

## BHARAT COKING COAL LIMITED

(A Subsidiary of Coal India Limited) OFFICE OF THE GENERAL MANAGER KATRAS AREA - IV

PO: Sijua, Dist. - Dhanbad (Jharkhand) - 828121

Dated: 05.5.2014

To, The Director (S) Ministry of Enviornment & Forest. Govt. Of India **Eastern Region Office** A/3, Chandrashekharpur, Bhubaneshwar-751023

Sub:- Six monthly report on implementation of Environmental Measures for the period from Oct'2013 to Mar'2014.

Dear Sir,

Kindly find enclosed herewith the six monthly report on implementation of environmental protection measures for the period from Oct'2013 to Mar'2014 in respect of Cluster-IV group of mines of BCCL.

Hope you will find in order.

Enclosed:-As above.

General Manager Katras Area

C.C.to:-

1. Dr. Sunita Aulock, Director, 1A Monitoring Cell, Paryavaran Bhawan, CGO Complex, New Delhi-11003 2.GM(Env),BCCL, Koyla Bhawan, Dhanbad.

3. Area Manager (PLG), Katras Area

4. Nodal Officer (Civil), katras Area

5.Office copy

Soi 3-14-81-5th And Manager LEAM )-

## ENVIRONMENTAL CLEARANCE COMPLIANCE OF CLUSTER-IV (GRANTED VIDE J-11015/212/2010-IA. II (M) Dated 06.02.2013) (Upto MARCH- 2014)

SN	A. Specific Conditions by MOEF:	Compliance	Compliance in
i	The maximum production from	The modern for the	Percentage (%)
	one opencast section in the cluster	i and operating	100
	shall not exceed beyond that for	limes of the cluster is within the	
	which environmental clearance	which environmental	
	has been granted for the cluster	clearance has been granted.	
	IV.	Additional 0.884MT firey coal was	
		recovered during fire dealing process	
		within this cluster.	
i .	The measure to identify in the	Master Plan is dovetailed with	100
	Environmental Plan for Cluster- IV	onvironmental de	-
	groups of mine and the conditions	For implementation of fire dealing as	
	State of the state	per the Master Plan Gasilitand fire	
	clearance letter shall be dovetailed to the implementation of the	patch was operated to dig out the	
	Jharia Action Plan.	firey coal seam and to control the	
	The state of the s	further spread of fire to the nearby	
		coal mines. During the course of fire	
		dealing activity additional coorse	
		dealing activity additional 0.884 MT	
		of firey coal has been recovered	
		during the year.	
1	The proponent shall prepare time	The study has been carried out by	100
	-series maps of the Jharia	NRSC and report has been	
.	Coalfields through NRSA to	submitted. In the report fire has	
	monitor and prevent fire problems in the Jharia Coalfields by	been reduced up to 2 sq km.	
1	Isothermal mapping /imaging and		
1	monitoring temperatures of the	Action is being taken as specified in	
		the Master Plan and EMP.	
	close to spontaneous ignition	THE MUSICI FIGHT SHU EIVIP.	
- 1	temperatures) and based on		
1	which, areas with potential fire		
1	problems shall be identified.		
. 1	Producting ation be identified.		
	Measures to prevent ingress of air		
	Measures to prevent ingress of air (Ventilation) in such areas, to		
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires		
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires in other areas including in mines of		
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires in other areas including in mines of cluster IV shall be undertaken.		
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires in other areas including in mines of cluster IV shall be undertaken. Expertise available internationally		•
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires in other areas including in mines of cluster IV shall be undertaken. Expertise available internationally could also be utilized for control of		
	Measures to prevent ingress of air (Ventilation) in such areas, to prevent restart fresh/spread fires in other areas including in mines of cluster IV shall be undertaken. Expertise available internationally		•

	subsidence control. Monitoring of fire should be carried out regularly.	1		
lv.	Underground mining should be	It is being complied. Mining is being	100	
1	taken up after completion of	done as per the guidelines and	100	
	reclamation of Opencast mine	done do per tric guidennes and		
	area after 15 years.	approval/permission of Directorate General of Mines Safety (DGMS).		
V	The embankment constructed		100	$\dashv$
1	along the river boundary shall be	construction of embankment has		
	of suitable dimensions and critical	boon taken as an astiral is seen		
	patches shall be strengthened by			
	stone pitching on the river front side and			
1	Stabilised with plantation so as to			
1	withstand the peak water flow and			
Vi	prevent mine inundation.			
V'	The rejects of washeries in Cluster  -IV should be send to FBC based	NO WASHERY AT PRESENT	100	7
	plant.			
vii	No mining shall be undertaken			
• • • • • • • • • • • • • • • • • • • •	where underground fires continue.	It shall be complied.	100	
	Measure shall be taken to			
	prevent/ check such fire including			1.
	in old OB dump areas where the			
	fire could start due to presence of			
	coal /shale with sufficient carbon			
	content.			
Viii	There shall be no external OB	Action is being taken as specified in	100	-
	dumps. OB produce from the one	EMP. Backfilling of OB is going on		
	OC Patch of cluster IV will be 45.5	with mining. At the end of mining		
	Mm <sup>3</sup> . OB from one OCP patches in	there shall be no void and area will		
	mixed mine shall be backfilled. At	be re-vegetated and reclaimed.		
	the end of the mining there shall be no void and	or respectited on a recialing a.		
	The entire mined out area shall be			
	re-vegetated. Areas where opencast mining was carried out			
	and completed shall be reclaimed			
	immediately thereafter.			
			• •	
lx	A detailed calendar plan of	Calendar plan has been prepared.	100	1
	production with plan for OB	Mine closure plan as per the	<del>-7</del>	
	dumning and bankfilling /fee OC	guidelines of Ministry of Coal and on		
	mines) and reclamation and final	the basis of cluster concept is under		
	mine crosure high for each mine of	preparation by Central Mine		
	ciuscei-iv silali be diawn up and	•	•	
		planning and Design Institute (CMPDI).		
κ .	Mining shall be carried out as per	It is being followed. Action for	100	
	statuette from the streams/nalas	construction of embankment has		. '
	flowing within the lease and maintaining a safe distance from	been taken as specified in EMP.		
				4

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i				
1	the Nalas flowing along the leas	e	* *	
1	boundary. A safety barrier of	a		
1	minimum 60m width shall b	e		
1	maintained along the nalas/water	r		
	bodies. The small water bodies i	п		
	OC shall be protected to the exten	t		
	feasible and the embankmen	t		
	proposed along water body sha	II		
	be strengthened with stone			
1	pitching taking into account the	<b>■</b>		
1	highest flood level, based on pas	<b>t</b>		
	data, so as to guard against mine			
	inundation. The slope of the			
	embankment shall at least 2:3	L		
	towards the ML. The height of the			
l	embankment shall be at least 3 m			
	higher than the HFL. The			
	embankment to be constructed by			
	OB /solid waste shall be			
	strengthened with stone pitching.			
1	Slope stability of the embankment			
	shall be done by planting suitable			
	grass and shrubs using native			
	species selected from the study			
	area.			
xi	Active OB dumps near water	No OB is being dumped near water	100	
	bodies and rivers should be	bodies. Further action has been		
	rehandled for backfilling	tolean for the tolean		
	abandoned mine voids. However,			
	those which have been biologically	as per Road Map prepared by FRI,	1	
	reclaimed need not be disturbed.	Dehradun.	,	
xii	Thick green belt shall be	It is being complied. Yearly	100	-
	developed along undisturbed	al-man's desirable of the state	100	
	areas, mine boundary and in mine	Plantation is being done for		
	reclamation. During post mining	development of green belts as per		
	stage, a total of 794.09 ha area	EMP. At Ecological restoration site	* .	
	would be reclaimed. The total	under AKWMC already 4837 nos		
	additional area under plantation	trees has been planted over 3.40 ha		
	would be 719.42 ha (101.7 ha	area and 3000 to 4000 nos trees		
	abandoned quarry area, 103.31 ha	shall be planted during 2014-15 at		1: .
	active quarry area, 14.82 OB dump	the same site.		1
	outside quarry area, 4.36 ha	one same site.		
	service building /mine			
	infrastructure area /coal dump etc,	•		
	160.25 ha green belt around OCP,			
	334.94 ha barren area), by			
	planting 17,98,550 plants at a total			
	cost of Rs 396.41 lakhs.			
cili		It shall be complied.	100	
	avenue plantation on both side as	it shan be complied.	100	
.	trees act as sink of carbon and			
	other pollutant.	<u> </u>		
100			•	
	· · · · · · · · · · · · · · · · · · ·			

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Xiv	Specific mitigative measure		100	
	identified for the Jharia Coalfield in the Environmental Action Pla	Is implemented. The salient actions of		
t				
	prepared for Dhanbad as critically polluted are and relevan	a 1. Transportation by covere	d	
		truck		
	for Cluster- IV shall b implemented.	e 2. Water sprinkling		
1	implemented.	P. Harring		
xv	The locations of monitorin			
~	The locations of monitoring stations in the Jharia Coalfield	e in the monitorial	g 100	
	should be finalized in consultation	s stations has been finalized.		
1	with the Jharkhand State Pollution			
	Control Board. The Committee	The work of monitoring of ambien	t	
	stated that smoke/dust emission	environment is being done through	n i	
1.	vary from source to source (fue			
	wood, coal, flyash from TPPs, silica	Research (CIMFR), Dhanbad who is		
	from natural dust, etc) and a	having CSIR laboratory recognized		
1	Source Apportionment Study	under the ED Pules	'	
	should be got carried out for the	dide: the Er Rules.		
1	entire Jharia Coalfields	For the source apportionment study		
	Mineralogical composition study	the action has been taken with help		1
	should be undertaken on the			
1	composition of the suspended			
	particulate matter (PM <sub>10</sub> and			
	PM <sub>2.5</sub> ) in Jharia Coalfields and also			
1.	quantified. These studies would			
	help ascertain source and extent			
	of the air pollution, based on	•		
	which appropriate mitigative			
Xvi	measures could be taken.  The Transportation Plan for			
741	The Transportation Plan for conveyor-cum-rail for Cluster-IV	THE DECIT LUNCTI TO		
	should be dovetailed with Jharia	Totting and drafte transportation		
	Action Plan. Road transportation	plan for conveyor cum rail system of		
1	of coal during Phase-I should be	dispatch. CMPDIL, RI-II has been		
1	by mechanically covered trucks,	requested to conduct study and		
	which should be introduced at the	prepare the plan in this regarding.		
	earliest. The Plan for conveyor-	Conversion of existing truck into		.
	cum-rail for Cluster-IV should be	mechanically covered trucks in a		
	dovetailed with Jharia Action Plan.		-	
	The Committee desired that road	phased manner has been taken up.		
	transportation of coal during	By that time transportation is being		
	phase-I should be by mechanically	done by covering vehicle with		
	covered trucks.	tarpaulin cover.		
Xvii	A study should be initiated to	CMPDI RI-2 has been requested for	100%	-
• •	analyse extent of reduction in	Source Apportionment Study.	•	
	pollution load every year by	The draft feasibility report has been		
	reducing road transport	submitted to CMPDIL.		
Xviii	R&R of 7012 nos of PAF's involved.			1
	They should be rehabilitated at	Action of Master plan is being	100	
<u>. 120, 21, 1, 22, 23</u>	cost of Rs 26274 lakhs as per the	completed as per action plan of		
	The second and as per the	Master Plan	:	
		<u> </u>		<b>→</b> .

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	approved Jharia Action Plan.  Regular monitoring of groundwater level and quality of	It has been complied. The work of	100	
	iteBailer	It has been complied. The work of		
	groundwater level and quality of		100	
		monitoring has been done through		
	the study area shall be carried out	Central Institute of Mining & Fuel		
	by establishing a network of	Research (CIMFR), Dhanbad who is		
	existing wells and construction of	having CSIR laboratory recognized		
1	new peizometers. The monitoring	under the EP Rules. Presently CMPDI		
- 1	for quantity shall be dome four			
- 1	times a year in pre-monsoon	is monitoring the ground water level.		
	(May), monsoon (August), post-			
	monsoon (November) and winter	The location of the monitoring		
-	(January) seasons and for quality	stations has been finalized with		
	including Arsenic and Fluoride	JSPCB.		
	during the month of May. Data	JSF CD.		
	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.			
- 1	Rainwater harvesting measures			
	shall be undertaken in case			
	monitoring of water table			i
. ]	indicates a declining trend.			
			100	
	Regular monitoring of subsidence	At present only development	100	1
	movement on the surface over and	districts are operational at UG mines		i
- 1	around the working area and	in Cluster IV and no depillaring		
	impact on natural drainage	district is taken up. However regular		
	pattern, water bodies, vegetation,	monitoring of subsidence will be	9 8 1 1 1	1
İ	structure, roads, and surroundings	undertaken on commencement of		
	shall be continued till movement			
	ceases completely. In case of	depillaring districts.		1
	observation of any high rate of			
1	subsidence movement,			l
	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			
1	material.	•		
			100	-
ci	Sufficient coal pillars shall be left	Sufficient coal pillars have been left	100	
	unextracted around the air shaft	around air shafts as per the statutes		
	(within the subsidence influence	and DGMS guidelines.		
	area) to protect from any damage			
: 1	from subsidence, if any.		100	-
di	High root density tree species shall	Identification of high root density	4	
	be selected and planted over areas			
	likely to be affected by subsidence.	subsidence prone area will be taken-		
		up at the time of depillaring		
		operations.		i
			100	1
Kili	Depression due to subsidence	It is being complied.	130	۔

	Toolida in the state of the sta		
	resulting in water accumulating		
	within the low lying areas shall be		
	filled up or drained out by cutting		
V .	drains.		
Xxiv	Solid barriers shall be left below		100
	the roads falling within the blocks	the surface installation and infra	
	to avoid any damage to the roads.	structures as per the statute and	
		DGMS guidelines.	
Xxv	No depillaring operation shall be		100
	carried out below the	it is being followed.	100
	township/colony.		
Xxvi	A detailed CSR Action Plan shall be	It is being complied. BCCL is	FO
	prepared for Cluster IV croup of		50
	mines. Specific activities shall be	mipionianing contactivities.	
	identified for CSR for the budget of	Area wise separate CSN Committee	
	Rs 142 .55 Lakhs /annum @ Rs 5/T	has been framed for this purpose.	
_	of coal provided for CSR and Rs.	For detailed CSR action plan and	
	5/T of coal as recurring	framework, Tata Institute Of Social	
_	expenditure. The 416.98 ha of area	Science (TISS) has been consulted.	
	within Cluster IV ML existing as	TISS is conducting necessary survey	
	waste land and not being acquired	in the project area.	
	shall be put to productive use	in the project area.	
	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		
10.01	future.		•
xvii	Details of transportation, CSR,	It is being followed.	100
	R&R and implementation of		
1	environmental action plan for the		
	clusters-IV should be brought out		
.	in a booklet form within a year		
	and regularly updated.		
xviii	Mine discharge water shall be	Monitoring station has been	100
1	treated to meet standards	finalized with the consultation of	•

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		<del></del>	,	
		prescribed standards before	JSPCB.	
		discharge into natural water	The monitoring is being done	
		courses/agriculture. The quality of	through Central Institute of Mining &	
		the water discharged shall be	Fuel Research (CIMFR), Dhanbad	
		monitored at the outlet points and	who is having CSIR laboratory	•
		proper records maintained thereof	•	
		and uploaded regularly on the	recognized under the EP Rules.	•
		company website.		
	xxix	No groundwater shall be used for	It is being complied and mine water	100
	1	the mining activities. Additional	is being used for the industrial	
		water required, if any, shall be met	purpose. Further Mine water is also	
	ĺ	from mine water or by	utilized for the community and	0
	ŀ	recycling/reuse of the water from	irrigation purposes.	
		the existing activities and from		
		rainwater harvesting measures.	Following actions has been taken by	
	ŀ	The project authorities shall meet	the company	
		water requirement of nearby	1. Installation of Pressure filters	
		village(s) in case the village wells	for utilisation of mine water	
(		go dry to dewatering of mine.	2. Rain water Harvesting	
	Xxx	The void shall be converted into a	It shall be complied. A part of the	100
	4.	water reservoir of a maximum	void will be converted into the water	
		depth of 15-20 m and shall be	body as specified in EMP.	
		gently sloped and the upper		
		benches of the reservoir shall be		
		recognized 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.		
	Xxxi	Regular monitoring of	It has been complied. The work of	100
		groundwater level and quality of	monitoring has been done through	
		the study area shall be carried out	Central Institute of Mining & Fuel	
		by establishing a network of	Research (CIMFR), Dhanbad who is	
		existing wells and construction of	having CSIR laboratory recognized	•
ا - م		new peizometers. The monitoring	under the EP Rules. Presently CMPDI	
1		for quantity shall be dome four	is monitoring the ground water level.	
		times a year in pre-monsoon	is mountaing the ground water level.	
		(May), monsoon (August), post- monsoon (November) and winter		
		,	The location of the monitoring	
		(January) seasons and for quality including Arsenic and Fluoride	stations has been finalized with	
		1	JSPCB.	
		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		
	ļ <u>.</u>	indicates a declining trend.		<b>!</b>
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	e			
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Xxxii	ETP shall also be provided for	Construction of ETP/ Oil grease Trap	100	
	workshop, and CHP, if any.	is being taken-up.		
	Effluents shall be treated to			
	confirm to prescribed standards in			
	case discharge into the natural			
Vanatti	water course The location of monitoring	Monitoring station has been	100	
Xxxiii	The location of monitoring stations in the Jharia coalfield		100	,
	should be finalized in consultation	finalized with the consultation of		
	with Jharkhand State Pollution	JSPCB.		
	Control Board.			
Xxxiv	For monitoring land use pattern	Complied. Presently a time series	100	100
	and for post mining land use, a	map of vegetation cover in the Jharia		
	time series of land use maps,	Coal Field is being carried out		
-	based on satellite imagery (on a	through CMPDI Ranchi.		
	scale of 1:5000) of the core zone	Further CMPDI has been requested		
-	and buffer zone, from the start of	to prepare "Time series of land use		
_	the project until end of mine life shall be prepared once in 3 years	maps based on satellite imagery of		
	(for any one particular season	the core zone and buffer zone in the		
	which is consistent in the time			
	series), and the report submitted	scale 1:5000 for every 3 years.		
	to MOEF and its Regional office at			-
	Bhubaneswar.			
Xxxv	A Final Mine Closure Plan along	CMPDI, Ranchi has been requested	100	
	with details of Corpus Fund shall	to prepare "Final Mine Closure Plan		
	be submitted to the Ministry of	along with a Plan for Habitat		
	Environment & Forests five year	Restoration and with details of		
	before mine closure for approval.	Corpus Fund".		
	Habitat Restoration Plan of the	CMPDI has submitted the mine		
	mine area shall be carried out	closure plan for the Amalgamated		
	using a mix of native species found in the original ecosystem, which	Keshalpur West Mudidih Colliery,		
	were conserved in-situ and ex-situ			
	in an identified area within the	Salanpur UG Mine & Amalgamated		
	lease for reintroduction in the	Angarpathra Ramkanali Colliery and		
	mine during mine reclamation and	for Gaslitant Colliery & Katras		
	at the post mining stage for	Chatudih Colliery is awaited.		
	habitat restoration.			
Xxxvi	Implementation of Final Mine		100	
	Closure Plan for Cluster IV, subject	related to the closure of mine prior		
	to obtaining prior approval of the DGMS in regard to mine safety	approval of DGMS will be taken.		
V.nn.ii	A consiste management structure	Environment Advisory committee	100	
Xxxvii	A separate management structure for implementing environment	Environment Advisory committee	100	-
	policy and socio-economic issues	has been formed at head quarter		
	and the capacity building required	level to frame and implement the		
	in this regard.	environment policy. Similar cell has		
		also been formed at area level.		2
		A full-fledged Environment		1

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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. sustainabledevelopment, 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. Environment 100 A well defined Corporate a) The Company shall have a well Environment Policy has already been laid down Environment Policy approved by the Board of laid down and approved by the Board of Directors. This is also posted on BCCL website. b) The Environment Policy shall standard Complied. operating process/procedures to bring into focus any infringements/deviation/violat ion of the environmental or

Xxxviii

Corporate

Responsibility:

Directors.

prescribe

for

forest norms/conditions.

		A hierarchical system of the		
	c) The hierarchical system or	company to deal with environmental		
	Administrative Order of the	issues from corporate level to mine		
	company to deal with	laval -to t		
	environmental issues and for			
	ensuring compliance with the	·	'	i
	environmental clearance			
	conditions shall be furnished.	Being complied.		
	d) To have proper checks and			i
	balances, the company shall			-
İ	have a well laid down system			
ĺ	of reporting of non-			
	compliances/violations of			
	environmental norms to the			
	Board of Directors of the	·		
1	company and/or shareholders			
,	or stakeholders at large.	·		
\\ \frac{3}{i}	General Conditions by MOEF:			
1	No change in mining technology	Being complied.	100	7
l	and scope of working shall be			
	made without prior approval of			i
	the Ministry of Environment and Forests.			
li				
"	No change in the calendar plan of	Being complied.	100	
	production for quantum of mineral coal shall be made.			
III		P. Consideration and a second		
	monitoring stations shall be	Monitoring stations has been	100	
	established in the core zone as	finalized.		i
	well as in the buffer zone for PM <sub>10</sub> ,	The work of monitoring of ambient		ĺ
	PM <sub>2.5</sub> , SO <sub>2</sub> and NOx monitoring.	environment is being done through		1
	Location of the stations shall be	Central Institute of Mining & Fuel		
	decided based on the	Research (CIMFR), Dhanbad who is		
	meteorological data,	having CSIR laboratory recognized		ļ
Ŀ.,	topographical features and	under the EP Rules.		İ
ri a a 🖠	environmentally and ecologically	under the Er Rules.		1
	sensitive targets in consultation			
1	with the State Pollution Control			1
	Board. Monitoring of heavy metals			
	such as Hg, As, Ni, Cd, Cr, etc			
	carried out at least once in six			
	months.			
lv	Data on ambient air quality (PM10,	It shall be complied.	100	
	PM 2.5, SO <sub>2</sub> and NO <sub>x</sub> ) and heavy			
1	metals such as Hg, As, Ni, Cd, Cr		×*	
1	and other monitoring data shall be			
	regularly submitted to the			
	Ministry including its Regional			
	Office at Bhubaneswar and to the			1
	State Pollution Control Board and			# ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
	the Central Pollution Control			
1	Board once in six months. Random verification of samples through			i .

Manufacture & Spanish Spanish

	analysis from independe	nt	
	laboratories 11recognized und	er	
	the EPA rules, 1986 shall be	ie l	
	furnished as part of compliant	e	
	report.		
ν	Adequate measures shall be take	n Being Complied.	100
	for control of noise levels below 8	5	100
	dBA in the work environmen	t.	
	Workers engaged in blasting an	d	
	drilling operations, operation of	f	
	HEMM, etc shall be provided wit	h	
	ear plugs/muffs.	•	
Vi	Industrial wastewate	r Monitories and	
	(workshop and wastewate	man pregions meet	100
	from the mine) shall be	manzeu.	
	properly collected, treated so as to		
	conform to the standard		
	prescribed under GSR 422 (E	environment is being done through	
	dated 19th May 1993 and 31*	Central Institute of Mining & Fuel	
	December 1993 or as amended		
	from time to time before	, , , , , , , , , , , , , , , , , , , ,	
	discharge. Oil and grease trap shall	manue reportatory recognized fludes	
	be installed before discharge of	the EP Rules.	
	workshop effluents.		
ii			
	Vehicular emissions shall be kept under control and regularly	It shall be Complied.	100
	manife and regularly		
	Tambles Macd 10		
	transporting the mineral shall be		
	covered with tarpaulins and optimally loaded.		
iii			
***		It is being done.	100
	quality parameters shall be carried	·	
	out through establishment of		
	adequate number and type of		•
- 1	pollution monitoring and analysis		
	equipment in consultation with		
1	the State Pollution Control Board		
	and data got analysed through a		
- 1	laboratory recognized under EPA		*
1	Rules, 1986.		. 4
- 1	Personnel working in dusty areas	Being Complied. Vocational training	100
	shall wear protective respiratory	Centers under separate Human	
	devices and they shall also be	Resource Development Deptt. Is	
	provided with adequate training		*
	The salety and	conducting regular training	
	health aspects.	programme on these issues.	
$\perp$			
11	Occupational health surveillance	Initial Medical Examination (IME)	100
		and Periodical Medical Examination	100
_ 14			
	e undertaken modealisalla a	(PME) of all the personnel are	

The second secon

	exposure to dust and to take	carried out as per the Statutes and		
.	corrective measures, if needed and	Director General of Mines Safety		
	records maintained thereof. The	(DGMS) guideline.		
	quality of environment due to			
	outsourcing and the health and			
	safety issues of the outsourced			
	manpower should be addressed by			
Xi	the company while outsourcing.  A separate environmental	A full-fledged Environment	100	
^'	A separate environmental management cell with suitable	Department, headed by a HOD		
	qualified personnel shall be set up	(Environment) along with a suitable		
	under the control of a Senior			
	Executive, who will report directly	qualified multidisciplinary team of		
	to the Head of the company.	executives (12 nos.) which includes		
		Environment, Mining, Excavation,		
		Civil, Survey ,Electrical & mechanical,		
		Forestry disciplines executives and		
- 1		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		
Ì		regular basis at Area and at Head		
		1		
•		quarters levels. GM (Environment) at		1
*   . *		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		
1.		very much motivated under the		ŀ
		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	It is being complied.	100	
\ <u>^</u> "	environmental protection			
	measures shall be kept in separate			
	account and shall not be diverted			
	for other purpose. Year-wise			
	expenditure shall be reported to			1

	,		
	this Ministry and its Regional Office at Bhubaneswar.		
Xiii	The Project authorities shall	It has been complied.	100
	advertise at least in two local		
	newspapers widely circulated	Advertisement in local newspaper is	
	around the project, one of which	Advertisement in local newspaper is	
	shall be in the vernacular language	enclosed as annexure-B.	
	of the locality concerned within	j	
	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	1	
	the State Pollution control Board	i .	
	and may also be seen at the	1	
	website of the ministry of		
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
	http://envfor.nic.in.		
xiv	A copy of the environmental		100
	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.		
Χv	A copy of the environmental	Complied.	100
	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		and the second second
	Collector's Office/Tehsildar's		
	Office for 30 days.		
	Office for 30 days.		
(vi	The clearance letter shall be	Complied	400
VVI :	1 3	Complied.	100
	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-m PM-m SO- and NO.		

	(ambient) and critical sect oral			
.	parameters shall also be displayed			
	at the entrance of the project			
	premises and mine office and in		1.	
	corporate office and on company's			
	website.			4.
XVII	The project proponent shall	It is being complied.	100	
	submit six monthly compliance			
	reports on status of compliance of			
	the stipulated environmental			i
1	clearance conditions (both in hard			
1	copy and in e-mail) to the			1
	respective Regional office of the			
	Ministry, respective Zonal offices			
	of CPCB and the SPCB.		1	
XVIII	The Regional office of this Ministry	It shall be complied.	100	
	located at Bhubaneswar shall			
	monitor compliance of the			
	stipulated conditions. The project			
	authorities shall extend full			
1	cooperation to the officer(s) of the			
	Regional office by furnishing			
	requisite data/ information/			
	monitoring reports.			1
XIX	The Environmental statement for	Being complied	100	
	each financial year ending 31st			
	March in form-V is mandated to be			
	submitted by the project			
İ	proponent for the concerned state			
	pollution control board under the		·	
	environment (protection) Rules,	1		
	1985 as amended subsequently,	1		İ
	shall also be uploaded on the	1		
	company's website along with the	I .		1
	status of compliances of EC	1		1
	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	Agree		
	competent authority may stipulate			
1	any further condition(s) for		+	
<u> </u>	environmental protection.			
11	Fallure to comply with any of the	Agree		
- [-	conditions mentioned above may			
	result in withdrawal of this			
	clearance and attract the			
	provisions of the environment	<u> </u>		
1	(protection) Act, 1986.			4
iii	The above condition will be	Being complied.		(
1	EUNITED HUEL-and HUBEL ARE provision of the Water (protection & Cardral of Palintian) devi-1972			
	& Cantral of Dalistian)det/4974			1

	the Air (prevention & Control of Pollution) Act, 1981, the Environment (protection) Act, 1985, and the public liability insurance Act, 1991 alongwith 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 outcome of the writ petition filed by M/s Bharat Coking Coal Limited (BCCL) in response to the closure order issued by the Jharkhand State Pollution Control Board which is pending in the Jharkhand High Court.	Agreed.	

GENERAL MANAGER KATRAS AREA

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