated to meet standards prescribed 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.	The work for keeping a check on the mine water quality is being done by Central Mine Planning and Design institute (CMPDIL). The quality of water is within prescribed standards.
xxx vi	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 activities and from rainwater harvesting measures.	No ground water is being utilized for the purposes of industrial use of the water. Mine water is being used for drinking purpose after being filtered.

	The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	
xxx vii	The void shall be converted into a water reservoir of a maximum depth of 15-20 m and shall be gently sloped and the upper benches of the reservoir shall be stabilized with plantation and the periphery of the reservoir fenced. The abandoned pits and voids should be backfilled with OB and reclaimed with plantation and or may be used for pisciculture.	Continuous process of the backfilling has been adopted. A part of the void will be converted into the water body as specified in EC.
xxx viii	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.	The work of monitoring of ambient environment including ground water monitoring is being done by Central Mine Planning and Design institute (CMPDIL). The monitoring stations have been set up and proper check is being maintained in this regard.
xxx ix	ETP shall also be provided for workshop, and CHP, if any. Effluents shall be treated to conform to prescribe standards in case discharge into the natural water course.	Construction of ETP/ Oil grease Trap is being taken up.
xl	The location of monitoring stations in the Jharia coalfield should be finalized in consultation with Jharkhand State Pollution Control Board.	It will be complied.
xli	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 MOEF and its Regional office at Bhubaneswar.	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. 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." Image is attached as annexure H.
xlii	A Final Mine Closure Plan along with details of Corpus 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.	Mine closure plan as per the guidelines of Ministry of Coal have been prepared by Central Mine Planning and Design Institute (CMPDI) and it is being implemented.
xliv	A separate management structure for implementing environment policy and socio-economic issues and the capacity building required in this regard.	A full-fledged Environment Department, headed by a HoD (Environment) along with a suitable qualified multidisciplinary team of executives which includes

		Environment, Mining, Excavation, Civil, Survey ,Electrical & mechanical, Forestry disciplines executives and technicians 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 Headquarters 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. 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.
xlvi	Corporate Environment Responsibility: a) The Company shall have a well laid down Environment Policy approved by the Board of Directors. b) The Environment Policy shall prescribe for standard operating process/ procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions. c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished. d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.	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. Complied. A hierarchical system of the company to deal with environmental issues from corporate level to mine level already exists. Being complied.
B	General Conditions by MOEF::	
i	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	Being followed.

ii	No change in the calendar plan of production for quantum of mineral coal shall be made.	Being followed. Production is being done well within the peak production capacity as per EC.
iii	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM ₁₀ , PM _{2.5} , SO ₂ and NO _x monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.	Establishment of Four ambient air quality monitoring stations by CIMFR has been completed. The work for monitoring of ambient environment is being done by Central Mine Planning and Design institute (CMPDIL).
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.	The work for monitoring of ambient environment is being done by Central Mine Planning and Design institute (CMPDIL). The stations for air quality check have been set and constant check is being maintained by CMPDIL. Monitoring data is attached in annexure-G
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.	Being Complied.
vi	Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 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 discharge of workshop effluents.	The work for monitoring of ambient environment is being done by Central Mine Planning and Design institute (CMPDIL). Monitoring stations have been set up by CMPDIL and constant check is being maintained by them.
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.	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 analyzed through a laboratory recognized under EPA Rules, 1986.	Establishment of monitoring stations is already in process and Jharkhand State Pollution Control Board is being pursued in this regard. The work for monitoring of ambient environment is being done by Central Mine Planning and Design institute (CMPDIL).

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.	Being Complied. A separate full-fledged Human Resource Development Department Is conducting regular training programme on these issues. Apart from this Vocational Training Centers are existing in Cluster-III which provide periodical training on the safety and occupational health issue to each of the workers working in the mines.
x	Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.	Initial Medical Examination (IME) and Periodical Medical Examination (PME) of all the personnel is carried out as per the Statutes and Director General of Mines Safety (DGMS) guideline.
xi	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.	A full-fledged Environment Department, headed by a HoD (Environment) along with a suitable qualified multidisciplinary team of executives which includes Environment, Mining, Excavation, Civil, Survey ,Electrical & mechanical, Forestry disciplines executives and technicians 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 Headquarters 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. 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.
xii	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneswar.	A separate fund under the environmental protection measures has already been allocated.
xiii	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy	It has been complied. Advert in local newspaper is enclosed as annexure-F.

	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 .	
xiv	A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.	Complied.
xv	A copy of the environmental clearance letter shall be shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.	Complied.
xvi	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM ₁₀ , PM _{2.5} , SO ₂ and NO _x (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.	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 Office s of CPCB and the SPCB.	Being complied.
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.	Shall be complied.
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)	Being Complied.

	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	
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 attract the provisions of the Environment (Protection) Act, 1986.	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.

Annexure-A

BCCL



Bharat Coking Coal Limited

(A Subsidiary of Coal India Limited)

Office of HOD(Environment)

Koyla Bhawan, Koyla Nagar

Dhanbad 826005

Ref. No.BCCL/HOD(Env)/F- MP/13/ **610**

Dated 21.05.2013.

To,

Dr Vinod Kumar,
Group Head, Geosciences group
Sc/Eng-SG
National Remote Sensing Centre
Indian Space Research Organization
Dept of Space, Govt Of India, Balanagar, Hyderabad
Andhra Pradesh-500625

Subject : Regarding proposal for "Delineation of Surface Coal Fire and associated Land Subsidence in Jharia coalfield, Jharkhand using satellite based remote-sensing techniques at a cost of Rs 19.70 Lakhs submitted by e-mail on 15.05.2013

D/Sir,

We are in receipt of the aforesaid proposal, sent by email on 15.05.2013, covering two components of the scope of study and subsequent communication by BCCL vide letter no. BCCL/D (T) Op/F-Env/2012/148(A) dated 11.02.2013:

Part 1: Coal Fire mapping of Jharia Coalfield using Thermal Infra-red data – for a cost of Rs. 6,70,721=00. The study is proposed to be completed within 8 months and

Part 2: Land subsidence mapping of Jharia Coalfield using Interferometric SAR data - for a cost of Rs. 12,98,571=00. The study is proposed to be completed within 12 months.

Competent authority of BCCL has approved both the two components as above. You are therefore requested to submit your invoice for 90% amounting to 17.73 Lakhs, of the cost of the project Rs 19.00 Lakhs at the earliest for placing the work order and releasing the 90% amount.

Thanking you,

Yours faithfully,

HOD (Environment)

Annexure-B

1. CALENDER PROGRAMME FOR OB DUMPING

- Backfilling programme : (in M cu. m)

YEAR	New Akashkinari OCP	Block- IV OCP	TOTAL
2015-16	2.76	5.12	7.88
2016-17	3.52	5.24	8.76
2017-18	4.04	5.48	9.52
2018-19	3.52	2.98	6.5

Annexure-C (Groundwater quality)

Groundwater Quality

Location: GOVINDPUR, AMBAGAN VILLAGE / CLUSTER-3 Stations: GW-3			Year: 2017-18 Date of sampling: 05-09-2017		
Sl. No	Parameter	Result	Detection Limit	IS:10500 Drinking Water Standards	Standard / Test Method
1	Boron (as B), mg/l, Max	<0.2	0.20	0.5	APHA, 22 nd Edition, Carmine
2	Colour, in Hazen Units	2	1	5	APHA, 22 nd Edition, Pt.-Co. Method
3	Calcium (as Ca), mg/l, Max	46	1.60	75	IS-3025/40:1991, EDTA
4	Chloride (as Cl), mg/l, Max	112	2.00	250	IS-3025/32:1988, R-2007, Argentometric
5	Copper (as Cu), mg/l, Max	<0.03	0.03	0.05	IS 3025/42 : 1992 R : 2009, AAS-Flame
6	Fluoride (as F) mg/l, Max	0.38	0.02	1.0	APHA, 22 nd Edition, SPADNS
7	Free Residual Chlorine, mg/l, Min	<0.02	0.02	0.2	APHA, 22 nd Edition, DPD
8	Iron (as Fe), mg/l, Max	0.132	0.06	0.3	IS 3025 /53 : 2003, R : 2009, AAS-Flame
9	Lead (as Pb), mg/l, Max	<0.005	0.005	0.01	APHA, 22 nd Edition, AAS-GTA
10	Manganese (as Mn), mg/l, Max	0.013	0.02	0.1	IS-3025/59:2006, AAS-Flame
11	Nitrate (as NO ₃), mg/l, Max	32.21	0.5	45	APHA, 22 nd Edition, UV-Spectrophotometric
12	Odour	Agreeable	Qualitative	Agreeable	IS 3025 /05:1983, R-2012, Qualitative
13	pH value	7.92	2.5	6.5 to 8.5	IS-3025/11:1983, R-1996, Electrometric
14	Phenolic compounds (as C ₆ H ₅ OH), mg/l, Max	<0.001	0.001	0.001	APHA, 22 nd Edition, 4-Amino Autipyrine
15	Selenium (as Se), mg/l, Max	<0.002	0.002	0.01	APHA, 22 nd Edition, AAS-GTA
16	Sulphate (as SO ₄) mg/l, Max	38	2.00	200	APHA, 22 nd Edition. Turbidity
17	Taste	Acceptable	Qualitative	Acceptable	APHA, 22 nd Edition. Taste
18	Total Alkalinity (CaCO ₃), mg/l, Max	164	4.00	200	IS-3025/23:1986, Titration
19	Total Arsenic (as As), mg/l, Max	<0.002	0.002	0.01	IS 3025/ 37:1988 R : 2003, AAS-VGA
20	Total Chromium (as Cr), mg/l, Max	<0.04	0.04	0.05	IS-3025/52:2003, AAS-Flame
21	Total Dissolved Solids, mg/l, Max	428	25.00	500	IS 3025 /16:1984 R : 2006, Gravimetric
22	Total Hardness (CaCO ₃), mg/l, Max	132	4.00	200	IS-3025/21:1983, R-2002, EDTA
23	Turbidity, NTU, Max	1	1.0	1	IS-3025/10:1984 R-1996, Nephelometric
24	Zinc (as Zn), mg/l, Max	0.024	0.01	5.0	IS 3025/ 49 : 1994, R : 2009, AAS-Flame
25	Nickel as Ni, mg/l Max	0.028	0.01	5.0	IS 3025/ 49 : 1994, R : 2009, AAS-Flame

अभिनव सेठी, उद्ग
Analysed By
JSA/SA/SSA

Checked By
Lab In Charge
RI-2, CMPDI, Dhanbad

2/9/19
Approved By
HOD(Mining/Environment)
RI-2, CMPDI, Dhanbad

LAB NO - 200417005

Scanned by CamScanner

ANNEXURE D

भारत कोकिंग कोल लिमिटेड एक मिनीरत्न कंपनी (कोल इंडिया लिमिटेड का एक अंग) पंजीकृत कार्यालय कोयला भवन, कोयला नगर, (धनबाद) झारखंड 826005 CIN:U10101JH1972GOI000918 Tele: 0326 2230174 FAX: 0326 2230176 ईमेल : cgmsafety@bccl.gov.in		Bharat Coking Coal Limited A Miniratna Company (A subsidiary of Coal India Ltd) Office of GM I/C(S&R) Koyla Bhawan, Koyla Nagar, Dhanbad, Jharkhand-826005 CIN:U10101JH1972GOI000918 Tele: 0326 2230174 FAX: 0326 2230176 Email: cgmsafety@bccl.gov.in
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पत्र संख्या भाकोकोलि/उप महाप्रबंधक(एस&आर)/I/C/संचिका-MP/17 323

दिनांक:-07.04.2017

To,
Dr, Vinod Kumar,
Group Head, Geosciences group
National Remote Sensing Center
India Space Research Organization
Dept of Space, Govt of India,
Balanagar, Hyderabad - 500037

Sub:- Work –Order for “ Delineation of Surface Coal Fire and associated Land Subsidence
in Jharia Coalfield, Jharkhand using satellite based remote – sensing techniques”

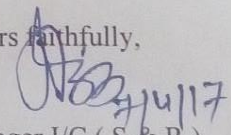
Dear Sir,

Consequent upon competent approval of proposal on aforesaid subject and subsequent signing o MOU between BCCL and NRSC, the aforesaid work is awarded to NRSC for Rs.18,10500/- (Eighteen lac ten thousand five hundred) only, against 100% payment in advance subject to terms and conditions listed in MOU. As per agreed payment terms and Demand Note No. 07/2016-17,

You are therefore requested to initiate all necessary activities for commencing the subject work as early as possible.

Thanking you,

Yours faithfully,


General Manager I/C (S & R)

Cc to :

1. Director (T) P&P, BCCL- for kind information.
2. TS to CMD, BCCL – for kind information.
- ✓ 3. Sri Mithilesh Kumar, Sr.Mgr.(M), Safety.Deptt., KoylaBhawan

Annexure- E

CSR ACTIVITIES OF BCCL

Bharat Coking Coal Limited (BCCL) is committed to good corporate citizenship and makes constant efforts to build and nurture long lasting relationships with members of the society in general and it's peripheral communities in particular.

BCCL is taking up activities from the HQ level and through its administrative areas for the implementation of CSR activities. For this purpose A CSR cell is functioning which is headed by General Manger (Welfare) under the direct control of Director (Personnel) of the company.

The CSR activities are specific to the village, depending on the need assessed for the people by local Hon'ble M.Ps and M.L.As. Further as suggested by the MOEF Committee, a detailed project specific CSR Action Plan shall be formulated and for this purpose, BCCL has approached TATA INSTITUTE AND SOCIAL SCIENCES, MUMBAI which is also the focal agency of the National CSR Hub. CSR Action Plan shall be formulated for the whole Jharia Coalfield and also project-wise which will include need-based/ stakeholder base line survey, monitoring, evaluation, auditing, etc.

The CSR activities presently being done by BCCL

- To meet the acute shortage of drinking water in peripheral villages' drinking Water is provided through deep borewells, tubewells, pumps/motors, in the peripheral villages of BCCL. Water supply through pipeline, through water tanker is provided also to the villages.
- **Education:** BCCL adopts a multi-pronged approach to promote quality education in backward areas. The measures taken by BCCL comprise Construction, Extension, and Renovation of school buildings etc are done to promote quality education in the nearby villages. BCCL is Extending financial aid for educational facilities to 83 nos. Private Committee Managed schools. Measures are taken to promote women literacy and carrier development.
- **Health Care:** BCCL Conducts medical/health camps for dwellers of peripheral villages for rendering free medical consultancy. CSR Clinics, wellness clinics, artificial limbs centers are organized for the benefit of the needy section of the society.. Mobile medical vans are deployed as special arrangement for medical services. AIDS awareness camps are organized as special drive to develop awareness and to render free consultancy.
- **Occupational health:** awareness programme are organized.
- **Other Welfare Activities:** this includes Construction / renovation of Community Halls, construction / repair of roads, construction of Health-sub centres, construction of drain, construction of Chhat Ghat in the ponds, Construction of Boundary wall, providing Choupal for community gatherings, Installation of road side Water Kiosks during summer etc.
- **Mashla Chakki centres:** Mashla Chakki centres are established with machines to promote self-employment.

- **Blankets:** During winter, Blankets are distributed among poor section of the society.
- **Sports & Cultural:** Various activities are organized to propagate sports and cultures. Sports/games items and instruments are also provided. To promote sports, children parks are constructed.
- **Village adoption:** Lahbera – A SC/ST village in Dhanbad has been adopted for its all-round development and a number of development activities have been carried out.
- **Skill development training programs by BCCL for Project Affected persons, fire affected persons and nearby communities:** Bharat Coking Coal Limited (BCCL) has signed a Memorandum of Understanding with Construction Industry Development Council (CIDC), New Delhi, a body promoted by Planning Commission, on 20.03.2012 for employment linked training program in the Construction Sector for poor and downtrodden people of the Jharia coalfield including project affected persons and fire affected people. BCCL in coordination with the CIDC is identifying the project affected persons to undergo the required training programs to be conducted by CIDC.

In this regard BCCL will bear the training cost @ Rs.42960/ per candidate which includes all expenses including lodging and boarding and after training the CIDC has to ensure a minimum of 75 % of sustainable placement for a period of six months. In case of placement below 75%, pro rata payment is to be made. All training are mandatorily residential. In the year 2012-13 5000 youths will be trained and in the subsequent years no. Of trainees will be scaled up @ 15% per annum.

ANNEXURE - F

अमित कुमार झेलिया, सीए

झरिया के लोगों ने कहा

आम बजट से जनता को राहत नहीं मिली है। बेरोजगार युवकों को रोजगार का अवसर नहीं मिला है। बजट ने सभी को निराश किया है। इसका खमियाजा चुनाव में कांग्रेस को भुगतना पड़ेगा।

संजीव सिंह, संयुक्त महामंत्री जमसं।

बजट कहीं से संतोषप्रद नहीं है। निराशाजनक बजट है। आम जनता पर बोझ बढ़ेगा। उद्योग खोलने पर कोई ध्यान नहीं दिया गया है। इसके बखरी, केंद्रीय उपाध्यक्ष सीटू

आम बजट में बेरोजगारों के लिए कुछ नहीं किया गया। आम लोगों पर बोझ लादा गया शिवबालक पासवान, भाकपा

कांग्रेस ने जनता को निराश किया है। जनता इस बार आम बजट का जवाब बैलेट से देगी। मुनिलाल राम, झाविमो

आम बजट जनविरोधी और महंगाई बढ़ाने वाला है। आकड़ों के जाल में यूपीए ने फंसा कर जनता को दिग्भ्रमित किया है। राजकुमार अग्रवाल, भाजपा नेता

आम बजट से जनता को अपनी राहत नहीं मिलेगी। जनता होने वाले चुनाव को रखकर जनता ने उम्मीद लगा रखी थी। डॉ. जेके सिन्हा, निदेशक आइएसएल

बजट संतुलित है। लेकिन आम जनता को ध्यान में नहीं रखा गया है। जनता को निराशा हाथ लगी है। अनूप साव, पार्थद

आम बजट का बोझ जनता के सिर पर पड़ा है। जनता को कोई राहत नहीं मिली है। हरिश जोशी, अधिवक्ता

बजट से महंगाई बढ़ेगी। यह बजट वोट को प्रभावित करनेवाला वित्त मंत्री विदवरम का आखिरी बजट कहलाएगा। कादिर अंसारी, व्यवसायी

बजट में व्यवसायियों पर कोई ध्यान नहीं दिया गया है। लोगों को भी इससे कोई फायदा नहीं है। मणिशंकरकेसरी, पूर्व जिलाध्यक्ष चैबर

ऑफ कॉमर्स

सुरील नारनोली



भारत कोकिंग कोल लिमिटेड (कोल इण्डिया लिमिटेड का एक अंग)

संस्करण सं.: - को सी सी एल/टी ए/वीक मेनेजर (सी) आई सी/12-13/1498 दिनांक: 26.02.2013

शुद्धि पत्र

कोयला नगर में विभिन्न कार्यों के लिए आर्माइंग की गई निविदा आमंत्रण सूचना संदर्भ सं.: - को सी सी एल/टी ए/वीक मेनेजर (सी) आई सी/पेडर - 1/12-13/1477 दिनांक: 21.02.2013 के संदर्भ में कार्य पूर्णता का समय 12 (बारह) महीने होंगे।

निविदा आमंत्रण सूचना के अन्य सभी शर्तें यथावत् रहेंगी।

RO/-

मुख्य प्रबंधक (आर्माइंग)

प्रधानी कोयला नगर, नगर प्रशासन

MC (KNTA)



भारत कोकिंग कोल लिमिटेड (कोल इण्डिया लिमिटेड का एक अंग)

सभी संबंधित व्यक्तियों को यह सूचित किया जाता है कि निम्नलिखित 09 (नौ) भारत कोकिंग कोल लिमिटेड का समूह (Cluster) जिसमें 63 खाने एवं 02 चायनीज सम्मिलित हैं, को पर्यावरण एवं वन मंत्रालय के द्वारा पर्यावरण सफाया (Environmental Clearance) प्रदान किया जा चुका है।

क्र. सं.	समूह (Cluster) का नाम	स्वीकृत आवेदन संख्या एवं तिथि
1.	समूह (Cluster) I : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की चामोरा समूह की 3 खानें - चामोरा (एनबीएम शाखा) ओलेवी, धनबाद कुलीवी एवं चामोरा कीज रेवेनम समूह की खानें (575 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 0.9 एम टी पी ए सामान्य एवं 1.17 एम टी पी ए (उच्च)।	जे-11015/93/2009-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
2.	समूह (Cluster) II : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 2025.71 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में (20.215 एम टी पी ए की उच्च उत्पादन के साथ 15.55 एम टी पी ए सामान्य) के एक सम्मिलित एम एल क्षेत्र में 0.9 एम टी पी ए सामान्य एवं 1.17 एम टी पी ए (उच्च)।	जे-11015/35/2011-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
3.	समूह (Cluster) III : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1420.61 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 3.6 एम टी पी ए की उच्च उत्पादन की 7 खानें (04.11.2010 को प्रदान की गई टी ओ आर पर आधारित ई सी)।	जे-11015/213/2010-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
4.	समूह (Cluster) IV : गल्लीटीड कोलिफिल्ड्स भूमिगत को छोड़कर मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1123.79 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 2.851 एम टी पी ए (सामान्य) 3.706 एम टी पी ए (उच्च) की उत्पादन क्षमता के साथ 6 खानें।	जे-11015/212/2010-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
5.	समूह (Cluster) V : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1957.08 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 4.854 (सामान्य) 6.311 (उच्च) एम टी पी ए के उत्पादन की 7 खानें (16.03.2011 को प्रदान की गई आई टी ओ आर पर आधारित ई सी)।	जे-11015/01/2011-1ए. 11 (एम) दिनांक: 11 फरवरी 2013
6.	समूह (Cluster) VII : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 2127.7 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 8.16 एम टी पी ए की सामान्य एवं 2.289 एम टी पी ए की उच्च उत्पादन की 6 खानें एवं 18 हेक्टेयर के एक क्षेत्र के लिए 1.6 एम टी पी ए सामान्य तथा 2.08 एम टी पी ए उच्च उत्पादन की सुदामबीह कोल चायरी (सुदामबीह शॉट्ट मॉर्न के लीज होल्ड के अन्तर्) (09.02.2011 को प्रदान की गई टी ओ आर पर आधारित ई सी)।	जे-11015/238/2010-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
7.	समूह (Cluster) X : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 2057.95 हेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 1.762 एम टी पी ए की सामान्य एवं 2.289 एम टी पी ए की उच्च उत्पादन की 6 खानें एवं 18 हेक्टेयर के एक क्षेत्र के लिए 1.6 एम टी पी ए सामान्य तथा 2.08 एम टी पी ए उच्च उत्पादन की सुदामबीह कोल चायरी (सुदामबीह शॉट्ट मॉर्न के लीज होल्ड के अन्तर्) (09.02.2011 को प्रदान की गई टी ओ आर पर आधारित ई सी)।	जे-11015/380/2010-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
8.	समूह (Cluster) XVI : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1183.92 हेक्टेयर के एक सम्मिलित एम एल क्षेत्र में 1.51 एम टी पी ए सामान्य तथा 1.963 एम टी पी ए उच्च तथा 12 हेक्टेयर के क्षेत्र में 1.6 एम टी पी ए की दौबीबाड़ी चायरी (28.05.2010 को प्रदान की गई टी ओ आर पर आधारित ई सी)।	जे-11015/185/2010-1ए. 11 (एम) दिनांक: 6 फरवरी 2013
9.	समूह (Cluster) VIII : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 10 खानों का समूह (1183.92 हेक्टेयर के एक सम्मिलित एम एल क्षेत्र में 5.603 एम टी पी ए की उच्च उत्पादन के साथ 4.31 एम टी पी ए के सम्मिलित क्षमता (12.0041 हेक्टेयर - 1649 हेक्टेयर - 1183.92 हेक्टेयर)।	जे-11015/298/2010-1ए. 11 (एम) दिनांक: 15 फरवरी 2013

सफाया पत्र की प्रतिलिपि झारखंड राज्य प्रशासन निदेशन बोर्ड के पास उपलब्ध है तथा इसे पर्यावरण एवं वन मंत्रालय की वेबसाइट "http://envfor.nic.in" और भा. को. को. लि. के कार्यालय वेबसाइट "http://www.bcci.gov.in" पर भी देखा जा सकता है।

RO/-

ओएचई

भारत के राष्ट्रपति के लिए तथा उनकी ओर दक्षिण पूर्व रेलवे द्वारा निम्नलिखित कार्यों के सं.: टीआरबी/एसीए/ओटी-2013/1/आइएएम

कार्य का विवरण

दक्षिण पूर्व रेलवे के आर्टा मंडल में ओवरहेड मोस्ट्रो के इन्वेंटरीशन का सुधार साथ में सं. निविदा प्रपत्र की कीमत: ₹ 10,000/-। निविदा (टीआरबी/एसीए) के कार्यालय अथवा सीईई 04.03.2013 से 04.04.2013 (अपराह्न 24) की तारीख: 04.04.2013 (अपराह्न 3.3) आर्टा के कार्यालय अथवा सीईई/टीआरबी, अवधि: एल.ओ.ए. के जारी होने की तारीख <http://tenders.gov.in>, दक्षिण पूर्व रेलवे उपलब्ध है। निविदा प्रपत्र प्राप्त करने के उद्देश्य से कोई/टीआरबी/एसीए के कार्यालय की सूचना अर्थात् "भारतीय रेल में 25 की एसी टेंडर डिजाइन, आगुती, संरचना एवं रखरखाव का

विभिन्न प्रकार के र

विद्युत (सामान्य) विभाग के लिये खुली निविदाएं, लाईसेंस, तकनीकी विशेषज्ञता, वित्तीय क्षमता एजेंसियों/संवेदकों से मुहरबंद खुली निविदाएं

निविदा सं.: इ.एल./41/बुली/2012-2013 धनबाद एवं बरकाका के कोकिंग डिपो में प्रकार राशि: ₹ 20.16.738/- क्रम सं.: 3. निविदा प्रपत्र क्रम सं.: 4. अधिपत्र राशि: ₹ 40.340/- क्रम

निविदा सं.: इ.एल./42/बुली/2012-2013 एवं शरा हो गये पाइप लाईन के बदलव एवं पाइप के वापस से संबंधित विद्युत कार्य। क्रम सं.: 3. निविदा प्रपत्र का मूल्य (अप्रतिवेध) ₹ 3,670/- क्रम सं.: 5. कार्य समापन अवधि

निविदा सं.: इ.एल./43/बुली/2012-2013 अप/3330 डाउन, 3307 अप/3308 डाउन, 33/ए/23348ए में वातानुकूलित कोषों का तीन व प्राक्कलित राशि: ₹ 92.33.463/- क्रम सं.: 3 हजार सेवन, क्रम सं.: 4. अधिपत्र राशि: ₹ 1. वर्षों के लिए वार्षिक अनुबंध।

क्रम सं.: 6. निविदा प्रपत्र मूल्य का भुगतान: 1. दौरान किसी भी कार्य दिवस को (शनिवार, रविवार मंडल सजाजी पू. म. रे. धनबाद अथवा बुकिंग अर्थात् डाउनटेनमेंट तथा कोपन से किसी को नकद से डाउनलोड किये गये निविदा दस्तावेज के साथ (अप्रतिवेध) का किमांड ड्राफ्ट, जो वित्त सलाहकों में तथा धनबाद में देय हो, आवश्यक रूप से संलग्न क्रम सं.: 7. निविदा जमा करने एवं खोलने 03.04.2013 तक की अवधि के दौरान (शनिवार, रविवार) को कार्य दिवस को 10.00 बजे से 16.00 बजे तक सहायक विद्युत अभियन्ता (सा.)/पूर्व मध्य रेल, खुलने की तिथि: वरीय मंडल विद्युत अभियन्ता।

क्रम सं.: 8. कार्यालय का पता जहाँ से निविदा () का कार्यालय (दिनांक 11.03.2013 से 03.04.2013 को छोड़कर) किसी भी कार्य दिवस को 10.00 बजे क्रम सं.: 9. वेबसाइट का विवरण एवं नोटिस बं जा सकता है: वेबसाइट www.ecr.indianrail

: व. म. विद्युत अभियन्ता (सा.) पू. म. रे. धनबाद का व वर्षों (अर्थात् चालू वर्ष तथा तीन पूर्व वित्तीय वर्षों) निविदा मूल्य का न्यूनतम 35 प्रतिशत हो, संपन्न वि वर्षों में प्राप्त कुल अनुबंध राशि विज्ञापित निविदा विविदादाताओं के द्वारा इस संबंध में प्रस्तुत प्रमाण द्वारा संशोधित प्रमाणपत्र अथवा चार्टर्ड एकाउंटेंट है। क्रम सं.: 11. ए. सी. कार्यों की एकोर्टिंग: 1) 15 टी. आर. एवं उपर के ए. सी. लाइट का अनुसंधान की एकोर्टिंग। 4) विद्युत प्रतिस्थापन की मरिग।

रेल प्रशासन बिना किसी सूचना के निविदा को बं डाक के द्वारा कोई निविदा कागजात नहीं भेजा जायेगी की अंतिम तिथि पर अवकाश घोषित होने के मामले दिवस माना जायेगा। वेबसाइट से डाउनलोड किये में उपलब्ध मूल निविदा प्रपत्र की प्रति को ही प्रम डाउनलोड करने में हुई देरी/कटिमाई के लिए रेल लिए जी.सी.सी. की धारा-65, दस करोड़ रुपये से पीआर/1508/डीएचएन/टी/152

"सभी श्रेणी के आर्माइंग टिकट पर रेल में इममे वास्तविक यात्री को लाभ होगा और इ

लोक सुनवाई की सूचना

सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार द्वारा बिहार राज्य के अन्तर्गत राष्ट्रीय उच्चपथ संख्या-30A फतुहा-बाढ़ खण्ड को दो लेन पक्की पटरी सहित चौकीकरण परियोजना का प्रस्ताव है। इसकी कुल लम्बाई लगभग 72.390 कि०मी० है। यह उच्चपथ पटना जिला के फतुहा से प्रारम्भ होकर नीलदा जिला के चण्डी, हरनीत होते हुए बाढ़ (पटना) तक जायगी। इस राजमार्ग में तीन बाईपास क्रमशः दनियाया, हरनीत एवं बाढ़ में प्रस्तावित है, इसके अतिरिक्त इसमें उपमार्ग, पुल, पुलिया, मृगगत मार्ग, रुकाव स्थल एवं टॉल प्लाजा आदि की व्यवस्था होगी। परियोजना का कुल लागत 420.70 करोड़ है। इस परियोजना मार्ग में कोई राष्ट्रीय उद्यान, वन्य-जीव अभ्यारण्य नहीं है।

पर्यावरण एवं वन मंत्रालय, भारत सरकार के पर्यावरणीय प्रभाव मूल्यांकन (ईआईए) अधिसूचना, 2006 एवं उसमें संशोधित अधिसूचना के आलोक में प्रस्तावित योजना की पर्यावरणीय स्वीकृति हेतु ईआईए रिपोर्ट तैयार किया गया है, जिसमें समाविष्ट कुप्रभावों के नियंत्रण हेतु उपाय दर्शाये गये हैं। ईआईए प्रतिवेदन एवं ईआईए सार-प्रतिवेदन को संबंधित जिलाधिकारी, जिला परिषद एवं महाप्रबंधक, जिला उद्योग केन्द्र के कार्यालयों के साथ-साथ पर्यटन मंत्रालय, पटना में कार्यालय कार्य दिवस के दौरान देखी जा सकती है। वैसे व्यक्ति जो इस परियोजना से प्रभावित होने वाले हों, अपना सुझाव/प्रतिक्रिया इस सूचना के प्रकाशित होने के 30 दिनों के अन्दर पर्यटन को उपलब्ध करा सकते हैं।

स्थानीय जनता की प्रतिक्रिया/सुझाव आमंत्रित करने हेतु लोक सुनवाई कार्यक्रम निम्नवत् है :-

दिनांक	समय	लोक-सुनवाई का स्थल
05.04.2013 (रविवार)	3.00 बजे अपराह्न	प्रखंड कार्यालय, हरनीत, नीलदा
06.04.2013 (शनिवार)	3.00 बजे अपराह्न	प्रखंड कार्यालय, बाढ़, पटना

सभी संबंधित से अनुरोध है कि उपरोक्त कार्यक्रम में उपस्थित होने का कष्ट करेंगे।

सदस्य-सचिव
बिहार राज्य प्रदूषण नियंत्रण पर्वद
बेल्डॉन भवन, शास्त्रीनगर, पटना - 800 023
दूरभाष नं०-0612-2281250 / 2282265, फॅक्स-0612-2281050
वेबसाइट-<http://bspb.bih.nic>



राजस्थान राज्य प्रदूषण नियंत्रण मण्डल

राजस्थान/बेका भील/राज/दिनांक

पर्यावरणीय स्वीकृति हेतु लोक सुनवाई के लिए आम सूचना

1. सर्वसाधारण को सूचित किया जाता है कि मैसर्स भारतीय राजमार्ग प्राधिकरण, परियोजना क्रियान्वयन इकाई, ए 11, चन्द्रकिरण, रीको हाउसिंग कॉलोनी, ब्यावर में प्रस्तावित राष्ट्रीय राजमार्ग संख्या 148-डी 109.750 कि.मी. राष्ट्रीय राजमार्ग-8 (जिला-राजसमन्द) से 64.200 कि.मी., राष्ट्रीय राजमार्ग-79 गुलाबपुरा (जिला भीलवाड़ा) तक की चौड़ाई एवं सुदृढ़करण से संबंधित प्राथमिक एवं मध्य दस्तावेज पर्यावरणीय स्वीकृति से पूर्व आवश्यक लोक सुनवाई हेतु प्रस्ताव राजस्थान राज्य प्रदूषण नियंत्रण मण्डल (यहाँ तथा बाद में मण्डल के नाम से अभिलिखित) को प्रस्तुत किया गया है।

2. और चूंकि मैसर्स भारतीय राजमार्ग प्राधिकरण, परियोजना क्रियान्वयन इकाई, ए 11, चन्द्रकिरण, रीको हाउसिंग कॉलोनी, ब्यावर ने राजस्थान राज्य प्रदूषण नियंत्रण मण्डल को उक्त परियोजना की पर्यावरणीय स्वीकृति से पूर्व आवश्यक लोक सुनवाई हेतु मण्डल को आवेदन प्रस्तुत किया है। उक्त परियोजना हेतु वन एवं पर्यावरण मंत्रालय, भारत सरकार, नई दिल्ली द्वारा अधिसूचना संख्या एस. ओ. 1533 दिनांक 14.09.2006 के अनुसार लोक सुनवाई हेतु इस आशय की सूचना जारी कर 30 दिवस का नोटिस दिया जाना आवश्यक है।

3. उक्त परियोजना से सम्बन्धित EIA/EMP Report एवं संक्षिप्त कार्यवाहक सार अभिलेख निम्न कार्यालयों में अवलोकनाार्थ उपलब्ध है :-

- (1) जिला कलेक्टर, राजसमन्द।
- (2) जिला उद्योग केन्द्र, राजसमन्द।
- (3) जिला परिषद, राजसमन्द।
- (4) तहसील कार्यालय, भीम, जिला-राजसमन्द।
- (5) कार्यालय पंचायत समिति, भीम, तहसील-भीम, जिला-राजसमन्द।
- (6) कार्यालय उपखण्ड मजिस्ट्रेट, भीम, तहसील-भीम, जिला-राजसमन्द।
- (7) क्षेत्रीय कार्यालय, राजस्थान राज्य प्रदूषण नियंत्रण मण्डल, भीलवाड़ा।
- (8) पर्यावरण विभाग, राजस्थान सरकार, शासन सचिवालय, जयपुर।
- (9) राजस्थान राज्य प्रदूषण नियंत्रण मण्डल, 4 पर्यावरण मार्ग, संस्थागत क्षेत्र, झालाना झारी, जयपुर।
- (10) क्षेत्रीय कार्यालय, पर्यावरण एवं वन मंत्रालय, पंचम ताल केन्द्रीय भवन, सेक्टर एवं अलीगंज, लखनऊ।

अतः सर्व साधारण को नोटिस के माध्यम से एतद्वारा सूचित किया जाता है कि से उक्त परियोजना के पर्यावरणीय स्वीकृति से संबंधित लोक सुनवाई हेतु दिनांक 02.04.2013 को 1.00 पी.एम. पर कार्यालय उपखण्ड मजिस्ट्रेट, भीम, तहसील-भीम, जिला-राजसमन्द में प्रस्थित होकर अपने लिखित / मौखिक आक्षेप / सुझाव प्रस्तुत कर सकते हैं।

इस संबंध में लिखित आग्रह / सुझाव इस सूचना के प्रकाशन की तिथि से 30 दिवस के अन्दर क्षेत्रीय कार्यालय, राजस्थान राज्य प्रदूषण नियंत्रण मण्डल, भीलवाड़ा को भी दिये जा सकते हैं।

(टी. एस. सांखला) क्षेत्रीय अधिकारी

NORTH EASTERN RAILWAY

Notification No.-23/2013

IMPORTANT NOTICE FOR THE RAIL PASSENGERS

It is notified for the information of general public that provision of one additional AC-2 Tier coach in train no. 18191/18192 Chhapra-Kanpur Anwarganj Utsarg Express, notified earlier vide this office Notification No. 108/2012 dated 21.12.2012, is being further extended on experimental basis as under:-

Train No. & Name	Station From	Station To	Originating Date	Last Date
18191 Chhapra-Kanpur Anwarganj Utsarg Exp.	Chhapra	Kanpur Anwarganj	01-03-13	30-06-13
18192 Kanpur Anwarganj-Chhapra Utsarg Exp.	Kanpur Anwarganj	Chhapra	02-03-13	01-07-13

CPTO/T-104 Chief Pass Trans., Manager, Gorakhpur

Railway Vigilance Mobile Helpline No.0551-155210 (for Complaints regarding Corruptions)

"SERVING CUSTOMERS WITH A SMILE"



Bharat Coking Coal Limited

(A Subsidiary of Coal India Limited)

This is to bring into notice of all concerned that the following 09 (Nine) Clusters of BCCL consisting of 63 Mines and 02 washeries are granted Environmental Clearances by Ministry of Environmental and forests.

Sl. No.	Name of the Cluster	Sanction order number and date
1.	Cluster-I (Damoda Group of 3 Mines - Damoda (Albion Section) OCP, Damoda UGP and Damp B.J Section OCP) Group of Mines (of 0.9 MTPA normative and 1.17 MTPA (peak) in a combined ML area of 575 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Block Chandrapur, Dist. Dhanbad, Jharkhand.	J-11015/93/2009-1A.II (M) dated 6th Feb. 2013
2.	Cluster-II (5 mines of a combined prod. capacity 15.55 MTPA with a peak production of 20.215 MTPA) in a combined ML area of 2025.71 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand.	J-11015/35/2011-1A.II (M) dated 6th Feb. 2013
3.	Cluster-III (7 mines of a peak production of 3.6 MTPA in a combined ML area of 1420.61 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand (EC based on TOR granted on 04.11.2010).	J-11015/213/2010-1A.II (M) dated 6th Feb. 2013
4.	Cluster-IV (6 mines with production capacity 2.851 MTPA (Normative) 3.706 MTPA (Peak) in a combined ML area of 1123.79 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand excluding Gasitand Colliery UG.	J-11015/212/2010-1A.II (M) dated 6th Feb. 2013
5.	Cluster-V (7 mines of a 4.854 (Normative) and 6.311 (Peak) production of MTPA in a combined ML area of 1957.08 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand (EC based on TOR granted on 16.03.2011).	J-11015/01/2011-1A.II (M) dated 11th Feb. 2013
6.	Cluster-VII (combined capacity 6.227 MTPA with a peak prodn. of 8.16 MTPA in a combined ML area of 2127.7 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand (EC based on TOR granted on 09.12.2010) (excluding Kustore UG and East Bhuggaldih).	J-11015/238/2010-1A.II (M) dated 6th Feb. 2013
7.	Cluster-X (6 mines of 1.762 MTPA of normative and peak production of 2.289 MTPA in a combined ML area of 2057.95 ha) and Sudamdih Coal Washery (Within the lease hold of Sudamdih Shaft Mine) of 1.6 MTPA of normative and 2.08 MTPA peak production for a area of 18 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand (EC based on TOR granted on 09.02.2011).	J-11015/380/2010-1A.II (M) dated 6th Feb. 2013
8.	Cluster-XVI - Coalmines (Dahibari-Basantimata OCP, Basantimata under Ground Mine, New Laikdih OCP (including Dahibari Coal Washery), Laikdih Deep UG, Chanch UG) (normative 1.51 MTPA and 1.963 MTPA peak in a combined ML area of 1964.21 ha) and Dahibari washery of 1.6 MTPA in the area of 12 ha of M/s Bharat Coking Coal Ltd., in Dist. Dhanbad, Jharkhand (EC based on TOR granted on 28.05.2010).	J-11015/185/2010-1A.II (M) dated 6th Feb. 2013
9.	Cluster-VIII Group of 10 Mines (combined capacity 4.31 MTPA with a peak prodn. of 5.603 MTPA in a combined ML area of 1183.92 ha (1200.47 ha-1649 ha-1183.92 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand.	J-11015/298/2010-1A.II (M) dated 15th Feb. 2013

The copy of the clearance letter is available with the Jharkhand State Pollution Control Board and may also be seen at the website of the Ministry of Environmental and forests at <http://envfor.nic.in> and on the official website of BCCL at <http://www.bcci.gov.in>

Annexure-G (Monitoring reports for cluster-III)

8

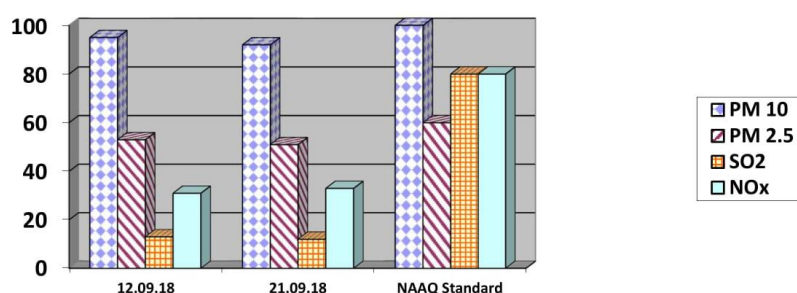
AMBIENT AIR QUALITY DATA

Cluster – III, Bharat Coking Coal limited

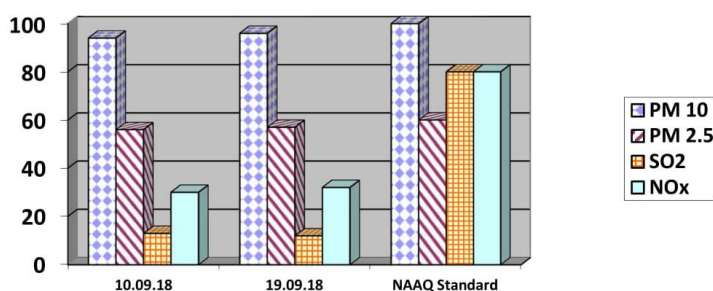
Month: SEP. 2018

Year : 2018-19.

Station Name: A6, Block IV		Zone: Core		Category: Industrial	
Sl. No.	Dates of sampling	PM 10	PM 2.5	SO ₂	NO _x
1	12.09.18	95	53	13	31
2	21.09.18	92	51	12	33
	NAAQ Standard	100	60	80	80



Station Name: A5, Muraidih OCP		Zone: Buffer		Category: Industrial	
Sl. No.	Dates of sampling	PM 10	PM 2.5	SO ₂	NO _x
1	10.09.18	94	56	13	30
2	19.09.18	96	57	12	32
	NAAQ Standard	100	60	80	80



Note:

- All values are expressed in microgram per cubic meter.
- 24 hours duration

Analysed By
JSA/SA/SSA

Checked By
Lab In Charge
RI-2, CMPDI, Dhanbad

Approved By
HOD(Mining/Environment)
RI-2, CMPDI, Dhanbad

JOB NO. 200316028

Cluster – III, BCCL Environmental Monitoring Report

WATER QUALITY MONITORING

3.1 Location of sampling sites

(Refer **Plate No. – II**)

i) **Mine Discharge of Govindpur (MW3)**

A sampling point is fixed to assess the effluent quality of Mine discharge. This location is selected to monitor effluent discharge in to Khudia Nala and Bagdighi Nala.

3.2 Methodology of sampling and analysis

Water samples were collected as per standard practice. The effluent samples were collected and analysed for four parameters on fortnightly basis at the Environmental Laboratory of CMPDI RI-II, Dhanbad.

3.3 Results & Interpretations

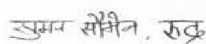
The results are given in tabular form along with the applicable standards. Results are compared with Schedule - VI, effluent prescribed by MoEF&CC. Results show that most of the parameters are within the permissible limits.

WATER QUALITY DATA

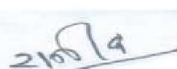
(EFFLUENT WATER- FOUR PARAMETERS)

Name of the Cluster: Cluster -III		Month: SEP. 2018	Name of the Station: Mine Discharge of Govindpur	
Sl. No.	Parameters	MW3 First Fortnight 13/09/2018	MW3 Second Fortnight 22/09/2018	As per MOEF General Standards for schedule VI
1	Total Suspended Solids	54	46	100 (Max)
2	pH	8.06	8.03	5.5 - 9.0
3	Oil & Grease	<2.0	<2.0	10 (Max)
4	COD	32	32	250 (Max)

All values are expressed in mg/lit unless specified.


 Analysed By
 JSA/SA/SSA


 Checked By
 Lab In Charge
 RI-2, CMPDI, Dhanbad


 Approved By
 HOD(Mining/Environment)
 RI-2, CMPDI, Dhanbad

NOISE LEVEL QUALITY MONITORING

4.1 Location of sampling sites

- i) **Block IV (N6)**
- ii) **Muraidih OCP(N5)**
- iii) **Govindpur Village(N7)**
- iv) **Kharkharee (N21)**

4.2 Methodology of sampling and analysis

Noise level measurements in form of 'L_{EQ}' were taken using Integrated Data Logging Sound Level Meter (NL-52 OF RION CO. Ltd. Make) during day time. Noise levels were measured for about one hour time in day time. Noise levels were measured in Decibels, 'A' weighted average, i.e. dB (A).

4.3 Results & Interpretations

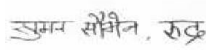
Ambient noise levels were recorded during day time and the observed values were compared with standards prescribed by MoEFCC. The results of Noise levels recorded during day time on fortnightly basis are presented in tabular form along with the applicable standard permissible limits. The observed values in terms of L_{EQ} are presented. The observed values at all the monitoring locations are found to be within permissible limits.

NOISE LEVEL DATA

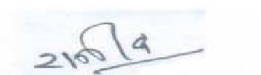
Name of the Project : Cluster -III			Month: SEP. 2018		
Sl. No.	Station Name/Code	Category of area	Date	Noise level dB(A)LEQ	*Permissible Limit of Noise level in dB(A)
1	Muraidih	Industrial area	10.09.18	62.3	75
2	Muraidih	Industrial area	19.09.18	71.2	75
3	Block-IV	Industrial area	12.09.18	59.8	75
4	Block-IV	Industrial area	21.09.18	59.3	75
5	Govindpur/Ramkanali	Industrial area	13.09.18	55.2	75
6	Govindpur/Ramkanali	Industrial area	24.09.18	52.7	75
7	Kharkharee	Industrial area	12.09.18	62.8	75
8	Kharkharee	Industrial area	20.09.18	49.2	75

**Permissible limits of Noise Level as per MOEF Gazette Notification No. GSR 742(E) dt. 25.09.2000 Standards for Coal Mines and Noise Pollution (Regulation and Control) Rules, 2000.*

** Day Time: 6.00 AM to 10.00 PM,*


 Analysed By
 JSA/SA/SSA


 Checked By
 Lab In Charge
 RI-2, CMPDI, Dhanbad


 Approved By
 HOD(Mining/Environment)
 RI-2, CMPDI, Dhanbad

JOB NO. 200316028

Cluster – III, BCCL Environmental Monitoring Report

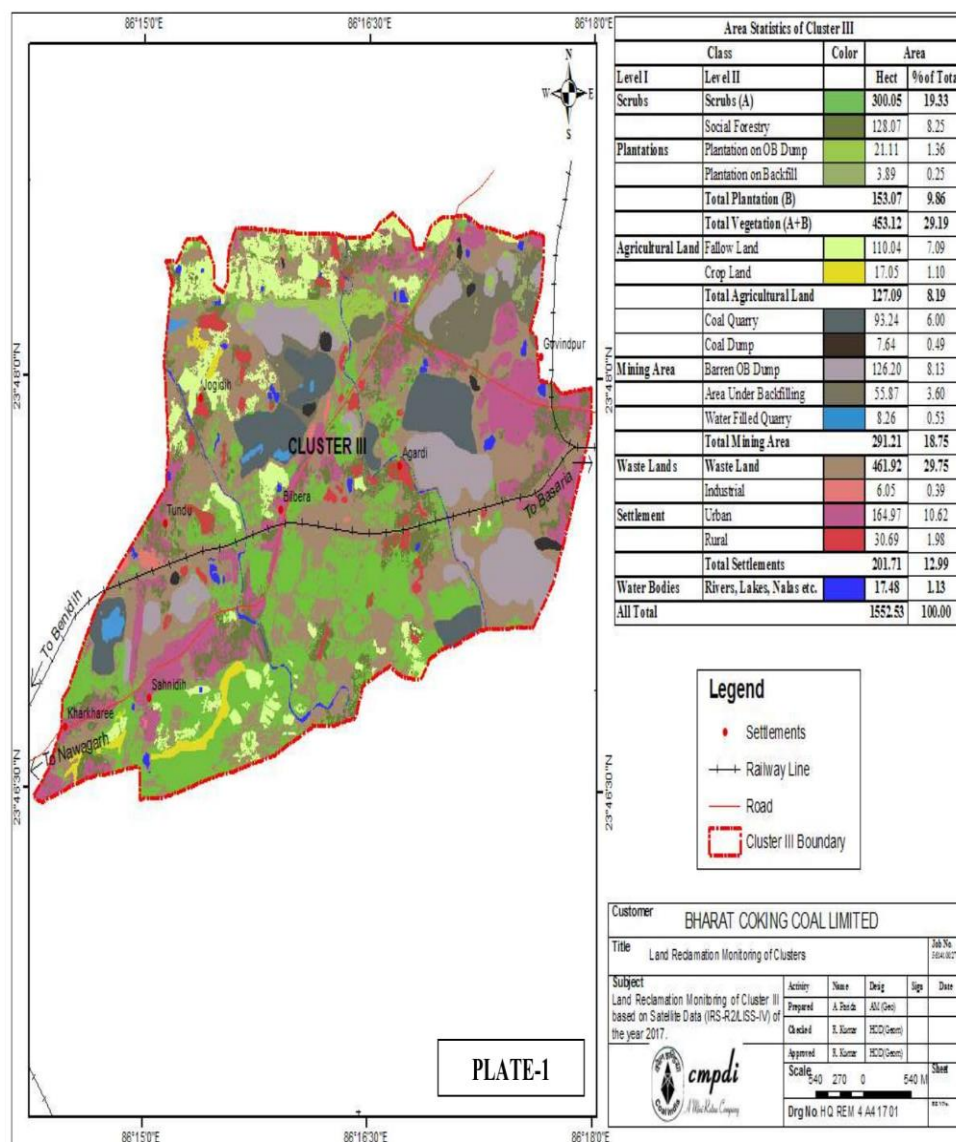
CMPDI

Table 2

**STATUS OF LAND USE/COVER IN CLUSTERS (<5 m cu .m) OF BHARAT COKING COAL LIMITED
BASED ON SATELLITE DATA OF THE YEAR 2017**

(Area in Hectare)											
		Cluster III		Cluster V		Cluster VIII		Cluster IX		TOTAL	
		Area	%	Area	%	Area	%	Area	%	Area	%
FORESTS	Dense Forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Open Forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total Forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCRUBS	Scrubs	300.05	19.33	344.78	19.99	143.21	10.75	339.86	17.28	1127.90	17.15
PLANTATION	Social Forestry	128.07	8.25	105.29	6.10	24.70	1.85	168.58	8.57	426.64	6.49
	Plantation on OB Dump	21.11	1.36	23.85	1.38	21.97	1.65	41.79	2.12	108.72	1.65
	Plantation on Backfill (Biological Reclamation)	3.89	0.25	7.19	0.42	13.72	1.03	6.80	0.35	31.60	0.48
	Total Plantation	153.07	9.86	136.33	7.90	60.39	4.53	217.17	11.04	566.96	8.62
	Total Vegetation	453.12	29.19	481.11	27.89	203.60	15.28	557.03	28.32	1694.86	25.77
ACTIVE MINING	Coal Dump	7.64	0.49	2.55	0.15	7.71	0.58	9.67	0.49	27.57	0.42
	Coal Quarry	93.24	6.00	102.79	5.96	108.02	8.11	178.55	9.08	482.60	7.34
	Advance Quarry Site	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Quarry Filled With Water	8.26	0.53	9.45	0.55	3.04	0.23	3.30	0.17	24.05	0.37
	Total Area under Active Mining	101.50	6.53	112.24	6.51	111.06	8.34	181.85	9.25	506.65	7.70
	Barren OB Dump	126.20	8.13	151.20	8.77	149.30	11.21	172.19	8.75	598.89	9.11
RECLAMED	Area Under Backfilling (Technical Reclamation)	55.87	3.60	162.09	9.40	161.86	12.15	77.53	3.94	457.35	6.95
	Total Area under Technical Reclamation	55.87	3.60	162.09	9.40	161.86	12.15	77.53	3.94	457.35	6.95
	Total Area under Mine Operation	291.21	18.75	428.08	24.83	429.93	32.28	441.24	22.43	1590.46	24.19
WATERBODIES	Waste Lands	461.92	29.75	517.23	29.99	443.58	33.30	614.64	31.24	2037.37	30.98
	Fly Ash Pond / Sand Body	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total Wasteland	461.92	29.75	517.23	29.99	443.58	33.30	614.64	31.24	2037.37	30.98
	Reservoir, nallah, ponds	17.48	1.13	10.21	0.59	13.15	0.99	20.59	1.05	61.43	0.93
	Total Waterbodies	17.48	1.13	10.21	0.59	13.15	0.99	20.59	1.05	61.43	0.93
AGRICULTURE	Crop Lands	17.05	1.10	8.41	0.49	18.05	1.35	0.00	0.00	43.51	0.66
	Fallow Lands	110.04	7.09	37.74	2.19	58.02	4.36	44.49	2.26	250.29	3.81
	Total Agriculture	127.09	8.19	46.15	2.68	76.07	5.71	44.49	2.26	293.80	4.47
SETTLEMENTS	Urban Settlement	164.97	10.62	217.50	12.61	97.19	7.30	232.31	11.81	711.97	10.83
	Rural Settlement	30.69	1.98	13.78	0.80	57.00	4.28	47.79	2.43	149.26	2.27
	Industrial Settlement	6.05	0.39	10.46	0.61	11.43	0.86	9.13	0.46	37.07	0.56
	Total Settlement	201.71	12.99	241.74	14.02	165.62	12.44	289.23	14.70	898.30	13.66
	Grand Total	1552.53	100.00	1724.52	100.00	1331.95	100.00	1967.22	100.00	6576.22	100.00