

भारत कोकिंग कोल लिमिटेड (कोल इन्डिया लिमिटेड का एक अंग) महाप्रबन्धक का कार्यालय कुसुन्डा क्षेत्रा, पोः कुसुन्डा, धनबाद्,

Ref No. BCCL/KA-6/2013/ 177

Date: 15-07-2013

To, . HOD(Envt.) BCCL, Koyla Bhawan .

Sub: Compliance of EC Coditions of Cluster- VII Mines of Kusunda Area

Dear Sir,

Enclosed please find herewith letter Compliance of EC Coditions of Cluster- VII Mines of Kusunda Area for onward submission.

> Addl.General Manager Kusunda Area

Copy: GM, Kusunda Area

# Bharat Coking Coal Limited (A Subsidiary of Coal India Limited) Pootkee Balihari Area

Ref.No.PBA/AM(Plg.)/2013/133

Dated:-18/07/2013

To
The HOD (Environment)
BCCL, Koyla Bhawan

#### Sub:- Compliance report cluster VII

Dear Sir,

Enclosed please find herewith a copy of Draft Compliance report along with Annexure A to E and Annexure 'F' in respect of mines of P.B.Area of cluster VII for your kind information and needful action.

Yours faithfully

AM(Plg.)/Nodal Officer Environment P.B.Area

Copy to:-

1) G.M, P.B.Area- for kind information.

## ENVIRONMENTAL CLEARANCE COMPLIANCE OF CLUSTER-VII (GRANTED VIDE J-11015/238/2010-IA.II (M) Dated 06.02.2013)

(Upto March 2013)

SN	A. Specific Conditions by MOEF:	Compliance
i	The maximum production shall not exceed beyond that for which environmental clearance has been granted.	The production from the cluster is within the limit for which environmental clearance has been granted.
ii	The measure identified in the environmental plan for cluster VII group of mines 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.
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.	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 at their end and to start the work immediately .(Copy enclosed as Annexure-A)
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires in other areas including in mines of cluster VII shall be undertaken.	Action is being taken as specified in the Master Plan and EMP.
iv	Underground mining should be taken up after completion of reclamation of Opencast mine area after 13 years.	It is being complied. Mining is being done as per the guidelines and approval/permission of Directorate General of Mines Safety (DGMS).
V	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 is being complied.
vi	The rejects of washeries in Cluster –VII should be send to FBC based plant.	Coal washery does not exist in this cluster at present.
vii	There shall be no external OB dumps. OB produce from the whole cluster will be 378.86 Mm3. OB from 5 OCP mine 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.	Action is being taken as specified in EMP. Backfilling of OB is going on with mining. At the end of mining there shall be no void and area will be re-vegetated and reclaimed.
viii	A detailed calendar plan of production with plan for	Calendar plan has been prepared.

	OB dumping and backfilling (for OC mines) and reclamation and final mine closure plan for each mine of cluster-VII shall be drawn up and implemented.	Mine closure plan as per the guidelines of Ministry of Coal and on the basis of cluster concept is under preparation by Central Mine planning and Design Institute (CMPDI).
ix	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 biologically reclaimed with plantation and or may be used for pisciculture.	It shall be complied. A part of the void will be converted into the water body as specified in EMP.
х	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
xi	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.
xii	Thick green belt shall be developed along undisturbed areas, mine boundary and in mine reclamation. During post mining stage, a total of 794.09 ha area would be reclaimed. The total additional area under plantation would be 1165.67 ha (90.78 ha abandoned quarry area, 516 ha active quarry area, 27.31 OB dump outside quarry area, 38.55 ha service building /mine infrastructure area /coal dump etc, 395 ha green belt around OCP, 98.5 ha barren area), by planting 2914150 plants at a total cost of Rs 642.20 lakhs.	It is being complied. Yearly plantation is being done for development of green belts as per EMP.
xiii	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.
xiv	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 VII 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.

The fixing up of locations of monitoring The locations of monitoring stations in the Jharia χV Coalfields should be finalized in consultation with the stations in the Jharia Coalfields has been Jharkhand State Pollution Control Board. The taken up with the Jharkhand State Pollution Committee stated that smoke/dust emission vary Control Board. (copy of letter enclosed as from source to source (fuel wood, coal, fly ash from Annexure-B) TPPs, silica from natural dust, etc) and a Source Apportionment Study should be got carried out for The work of monitoring of ambient the entire Jharia Coalfields. Mineralogical environment will be done through Central composition study should be undertaken on the Institute of Mining & Fuel Research (CIMFR), composition of the suspended particulate matter Dhanbad which is having CSIR laboratory, (PM<sub>10</sub> and PM<sub>2.5</sub>) in Jharia Coalfields and also recognized under the EP Rules. For the quantified. These studies would help ascertain source source apportionment study the action has and extent of the air pollution, based on which been taken with help of CMPDIL. appropriate mitigative measures could be taken. Presently ambient air is being monitored through BCCL own Laboratory at HQ level. xvi No groundwater shall be used for the mining It is being complied and mine water is being activities. Additional water required, if any, shall be used for the industrial purpose. Further met from mine water or by recycling/reuse of the Mine water is also utilized for the water from the existing activities and from rainwater community and irrigation purposes. harvesting measures. Following actions has been taken by the The project authorities shall meet water requirement company of nearby village(s) in case the village wells go dry to 1. Installation of Pressure filters for utilisation of mine water dewatering of mine 2. Rain water Harvesting It shall be complied. The work of monitoring xvii Regular monitoring of groundwater level and quality will be done through Central Institute of of the study area shall be carried out by establishing a network of existing wells and construction of new Mining & Fuel Research (CIMFR), Dhanbad peizometers. The monitoring for quantity shall be who is having CSIR laboratory recognized dome four times a year in pre-monsoon (May), under the EP Rules. Presently CMPDI is monsoon (August), post-monsoon (November) and monitoring the ground water level. 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 Fixing up the monitoring stations for this Environment & Forest and to the Central Pollution purpose is in process with Jharkhand State Control Board/SPCB quarterly within one month of Pollution Control Board. monitoring. Rainwater harvesting measures shall be undertaken in case monitoring of water table indicates a declining trend. Mine discharge water shall be treated to meet It shall be complied. Jharkhand State xviii Pollution Control Board has been consulted standards prescribed standards before discharge into natural water courses/agriculture. The quality of the for this purpose. The monitoring will be done through Central water discharged shall be monitored at the outlet points and proper records maintained thereof and Institute of Mining & Fuel Research (CIMFR), uploaded regularly on the company website. Dhanbad which is having CSIR laboratory

		recognized under the EP Rules. Presently
		mine water is being monitored through
		BCCL own Laboratory at HQ level.
xix	ETP shall also be provided for workshop, and CHP, if	Construction of ETP/ Oil grease Trap is being
	any. Effluents shall be treated to confirm to prescribe	taken-up.
	standards in case discharge into the natural water	
	course.	
XX	Regular monitoring of subsidence movement on the	At present only development districts are
	surface over and around the working area and impact	operational at UG mines in Cluster VII and
	on natural drainage pattern, water bodies,	no depillaring district is taken up. However
	vegetation, structure, roads, and surroundings shall	regular monitoring of subsidence will be
	be continued till movement ceases completely. In	undertaken on commencement of
	case of observation of any high rate of subsidence	depillaring districts.
	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.	
xxi	Sufficient coal pillars shall be left un-extracted around	Sufficient coal pillars have been left around
	the air shaft (within the subsidence influence area) to	air shafts as per the statutes and DGMS
	protect from any damage from subsidence, if any.	guidelines.
xxii	High root density tree species shall be selected and	Identification of high root density Plant and
	planted over areas likely to be affected by subsidence	its plantation in subsidence prone area will
		be taken-up at the time of depillaring
		operations.
xxiii	Depression due to subsidence resulting in water	It shall be complied.
701111	accumulating within the low lying areas shall be filled	Testian se compilear
	up or drained out by cutting drains.	
xxiv	Solid barriers shall be left below the roads falling	Sufficient barriers are left for saving the
AAIV	within the blocks to avoid any damage to the roads.	surface installation and infrastructures as
	within the blocks to avoid any damage to the roads.	per the statute and DGMS guidelines.
2001	No desillaring energtion shall be corried out below	It is being followed.
XXV	No depillaring operation shall be carried out below the township/colony.	it is being followed.
xxvi	The Transportation Plan for conveyor-cum-rail for	Action has been taken for formulating
XXVI	Cluster-VII should be dovetailed with Jharia Action	adequate transportation plan for conveyor-
	Plan. The Plan for conveyor-cum—rail for Cluster-VII	cum-rail system of dispatch. CMPDIL has
	should be dovetailed with Jharia Action Plan. The	
		been requested to prepare the plan.
	road transpiration of coal during phase—I should be	By that time transportation is being done by
	by mechanically covered trucks.	covering vehicle with tarpaulin cover. Action
		for mechanically covered trucks has been taken.
xxvii	A study should be initiated to analyze extent of	CMPDI has been requested for Source
	reduction in pollution load every year by reducing	Apportionment Study.
	road transport	.,
xxvii	R&R of 13605 nos of PAF's involved. They should be	Implementation is being done as per the
i	rehabilitated at cost of Rs 529.47Crores as per the	Master plan.
1	· '	<u> </u>

	approved Jharia Action Plan.	
xxix	A detailed CSR Action Plan shall be prepared for	It shall be complied. BCCL is implementing
	Cluster VII croup of mines. Specific activities shall be	CSR activities.
	identified for CSR the budget of Rs. 311.35 Lakhs per	
	year@ Rs 5/T of coal as recurring expenditure. The	
	143 ha of area within Cluster VII 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. In addition to afforesting 794.09 ha of	
	are at the post-mining stage, 135.5 ha waste land	
	/barren land within Cluster VII ML shall be	
	rehabilitated/reclaimed as forest/agricultural land	
	under CSR Plan in consultation with 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.	
XXX	For monitoring land use pattern and for post mining	Complied. Presently a time series map of
	land use, a time series of land use maps, based on	vegetation cover in the Jharia Coal Field is
	satellite imagery (on a scale of 1: 5000) of the core	being carried out through CMPDI Ranchi.
	zone and buffer zone, from the start of the project	Further CMPDI has been requested to
	until end of mine life shall be prepared once in 3	prepare "Time series of land use maps based
	years (for any one particular season which is	on satellite imagery of the core zone and
	consistent in the time series), and the report	buffer zone in the scale 1:50000 for every 3
	submitted to MOEF and its Regional office at	years.
	Bhubaneswar.	
xxxi	A Final Mine Closure Plan along with details of Corpus	CMPDI has been requested to prepare "Final
	Fund shall be submitted to the Ministry of	Mine Closure Plan along with a Plan for
	Environment & Forests five year before mine closure	Habitat Restoration and with details of
	for approval. Habitat Restoration Plan of the mine	Corpus Fund".
	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.	

A separate environmental management cell with	A full-fledged Environment Department,
suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company for implementing environment policy and socio-economic issues and the capacity building required in this regard.	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, coordinates 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.
Implementation of final mine closure plan for Cluster VII, 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.	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
	control of a Senior Executive, who will report directly to the Head of the company for implementing environment policy and socio-economic issues and the capacity building required in this regard.  Implementation of final mine closure plan for Cluster VII, subject to obtaining prior approval of the DGMS in regard to mine safety issues  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 company to deal with environmental issues	corporate level to mine level already exists.
	and for ensuring compliance with the	corporate level to milite level alleady exists.
	environmental clearance conditions shall be	
	furnished.	Being complied.
	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	
В	General Conditions by MOEF:	
i	No change in mining technology and scope of	Being complied.
	working shall be made without prior approval of the	being complica.
	Ministry of Environment and Forests.	
		Daine according
ii	No change in the calendar plan of production for	Being complied.
	quantum of mineral coal shall be made.	
iii	Four ambient air quality monitoring stations shall be	The fixing up of locations of monitoring
	established in the core zone as well as in the buffer	stations in the Jharia Coalfields has been
	zone for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NOx monitoring.	taken up with the Jharkhand State Pollution
	Location of the stations shall be decided based on the	Control Board.
	meteorological data, topographical features and	
	environmentally and ecologically sensitive targets in	The work of monitoring of ambient
	consultation with the State Pollution Control Board.	environment will be done through Central
	Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr,	Institute of Mining & Fuel Research (CIMFR),
	etc carried out at least once in six months.	Dhanbad who is having CSIR laboratory
		recognized under the EP Rules.
iv	Data on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and	It shall be complied.
'	$NO_x$ ) and heavy metals such as Hg, As, Ni, Cd, Cr and	it shall be complica.
	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.	
٧	Adequate measures shall be taken for control of	Being Complied.
	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 wastewater	The fixing up of locations of monitoring
	from the mine) shall be properly collected, treated so	stations in the Jharia Coalfields has been
	as to conform to the standards prescribed under GSR	taken up with the Jharkhand State Pollution
	as to comorn to the standards prescribed under dish	taken up with the markhana state Foliution

recognized under the EP Rules. mine effluent is being monitored BCCL own Laboratory at HQ level.  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.  Viii Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis	h Central (CIMFR), aboratory Presently
Oil and grease trap shall be installed before discharge of workshop effluents.  Dhanbad which is having la recognized under the EP Rules. mine effluent is being monitored BCCL own Laboratory at HQ level.  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.  Viii Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis	h Central (CIMFR), aboratory Presently
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equipment in consultation with the State Pollution	
Control Board and data got analyzed through a	
laboratory recognized under EPA Rules, 1986.	
ix Personnel working in dusty areas shall wear Being Complied. Vocational trainin	g Centers
protective respiratory devices and they shall also be under separate Human	Resource
provided with adequate training and information on Development Deptt. is conductin	
safety and health aspects. training programme on these issues	).
x Occupational health surveillance programme of the Initial Medical Examination (II	ME) and
workers shall be undertaken periodically to observe Periodical Medical Examination (PI	•
any contractions due to exposure to dust and to take the personnel are carried out as	•
corrective measures, if needed and records Statutes and Director General of	-
	JI IVIIIICS
maintained thereof. The quality of environment due Safety (DGMS) guideline.	
to outsourcing and the health and safety issues of the	
outsourced manpower should be addressed by the	
company while outsourcing.	
xi A separate environmental management cell with A full-fledged Environment Dep	oartment,
suitable qualified personnel shall be set up under the headed by a HoD (Environment) alc	ng with a
control of a Senior Executive, who will report directly suitable qualified multidisciplinary	team of
to the Head of the company. executives (12 nos.) which	includes
	n, Civil,
Survey ,Electrical & mechanical,	
disciplines executives and techn	-
	-
nos.) has been established in Head	•
	ecological
	elopment,
rainwater harvesting methods et	
project level, one Executive in each	area has
project levely one Exceditive in educing	at Nadal
also been nominated as Proje	ct nodai

		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 protection	It is being complied.
	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 least in two	It has been complied.
	local newspapers widely circulated around the	
	project, one of which shall be in the vernacular	Advertisement in local newspaper is
	language of the locality concerned within seven days	enclosed as annexure-C.
	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 http://envfor.nic.in.	
xiv	A copy of the environmental clearance letter shall be	Complied.
AIV	marked to concern Panchayat/Zila Parishad,	Compiled.
	Municipal corporation or Urban local body and local	
	, ,	
	, , ,	
	/representation has been received while processing	
	the proposal. A copy of the clearance letter shall also	
	be displayed on company's website.	
XV	A copy of the environmental clearance letter shall be	Complied.
	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 the	Complied.
	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.	
xvii	The project proponent shall submit six monthly	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 the	
	Regional Office by furnishing the requisite data/	
	information/monitoring reports.	
xix	The Environmental statement for each financial year	Being complied.
	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 along with the	
	status of compliance of EC conditions and shall be	
	sent to the respective Regional Offices of the MoEF	
	by E-mail.	
С	Other Conditions by MOEF:	
i	The Ministry or any other Competent Authority may	Agree.
	stipulate any further condition(s) for environmental	
	protection.	
ii	Failure to comply with any of the conditions	Agree.
	mentioned above may result in withdrawal of this	
	clearance and	

F		the Environment (Protection) Act, 1986.	
	iii	The above conditions will be enforced inter-alia, under the provisions of the	It is being complied.
1		Water (Prevention & Control of Pollution)	,
1		Act, 1974, the Air (Prevention & Control of	
ł		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.	
	iv	The Environmental Clearance is subject to the	Agree.
		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.	

#### **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**

#### 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 समृह (Cluster) जिसमें 63 खाने एवं 02 वाशरीज सम्मिलत हैं, को पर्यावरण एवं वन

क्र. सं	समृह (Cluster) का नाम	स्वीकृति आदेश संख्या एवं तिथि
1. ji	समूह (Cluster) : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिय कोलफिल्ड्स में स्थित, ब्लॉक घन्युपा, जिला- धनबाद, झारखंड की दामोदा समुड की 3 खाने- दामोदा (एलबियॉन शाखा) ओसीपी, दामोदा युक्तीपी एवं दामोदा बीजे संब्यान समुद्र की खाने (575 डेक्टेयर की एक सम्मिलित एम एल क्षेत्र में 0.9 एम टी पी ए सामान्य एवं 1.17 एम टी पीए (उच्च))	जे-11015/93, 2009-1ए. 11 (एम) दिनांक : 6 फरवरी 2013
2.	समृह (Cluster) ॥ : मेसर्स थारत कोकिंग कोल लिमिटेड, झारिया कोलफिल्ड्स 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 सम्मिलित उत्पादन क्षमता की 5 खानें)	2011-1T 11
3.	समृह (Cluster) III: मेसर्स भारत कोकिंग कोल लिमिटेङ, झारिया कोलफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1420.61 हेब्देयर 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 ईसी)	
4.	समृह (Cluster) IV : गसलीटॉंड कोलिवरी भूमिगत को छोड़कर मेसर्स भारत कोकिंग कोल लिमिटेड, झारिवा कोलफिल्ड्स 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 झमता के साध 6 खानें।	जे-11015/212 2010-1ए. 11 (एस) दिनांक : 6 फरवरी 2013
5.	समूह (Cluster) V : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 1957.08 हेक्टेबर की एक समिमितित 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
	समूह (Cluster) VII : मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलफिल्ड्स में स्थित, जिला- धनबाद, झारखंड की 2,127.7 हेक्टेबर की एक सम्मिलित एम एल क्षेत्र में 8.16 एम टी पी ए की उच्च उत्पादन के साथ 6.227 एम टी पी ए की सम्मिलित क्षमता (09.12.2010 को प्रदान की गई टी ओ आर पर आधारित इंसी) (कुस्तीर भूमिगत एवं पूर्वी भगतडीह को छोड़कर)	जे-11015/238 2010-1ए, 11 (एम) दिनांक : 6 फरवरी 2013
1	समृह (Cluster) X: मेसर्स भारत कोकिंग कोल लिमिटेड, झारिया कोलफिल्ड्स में स्थित, जिला- धनखाद, झारखंड की (2057.95 हेक्टेयर की एक सम्मितित 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 सुदामडीह कोल वाशरी (सुदामडीह शॉफ्ट माईन के लीज होल्ड के अन्दर) (09.02.2011 को प्रदान की गुई टी ओ आर पर आधारित ई सी)	जे-11015/380, 2010-1ए. 11 (एम) दिनांक : 6 फरवरी 2013
on the state of the	हमूह (Cluster) XVI: मेसर्स भारत कोकिंग कोल लिमिटेड, जिला- अनवाद, झारखंड में कोमला खानें (दहीबाड़ी -खस्तीमाता ओ सी पी, बस्तनीमाता शूमिगत खान, नई लायकडीह ओ सी पी (दहीबाड़ी कोल अगरों सहित), लायकडींड डीप भूमिगत, बांच भूमिगत) (1964.21) विटेबर के एक सम्मिलित एम एल क्षेत्र में 1.51 एम टी पी ए सामान्य तथा 1.963 एम टी पी ए उच्च) तथा 12 हेक्टेबर के क्षेत्र में 1.6 एम टी पी ए की होबाड़ी वाशरी (28.05.2010 को प्रदान की गई टी ओ आर पर प्राथारित ई सीं)	जे-11015/185/ 2010-1ए. 11 (एम) दिनांक : 6 फरवरी 2013
3 (	निलिफल्ड्स में स्थित, जिला- घनबाद, झारखंड के 10 खानों का समूह	जे-11015/298/ 2010-1ए, 11 (एम) दिनांक : 15 फरवरी 2013

मंत्रालय की वेबसाईट "http://envfor.nic.in" और भा. को. को. लि. के कार्यालय वेबसाईट

"http://www.bcci.gov.in" पर भी देखा जा सकता है।



#### **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

SI. 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 Damuda BJ 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.	1A II (M) dated 6th
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 6th
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 Gaslitand 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
	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 Bhuggatdin).	J-11015/238/2010- 1A.II.(M) dated 6th Feb. 2013
	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
	OCP, Basantimata under Ground Mine, New	J-11015/185/2010- 1A.II (M) dated 6th Feb. 2013
	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 1200.41 ha-1649 ha-1183.92 ha) of M's Bharat Coking Coal Ltd., located in Jharia Coalfields, Diet Dhanhod, Ilbarthaged	J-11015/298/2010- 1A.II (M) dated 15th Feb. 2013

Coking Coal Ltd., located in Jharia Coalfields, Dist. Dhanbad, Jharkhand.

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.bccl.gov.in