Bharat coking coal Limited

(A Subsidiary of Coal India Limited)
OFFICE OF THE GENERAL MANAGER

CHANCH-VICTORIA AREA-XII

P.O.-BARAKAR – 713324, DIST-BURDWAN (W.E.) <u>Phone</u>: 06540-272126; FAX 0341-2520063



Ref. No: BCCL/XII/ACE/Env./2013-14/ 9 76

Date: -19-7-13

To,
The HOD(Env.),
BCCL, Koyla Bhawan,

Sub. - Submission of COMPLIANCE OF EC CONDITIONS OF CLUSTER-XVI in respect of C.V. Area.

Dear Sir,

Enclosed please find herewith the COMPLIANCE OF EC CONDITIONS OF CLUSTER-XVI in respect of C.V. Area for the year ending 2013-14 in 26 pages.

This is for your kind information & needful .

Encl. - as above

Yours faithfully

General Manager

General Manager C. V. - AREA, B MC I

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ENVIRONMENTAL CLEARANCE COMPLIANCE OF CLUSTER-XVI (GRANTED VIDE J-11015/01/2011-IA.II (M) Dated 11.02.2013)

(Upto March 2013)

SI. No.	A. Specific Conditions by MOEF:	compliance
i	The maximum production shall not exceed beyond that for which environmental clearance has been granted for the 14 mine of cluster XVI as below:	The production from the cluster is within the limit for which environmental clearance has been granted.
li	All the void /water bodies should be backfilled upto ground level and no OB dump at the end of mining.	It shall be complied.
lii	Extensive plantation should be provided on either side of River;	It shall be complied. Yearly plantation is being done for development of green belts as per EMP.
iv	Impact of mining on ground water of the area (Impact Zone) should be provided;	The work of monitoring of ambient environment including ground water monitoring has been awarded to Central Institute of Mining & Fuel Research (CIMFR), Dhanbad having CSIR laboratory recognized under the EP Rules. Fixing up the monitoring stations for this purpose is in process with Jharkhand State Pollution Control Board.
V	A Garland drain should be provided	It shall be complied.
Vi	Excess water from mine after treatment should be supplied to the villagers;	It shall be complied.
Vii	Rejects of washery along with dry carbon slurry should be utilized in power plant and other recognized vendors.	There is no washery at present.
Viii	A time schedule for filling of existing and abandoned quarries is done.	Action is being taken as per EIA-EMP Report.
ix	The measure identified in the environmental plan for cluster XVI 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 is dovetailed with environmental clearance conditions.
X	As there is no fire in Cluster XVI but the measure should be adopted by proponent to control spread of neighboring fire to this Cluster XVI. The proponent shall prepare time –series maps of the Jharia	Work has been awarded to NRSC (earlier NRSA). A MoU is to be entered with the NRSC for start of the work .For this purpose, duly signed MOU has been sent to NRSC for necessary processing

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	Coalfields through NRSA to monitor and	at their end and to start the work immediately
	prevent fire problems in the Jharia	.(Copy enclosed as Annexure-A)
	Coalfields by Isothermal mapping	
	/imaging and monitoring temperatures of	Action is being taken as specified in the Master
	the coal seams (whether they are close to	Plan and EMP.
	spontaneous ignition temperatures) and	Train and Emili
	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 XIV shall be undertaken.	
Xi		It is being complied. Mining is being done as now
AI	Underground mining should be taken up	It is being complied. Mining is being done as per
	after completion of reclamation of	the guidelines and approval/permission of
	Opencast mine area after 2 years.	Directorate General of Mines Safety (DGMS).
Xii	No mining shall be undertaken where	It is being complied.
	underground fires continue. Measure shall	
	be taken to prevent/ check such fire	
	including in old OB dump	
Xiii	A part of cluster XVI is under Barakar River	Action has been taken to get the monitoring of
	and Damodar River. It was clarified that	permeability through CMPDI.
	although the mine is underground, there	
	is no coal underneath River Damodar,	
	which would be mined. The Committee	
	desired that the data of bore wells near	
	River Damodar require to be monitored	
	for permeability and seepage of waster of River Damodar.	
xiv	The rejects of washeries in Cluster –XVI	Cool washary doos not exist in this cluster at
XIV	should be send to FBC based plant.	Coal washery does not exist in this cluster at
	•	present.
Χv	There shall be no external OB dumps. OB	Action is being taken as specified in EMP.
	produce from the whole cluster will be	Backfilling of OB is going on with mining. At the
	29.01 Mm³. OB from One Patch OCP mine	end of mining there shall be no void and area
	shall be backfilled. At the end of the	will be re-vegetated and reclaimed.
	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.	
Xvi	A detailed calendar plan of production	Calendar plan has been prepared.
AVI	with plan for OB dumping and backfilling	·
	(for OC mines) and reclamation and final	Mine closure plan as per the guidelines of
	mine closure plan for each mine of cluster-	Ministry of Coal and on the basis of cluster
	XVI shall be drawn up and implemented.	concept is under preparation by Central Mine
	7.1. Shan we arawn up and implemented.	planning and Design Institute (CMPDI).
Xvii	The void in 5 ha area shall be converted	It shall be complied. A part of the void will be
	into a water reservoir of a maximum	converted into the water body as specified in
	depth of 15-20 m in post mining stage and	EMP.
	shall be gently sloped and the upper	
	benches of the reservoir shall be	
	3recognized with plantation and the	

	periphery of the reservoir fenced. The abandoned pits and voids should be backfilled with OB and biologically reclaimed with plantation and or may be used for pisciculture	
Xviii	Mining shall be carried out as per statuette from the streams/nalas flowing within the lease and maintaining a safe distance from the Nalas flowing along the lease boundary. A safety barrier of a minimum 60m width shall be maintained along the nalas/water bodies. The small water bodies in 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. Action for construction of embankment has been taken as specified in EMP.
xix	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. Further action has been taken for their ecorestoration work as per Road Map prepared by FRI, Dehradun.
xx	Thick green belt shall be developed along undisturbed areas, mine boundary and in mine reclamation. During post mining stage, a total of 242.09ha area would be reclaimed by planting native species in consultation with the local DFO/Agriculture Department/institution with the relevant discipline. The density of the trees shall be around 2500 plants per ha.	It is being complied. Yearly plantation is being done for development of green belts as per EMP.
xxi	The road should be provided with avenue plantation on both side as trees act as sink of carbon and other pollutant.	It shall be complied.
Xxii	Specific mitigative measures identified for the Jharia Coalfields in the Environmental Action Plan prepared for Dhanbad as a critically polluted are and relevant for Cluster –XVI shall be implemented.	Dhanbad Action Plan is being implemented. The salient actions of this cluster 1. Covered transportation of coal. 2. Water sprinkling 3. Plantation.
xxiii	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, flyash from TPPs, silica from natural dust, etc) and a Source Apportionment Study should be got carried out for the entire libaria. Coalfields. Mineralogical	The fixing up of locations of monitoring stations in the Jharia Coalfields has been taken up with the Jharkhand State Pollution Control Board. (Annexure-B) The work of monitoring of ambient environment will be done through Central Institute of Mining & Fuel Research (CIMFR), Dhanbad who is having CSIR laboratory recognized updor the ER.
	Should be got carried out for the entire Jharia Coalfields. Mineralogical composition study should be undertaken	& Fuel Research (CIMFR), Dhanbad who having CSIR laboratory recognized under the E

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	on the composition of the suspended	Rules. For the source apportionment study the
	particulate matter (PM ₁₀ and PM _{2.5}) in	action has been taken with help of CMPDIL.
	Jharia Coalfields and also quantified.	
	These studies would help ascertain source	Presently ambient air is being monitored
	and extent of the air pollution, based on	through BCCL own Laboratory at HQ level.
	which appropriate mitigative measures	till ough beet own taboratory at rice level.
	could be taken.	
Xxiv	No groundwater shall be used for the	It is being complied and mine water is being
	mining activities. Additional water	used for the industrial purpose. Further Mine
	required, if any, shall be met from mine	water is also utilized for the community and
	water or by recycling/reuse of the water	irrigation purposes.
	from the existing activities and from	
	rainwater harvesting measures. The	Following actions has been taken by the
	project authorities shall meet water	company
	requirement of nearby village(s) in case	1. Installation of Pressure filters for utilisation
	the village wells go dry to dewatering of	of mine water
	mine.	2. Rain water Harvesting
Xxv	Regular monitoring of groundwater level	It shall be complied. The work of monitoring will
	and quality of the study area shall be	be done through Central Institute of Mining &
	carried out by establishing a network of	Fuel Research (CIMFR), Dhanbad who is having
	existing wells and construction of new	CSIR laboratory recognized under the EP Rules.
	peizometers. The monitoring for quantity	, -
	shall be dome four times a year in pre-	Presently CMPDI is monitoring the ground water
	monsoon (May), monsoon (August), post-	level.
	monsoon (November) and winter	
	(January) seasons and for quality including	
	Arsenic and Fluoride during the month of	Fixing up the monitoring stations for this
	May. Data thus collected shall be	purpose is in process with Jharkhand State
	submitted to the Ministry of Environment	Pollution Control Board.
	& Forest and to the Central Pollution	Pollution Control Board.
	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.	
Xxvi	Mine discharge water shall be treated to	It shall be complied. Jharkhand State Pollution
	meet standards prescribed standards	Control Board has been consulted for this
	before discharge into natural water	purpose.
	courses/agriculture. The quality of the	The monitoring will be done through Central
	water discharged shall be monitored at	
	the outlet points and proper records	Institute of Mining & Fuel Research (CIMFR),
	maintained thereof and uploaded	Dhanbad who is having CSIR laboratory
	regularly on the company website.	recognized under the EP Rules. Presently mine
		water is being monitored through BCCL own
		Laboratory at HQ level.
Xxvii	ETP shall also be provided for workshop,	Construction of ETP/ Oil grease Trap is being
7.7.VII	and CHP, if any. Effluents shall be treated	
	to confirm to prescribe standards in case	taken-up.
	discharge into the natural water course.	
Xxviii	Regular monitoring of subsidence	At present only development districts are
VVAIII	movement on the surface over and	1 .
	inovenient on the surface over allu	operational at UG mines in Cluster XVI and no

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	around the working area and impact on	depillaring district is taken up. However regular
	natural drainage pattern, water bodies,	monitoring of subsidence will be undertaken on
	vegetation, structure, roads, and	commencement of depillaring districts.
	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.	
Xxix	Sufficient coal pillars shall be left	Sufficient coal pillars have been left around air
	unextracted around the air shaft (within	shafts as per the statutes and DGMS guidelines.
	the subsidence influence area) to protect	
	from any damage from subsidence, if any.	
Xxx	High root density tree species shall be	Identification of high root density Plant and its
	selected and planted over areas likely to	plantation in subsidence prone area will be
	be affected by subsidence.	taken-up at the time of depillaring operations.
Xxxi	Depression due to subsidence resulting in	It shall be complied.
, , , , ,	water accumulating within the low lying	The state of the s
	areas shall be filled up or drained out by	
	cutting drains.	
Xxxii	Solid barriers shall be left below the	Sufficient barriers are left for saving the surface
70001	roads falling within the blocks to avoid	installation and infra structures as per the
	any damage to the roads.	·
		statute and DGMS guidelines.
Xxxiii	No depillaring operation shall be carried	It is being followed.
	out below the township/colony.	
Xxxiv	The Transportation Plan for conveyor-	Action has been taken for formulating adequate
	cum-rail for Cluster- XVI should be	transportation plan for conveyor-cum-rail
	dovetailed with Jharia Action Plan. Road	system of dispatch. CMPDIL has been requested
	transportation of coal during Phase–I	to prepare the plan.
	should be by mechanically covered trucks,	By that time transportation is being done by
	which should be introduced at the	covering vehicle with tarpaulin cover. Action for
	earliest. The Plan for conveyor-cum-rail for Cluster-XIV should be dovetailed with	mechanically covered trucks has been taken.
		Infectionically covered trucks has been taken.
	Jharia Action Plan. The road transpiration	
	of coal during phase—I should be by	
Xxxv	mechanically covered trucks. A study should be initiated to analyze	CMPDI RI-2 has been requested for Source
77¥V	extent of reduction in pollution load every	·
	year by reducing road transport.	Apportionment Study.
Xxxvi	R&R of 1193 nos of PAF's involved. They	Implementation is being done as per the Master
VYYA	should be rehabilitated at cost of Rs	
	10171.88 lakhs as per the approved Jharia	plan.
	Action Plan.	
xxxvii	The details of Transportation, CSR, R&R	It shall be complied
XXXVII	Implementation of environmental action	it shall be complied
	plan for each of the 17 clusters should be	
	brought out in a booklet form.	
Xxxviii	A detailed CSR Action Plan shall be	It shall be complied. BCCL is implementing CSR
I VYXXVIII	A detailed CON ACCION Plan Shall De	I it shall be complied, but is implementing CSK

xxxix	prepared for Cluster XVI croup of mines. Specific activities shall be identified for CSR of Rs 20.25/annum @ of Rs 5/ton of coal production. As recurring expenditure. The 242.09ha of area within Cluster XVI 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. 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.	activities. Complied. Presently a time series map of vegetation cover in the Jharia Coal Field is being carried out through CMPDI Ranchi. Further CMPDI has been requested to prepare "Time series of land use maps based on satellite imagery of the core zone and buffer zone in the scale 1:50000 for every 3 years.
XI	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.	CMPDI has been requested to prepare "Final Mine Closure Plan along with a Plan for Habitat Restoration and with details of Corpus Fund".
	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.	
Xli	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly	A full-fledged Environment Department, headed by a HoD (Environment) along with a suitable qualified multidisciplinary team of executives (12 nos.) which includes Environment, Mining,

to the Head of the company for implementing environment policy and socio-economic issues and the capacity building required in this regard.	Excavation, Civil, Survey ,Electrical & mechanical, Forestry disciplines executives and technicians (4 nos.) has been established in Headquarters. They are also trained in ecological restoration, sustainable development, rainwater harvesting methods etc. At the project level, one Executive in each area has also been nominated as Project Nodal Officer (Environment) and is also entrusted with the responsibility of compliance and observance of the environmental Acts/ Laws including environment protection measures .The activities are monitored on regular basis at Area and at Head quarters levels. GM (Environment) at head quarter level, co-ordinates with all the Areas and reports to the Director (Technical) and in turn he reports to the CMD of the company. 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.
Xlii mplementation of final mine closure plan for Cluster XVI, subject to obtaining prior approval of the DGMS in regard to mine safety issues	For the purpose of safety issues related to the closure of mine prior approval of DGMS will be taken.
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.	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.
d) To have proper checks and balances,	

	the company shall have a well laid	
	down system of reporting of non-	Being complied.
	compliances/violations of	
	environmental norms to the Board of	
	Directors of the company and/or	
	shareholders or stakeholders at large.	
В	General Conditions by MOEF:	
i	No change in mining technology and scope	Being complied.
'	of working shall be made without prior	being complied.
	approval of the Ministry of Environment	
	and Forests.	
li	No change in the calendar plan of	Being complied.
	production for quantum of mineral coal	
	shall be made	
lii	Four ambient air quality monitoring	The fixing up of locations of monitoring stations
	stations shall be established in the core	in the Jharia Coalfields has been taken up with
	zone as well as in the buffer zone for PM ₁₀ ,	the Jharkhand State Pollution Control Board.
	PM _{2.5} , SO ₂ and NOx monitoring. Location	
	of the stations shall be decided based on	The work of monitoring of ambient environment
	the meteorological data, topographical features and environmentally and	will be done through Central Institute of Mining
	ecologically sensitive targets in	& Fuel Research (CIMFR), Dhanbad which is
	consultation with the State Pollution	having CSIR laboratory recognized under the EP
	Control Board. Monitoring of heavy	Rules.
	metals such as Hg, As, Ni, Cd, Cr, etc	Rules.
	carried out at least once in six months.	
lv	Data on ambient air quality (PM ₁₀ , PM _{2.5} ,	It shall be complied.
	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	
	from independent laboratories 9recognized under the EPA rules, 1986	
	shall be furnished as part of compliance	
	report.	
v	Adequate measures shall be taken for	It is being complied.
	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.	
Vi	Industrial wastewater (workshop and	The fixing up of locations of monitoring stations
	wastewater from the mine) shall be	in the Jharia Coalfields has been taken up with
	properly collected, treated so as to	the Jharkhand State Pollution Control Board.
	conform to the standards prescribed	The work of monitoring of ambient environment
		and the second of the second o

vii	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. Vehicular emissions shall be kept under	will be done through Central Institute of Mining & Fuel Research (CIMFR), Dhanbad who is having laboratory recognized under the EP Rules. Presently mine effluent is being monitored through BCCL own Laboratory at HQ level. It shall be Complied.
	control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	
Viii	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory 10 recognized under EPA Rules, 1986.	It is being done.
lx	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. Vocational training Centers under separate Human Resource Development Deptt. Is conducting regular training programme on these issues.
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 are 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 (12 nos.) which includes Environment, Mining, Excavation, Civil, Survey ,Electrical & mechanical, Forestry disciplines executives and technicians (4 nos.) has been established in Headquarters. They are also trained in ecological restoration, sustainable development, rainwater harvesting methods etc. At the project level, one Executive in each area has also been nominated as Project Nodal Officer (Environment) and is also entrusted with the responsibility of

		compliance and observance of the
		environmental Acts/ Laws including
		environment protection measures .The activities
		•
		are monitored on regular basis at Area and at
		Head quarters levels. GM (Environment) at head
		quarter level, co-ordinates with all the Areas and
		reports to the Director (Technical) and in turn he
		reports to the CMD of the company.
		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	It is being complied.
	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.	
Xiii	The Project authorities shall advertise at	It has been complied.
	least in two local newspapers widely	
	circulated around the project, one of	Advertisement in local newspaper is enclosed as
	which shall be in the vernacular language	annexure-C.
	of the locality concerned within seven	
	days of the clearance letter informing that	
	the project has been accorded	
	environmental clearance and a copy of the	
	clearance letter is available with the State	
	Pollution control Board and may also be	
	seen at the website of the ministry of	
	Environment& Forests at	
viv	http://envfor.nic.in.	Complied
xiv	A copy of the environmental clearance	Complied.
	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	
V.,	company's website.	Complied
Xv	A copy of the environmental clearance	Complied.
	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.	
xvi	The clearance letter shall be uploaded on	Complied.
1	the company's website. The compilance	
	status of the stipulated environmental	,
	clearance conditions shall also be uploaded by	
:	the project authorities on their website and	
ı	updated at least once every six months so as to	
1	bring the same in public domain. The	
ì		
	monitoring data of environmental quality	
	parameter (air, water, noise and soil) and	
1	critical pollutant such as PM10, PM25, SO2 and	
1	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.	
YVII	The project proponent shall submit six monthly	It is being complied.
	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.	
XVIII	The Regional Office of this Ministry located at	Shall be complied.
	Bhubaneswar shall monitor compliance of the	
	stipulated conditions. The Project authorities	
	shall extend full cooperation to the office(s) of	
t	the Regional Office by furnishing the requisite	
	data/information/monitoring reports.	
י אוא	The Environmental statement for each financial	Being complied
i	year ending 31 March in For -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	
1	along with the status of compliance of EC	
,	conditions and shall be sent to the respective	
	Regional Offices of the MoEF by E-mail	!
L	wegional offices of the Morr by E-mall	

General Manager, CV Area BCCL General Manager C. V. - Andria, BCCL.

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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



BHARAT COKING COAL LIMITED (A Subsidiary of Coal India Limited) Office of the HOD(Environment) Koyla Bhawan, Koyla Nagar Dhanbad

Ref.No.BCCL/HOD(Envt.)/F-EC/13/262

Dated 27-02-2013

To,
The Member Secretary,
Jharkhand State Pollution Control Board,
T.A. Division Building (Ground Floor),
H.E.C., Dhurwa,
Ranchi – 834004.

Sub.: Reg. fixing locations of monitoring station for Air, Water, Noise, Ground Water.

Dear Sir.

Please refer to our earlier letter nos.BCCL/HOD(Env.)/F-EC/13/186, dated 18.2.2013 and BCCL/HOD(Env.)/F-EC/13/254, dated 27.2.2013 along with copy of environmental clearance of Clusters I, II, III, IV,V,VII,VIII, X & XVI enclosed therewith.

As per the specific conditions and general conditions laid down in the aforesaid environmental clearances granted Cluster-wise by MoEF, you are requested to advise the Regional Officer, JSPCB, Dhanbad for fixing the locations of monitoring stations for Air, Water, Noise, Ground Water.

This is required for making the compliances and report to MoEF and your good office in respect of environmental clearances granted to the Clusters.

Yours faithfully,

(Dr. EVR Raju) HOD (Environment)

Copy to:

Regional Officer, JSPCB, Dhanbad

Annexure-C

	(कोल इण्डिया लिमिटेड का ए	
लिग	. संबंधित व्यक्तियों को यह सूचित किया जाता है कि निम्नलिखित 09 (' गटेड का समृह (Cluster) जिसमें 63 खाने एवं 02 वाशरीज सम्मिलत लय के द्वारा पर्यावरण सफाया (Environmental Clearance)!	में को पर्यायका पर्यंत्र
क्र. र		स्वीकृति आदेश संख्या एवं तिथि
1.	समूह (Cluster) े : मेसर्स भारत कोव्हिंग कोल लिमिटेड, झारिया कोलिफल्इस में स्थित, ब्लॉक चन्त्रपुर, जिला- छनवार, झारखंड की दामोदा समूह की 3 बाने- दामोदा (एलिबवॉन शाखा) ओसीपी, दामोदा वृजीपी पर्व तामोदा जीज सेक्झन ससूह की खाने (575 हेक्टेयर को एक स्मिलित एम एल क्षेत्र में 0.9 एम टी पी ए सामान्य एवं 1.17 एम टी पी ए (उच्च))	2009-1ए. 11
2.	सस्तृह (Cluster) ॥: मेसर्स भारत कोविंक्ग कोल लिमिटेड, झारिया कोलफिल्ड्स में स्थित, जिला- धन्त्वाद, झारखेड की 2025.71 हेलटेबर की एक अभिलित एम एक होंच्य में 20.21 प्रथा में पि ए की उच्च उत्पादन के साथ 15.55 एम टी पी ए सोमिलित उत्पादन क्षमता की 5 खानें)	2011-1ए, 11 (एम) दिनांक : 6 फरवरी 2013
3.	समुज (Cluster) III: - येसर्स चारत कोकिंग कोल लिमिटेड, झारिया कोलिफिल्ड्स में स्थित, जिला- धनवाद, झारखंड की 1420-1 हेक्टेयर की एक समिमितित एम एल क्षेत्र में 3.0 एम टी घी ए की उच्च उत्पादन की 7 खानें (04.11.2010 को प्रदान की गई टी ओ आर पर आधारित ईसी)	2010 47 44
4.	समृह (Cluster) IV : गसलीटाँड कोलिवरी धूमिगत को छोड़कर मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1123.79 हेक्टेबर 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 लिबिटेड, इग्रिया कोल्लिक्ट्स में स्थित, विला- धनबाद, इग्ररखंड की 1957.08 हेक्टेयर की एक सिमिलित एम एल क्षेत्र में 4.854 (सामान्य) 6.311 (उच्च) एम टीपी ए के उत्पादन की 7 खानें (16.03.2011 को प्रदान की गई आई टी ओ आर पर आधारित हुँ सी)	जे-11015/01/ 2011-1ए. 11 (एम) दिनांक : 11 फरवरी 2013
6.	समृष्ठ (Cluster) VII: भेसर्स भारत कोकिंग खोल लिमिटेड, झारिशा कोल्पीन्जूस में स्थित, जिल्ला-धानाब, झारखंड की 2127.7 इंक्टेयर को एक समिमिलत पर एच खुंच में 8-16 एस टी थी ए को उच्च उत्पादन के साथ 6-227 एस टी थी ए की समिमित क्षमता (09.12.2010 को प्रचान की गई टी ओ आर पर आधारित ईसी) (कुस्तीर धूमिगत एवं पूर्वी धगतडीह को छोड़कर)	जे-11015/238/ 2010-1ए, 11 (एम) दिनांक: 6 फरवरी 2013
7.	समृह (Cluster) X : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलफिल्झ्स में सिवा, जिला- अनबाद, झारखंड की (2057-95 केट्टेयर की एक सिमिलिका एम एक हो में 7,62 एम टी पीए की सामान्य एटं 2,289 एम टी पी ए की उच्च उत्पादन की 6 खानें) एवं 18 हेक्टेयर के एक होन के लिए 1,6 एम टी पी ए सामान्य तथा 2,08 एम टी पी ए उच्च उत्पादन की सुदामडीह कोल चायरी (सुदामडीक ग्रांग्ट माईन के लील होल्ड के अन्दर) (09,02,201 को प्रदान की गुई टी ओ आर पर आधारित ई सी)	जे-11015/380/ 2010-1ए. 11 (एम) दिनांक : 6 फरवरी 2013
8.	समृह (Cluster) XVI: मेसर्स भारत कोकिंग कोल लिमिटेड, जिला- धनवाद, झारखंड में कोचला खार्न (दक्षीवाड़ी - बस्तीमाता ओ सी पी, बस्तनीमाता भूमिगात खान, नई लायकडीह ओ सी पी (दहीबाड़ी कोल बाहारी सिहंत), लायकडीह डीम भूमिगत, बांच भूमिगत) (1964.21 हेक्टेबर के एक सम्मिलंत एम एल क्षेत्र में 1.51 एस टी पी ए सामान्य तथा 1.963 एम टी पी ए उच्चो तथा। 12 हेक्टेबर के क्षेत्र में 1.6 एम टी पी ए की दहीबाड़ी वाहारी (28.05.2910 को प्रदान की गई टी ओ आर पर आवारितई सी)	जे-11015/185/ 2010-1ए, 11 (एम) दिनांक : 6 फरवरी 2013
	समूह (Cluster) VIII: भेसर्स मात्त कोकिंग कोल लिमिटेड, इमरिया कोलफिल्ह्स में स्थित, बिला- धनबाद, इमरखंड के 10 खानों का समूह (1183.92 हेक्टेयर के एक समिमिला एम एव क्षेत्र में 5.603 एम टीमी ए की उच्च उत्पादन के साथ 4.31 एम टी पी ए को सम्मिलित क्षमता (12.0041 हेक्टेयर - 1649 हेक्टेयर = 1183.92 हेक्टेयर)	जे-11015/298/ 2010-1ए, 11 (एम) दिनांक : 15 फरवरी 2013
गलय	पत्र की प्रतिलिपि झारखंड राज्य प्रदूषण नियंत्रण बोर्ड के पास उपलब्ध है तथा की येबसाईट <u>"http://envfor.nic.in"</u> और भा. को. को. लि. के ://www.bccl.gov.in" पर भी देखा जा सकता है।	इसे पर्यावरण एवं वन कार्यालय वेबसाईट

SI. No	Name of the Cluster	Sanction order
1.	Cluster-I (Damoda Group of 3 Mines - Damoda (Albion Section) OCP, Damoda UGP and Damuda BJ Section OCP) Group of Mines (o 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.	1A.li (M) dated 6 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 hay of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand.	
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).	1A.II (M) dated 6
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 Mis Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist: Dhanbad, Jharkhand excluding Gaslitand Colliery US.	1A.II (M) dated 61 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).	1A.II (M) dated 111
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 Bhuggatdih).	
	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 Sudamdin 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 Ws Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand (EC based on TOR granted on 0.02.2011).	
	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).	A.A. H. /RAY STAR A. A. A.
9.	Cluster-VIII Group of 10 Mines (combined capacity 4.3f MTPA with a peak prodn. of 5.603 MTPA in a combined ML area of 1183.92 ha (1200.41 ha-1649 ha=1183.92 ha) of M/s Bharat Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand.	1A II (M) dated 15th