

भारत कोकिंग कोल लिमिटेड (एक मिनिरत्न कम्पनी) (कोल इन्डिया लिमिटेड का एक अंग) महाप्रबन्धक का कार्यालय कुसुन्डा क्षेत्र, पो: कुसुन्डा, धनबाद, झारखन्ड

Ref No. BCCL/KA-6/Env./2019/27,

Date: 20-06-2019

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

Sub: Six monthly compliance report on Environmental Clearance Conditions for the period from Oct '2018 to March '2019 in respect of Cluster-VII Group of mines, EC order no.: J-11015/238/2010-1A.II (M) Pt dated 12-10-2018

Dear Sir,

Enclosed please find herewith six monthly compliance report on environmental clearance conditions for the period from Oct '2018 to March '2019 in respect of Cluster-VII Group of mines, EC order no.: J-11015/238/2010-1A.II (M) Pt dated 12-10-2018 for your kind perusal.

With regards,

Kusunda Area, BCCL

COMPLIANCE OF EC CONDITIONS of CLUSTER-VII

EC order no.: J-11015/238/2010-1A.II (M) Pt dated 12" October, 2018 (Oct '18 to March '19)

Sl.no.	4. Specific Conditions by MOEF:	Compliance			
i	The project proponent shall obtain Consent to establish from the State Pollution Control Boards of Jharkhand for the proposed peak capacity of 11.42 MTPA prior to commencement of the increased production.	Consent to Establish has been applied/obtained from JSPCB for the projects where production enhancement is planned/proposed.			
ii	Transportation of coal from face to coal heap shall be carried out by truck. Further, the coal transportation from coal heap to Coal Handling Plant shall be carried out through covered trucks.	It has been complied. Presently coal transportation has been done by trucks with tarpaulin cover. Covering of truck has been made mandatory in the transportation contract.			
iii	Mitigation measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.	It is being Complied. Mobile water Sprinklers are being used for dust suppression.			
iv	Sufficient coal pillars shall be left un-extracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.	It is being complied. Sufficient coal pillars are being left un-extracted as per DGMS Statutes. It is being complied. Solid barriers under roads townships, colony are being left as per DGMS Statutes. At present, there is no depillaring operation in this cluster.			
V	Solid barrier shall be left below the roads falling within the block to avoid any damage to the roads and no depillaring operation shall be carried out below the township/colony.				
vi	Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.	It shall be complied.			
vii	Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rain fall.	It is being complied.			
viii	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 11.42 MTPA.	Application for obtaining NOC for usage/extraction of Ground water is already submitted to CGWA for Cluster VII group of Mines.			
ix	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	It is being complied. Proper safety, health hazards corrective measures are being taken by Area and HQ Level Safety/Medical Board			
Х	The fire dealing operations by excavating out fire should be expedited.				
Generic	Conditions by MOEF:				
A.	Mining				
İ	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.	It is being Complied.			

ii	No change in mining method, calendar programme and scope of work shall be made	Agreed.		
	without obtaining prior approval of the Ministry of Environment, Forest and Climate Change.			
iii	Mining shall be carried out as per the approved mining plan including Mine Closure Plan, abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).	It is being complied. Mining Plan & Mine closure plan has been prepared by CMPDIL in consonance with Acts, Rules and Guidelines.		
iv	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.			
	Land reclamation and water conservation			
i	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 4:50,000 scale shall be submitted to Ministry of Environment, Forest and Climate Change/Regional Office (RO).	It is being complied. Land Use Map of Cluster VII has been prepared by CMPDIL using remote sensing data for monitoring of land use pattern and for post mining land use. The land use map is attached in Annexure-I		
ii	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS.	It is being complied. Approval form competent authority of State Govt. shall be sought in case of diversion of Natural Water Course.		
iii	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective state government as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal	Backfilling process in abandoned pits and voids are continuously carried out along with the mining operation. Ecological restoration practice is being carried out at the stable OB dumps. Abandoned Pits will be utilized for Pisciculture in Post Mining Phase. Post mining, Mined out land shall be reclaimed and handed over to the State Govt. in accordance to the mine closure Plan prepared by CMPDIL.		

	dated 27" August, 2009 and subsequent amendments.	
iv	The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining'/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the Ministry of Environment, Forest and Climate Change/Regional Office on six monthly basis.	It shall be complied.
V	The top soil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized for long. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilized with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office on six monthly basis.	It is being Complied.
C.	Emissions, effluents, and waste disposal	
i	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.	It is being Complied. Presently coal transportation is being done by trucks with tarpaulin cover. Covering of truck has been made mandatory in the transportation contracts. Additionally, Mobile Water Sprinklers are being used for mitigating dust from being air borne from haul roads.
ii	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area in a phased manner. The green belt comprising a mix of native species shall be developed all along the major approach/coal transportation roads.	It shall be complied.

iii	The transportation of coal shall be carried out as per the provisions and route proposed in the approved Mining Plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	It is being complied.
iv	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centers.	It is being complied. Vehicles used for transportation of coal are always covered by tarpaulin and being monitored for the vehicular emission by the transporter and BCCL. Copy of some Emission Under Control Certificate has been enclosed as Annexure II
V	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	It is being complied.
vi	Coal handling plant shall be operated with effective control measures viz. bag filters/water or mist sprinkling system etc. to check fugitive emissions from crushing operations, conveyor system, transfer points, etc.	It is being complied.
vii	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	It is being complied. Mine water is being used for the industrial as well as domestic purpose. Mine water is also supplied to colonies and community after filtration through pressure filters, slow sand filters and rapid sand filters. Proposal for mine water supply to nearby village/community is taken up under CSR Policy of the company. An MoU has been signed between Coal India Ltd. & Govt. of Jharkhand for providing mine water to nearby villages. A copy of MoU has been enclosed as Annexure III

ix	Catch/garland drains and siltation ponds of appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilized for dust suppression measures and green belt development. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Oil and grease trap shall be installed and maintained fully functional with effluents discharge adhering to the norms.	It is being complied. In phased manner, garland drains are constructed around mine working, coal heaps & OB dumps to prevent run off water and flow of sediments directly into the river & water bodies. Retention wall has been constructed around finalized OB Dumps. It is being complied. Effluents discharge standards are regularly monitored by CMPDIL for cluster VII group of mines. Mine water is being treated using filter plants (Pressure, Sand filters etc.) for its further use in industrial purpose and supply to the community. Mine water monitoring report has been		
v	Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste. Adequate groundwater recharge measures shall	It is being complied.		
X	be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	it is being complicu.		
D.	Illumination, Noise & Vibration			
i	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on sixmonthly basis.	It is being complied. Adequate illumination is being ensured in all mine locations as per DGMS standards and the same is being monitored by Area & HQ Level Safety Committees on regular basis.		

ii	Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.	It is being complied. Personnel operating HEMMs, drilling machine and other machines comply with safety regulation and are equipped with Personal Protective Equipment. Noise monitoring data has been enclosed as Annexure V
iii	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations and fly rocks as per the guidelines prescribed by the DGMS.	It is being complied. Additionally Personnel operating HEMMs, drilling machine and other machines are given training on regular basis.
iv	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	It is being Complied. Noise level monitoring is done by CMPDIL on monthly basis.
E.	Occupational health & safety	
i	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the workers engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.	It is being Complied. Periodical medical Examination (PME) of all the mining and other personnel is being carried out regularly at Area Hospital, as per the Statutes and guidelines of Director General of Mines Safety (DGMS). Enclosed as Annexure - VI
ii	Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	It is being complied. Protective respiratory devices & other PPEs are supplied to personnel working in dusty areas. Also, a separate full-fledged Human Resource Development Department is conducting regular training programme on these issues. Apart from this Vocational Training Centers are existing in all the Areas of BCCL, which provides periodical training on the safety and occupational health issue to the workers. Enclosed as Annexure VII
iii	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.	It is being complied. HRD Department & Area level Vocational Training Centres are conducting regular training programmes. Enclosed as Annexure VIII

F. Ecosystem and biodiversity conservation	
i The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	It is being complied. Conservation and Protection of endangered flora/fauna shall be taken with utmost priority if spotted/reported. Action Plan shall be prepared in consultation with State Forest and Wildlife Department.
i Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land ousters shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	It is being Complied. The issues raised during Public Hearing is mentioned in the EMP and phase wise measures are being taken to ensure its implementation.
The project proponent shall ensure the expenditure towards socio-economic development in and around the mine, in every financial year as per the Corporate Social Responsibility Policy as per the provisions under Section 135 of the Companies Act, 2013	It is being complied. BCCL is implementing CSR activities at various scale. A separate CSR committee has been formed at area level, which is looking after the works being executed under CSR. Bastacolla area is constructing 238 Nos. of toilets under CSR activity in different schools in Simdega district of Jharkhand under flagship program (Swachch Bharat Abhiyan) initiated by Hon'ble Prime Minister of India. CSR work undertaken by Kusunda Area is listed in Annexure IX.
The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (M) dated 29" October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	It shall be complied. Rehabilitation of project affected families is being done as per Approved Master Plan for Jharia Coalfields.
The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	It shall be complied.
H. Corporate Environment Responsibility	

i	The Company shall have a well laid down environment policy duly approved by Board of Directors. The environment policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions. Also, the company shall have a defined system of reporting of noncompliances/violations of environmental norms to the Board of Directors and/or shareholders/stakeholders.	A well-defined Corporate Environment Policy has already been laid down and approved by the Board of Directors. This is also uploaded on company's website. Enclosed as Annexure X
ii	The project proponent shall comply with the provisions contained in this Ministry's OM dated 1*' May, 2018, as applicable, regarding Corporate Environment Responsibility	It shall be complied.
iii	The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions should be displayed on website of the Company.	A hierarchical system of the company to deal with environmental issues from corporate level to mine level already exists.
iv	A separate environmental management cell both at the project and company headquarter level, with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A full-fledged Environment Department, headed by a Dy.GM (Environment) along with a suitable qualified multi-disciplinary team of executives and technicians has been established at Company Headquarters. One Executive in each area has also been nominated as Nodal Officer (Environment) for implementing environment policy. The activities are monitored on regular basis at Area and at Headquarter levels
V	Action plan for implementing EMP and environmental conditions shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	It is being Complied
vi	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Internal audit is done periodically and third party audit has been done by CAG, ICFRE.
I.	Statutory Obligations	
i	The environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Court, NGT and any other Court of Law from time to time, and as applicable to the project.	Agreed

	T=	
ii	This environmental clearance shall be subject to	Agreed
	obtaining wildlife clearance, if applicable, from	
	the Standing Committee of National Board for Wildlife.	
iii	The project proponent shall obtain Consent to	Agreed.
	Establish/Operate under the Air Act, 1981 and	
	the Water Act, 1974 from the concerned State	
	Pollution Control Board.	
iv	The project proponent shall obtain the necessary	Agreed. Application for obtaining NOC for
	permission from the Central Ground Water	usage/extraction of Ground water is already
	Authority. (CGWA).	submitted to CGWA for Cluster VII group of Mines.
J.	Monitoring of project	J 1
i	Adequate ambient air quality monitoring	It is being complied. Establishment of ambient
•	stations shall be established in the core zone as	
	well as in the buffer zone for monitoring of	environment quality monitoring stations has been
	pollutants, namely PM ₁₀ , PM _{2.5} , SOx and NOx.	finalized with the consultation of Jharkhand State
	Location of the stations shall be decided based	Pollution Control Board. Enclosed in Annexure XI
	on the meteorological data, topographical	
	features and environmentally and ecologically	
	sensitive targets in consultation with the State	
	Pollution Control Board. Online ambient air	
	quality monitoring stations may also be installed	
	in addition to the regular monitoring stations as	
	per the requirement and/or in consultation with	
	the SPCB. Monitoring of heavy metals such as Hg,	
	As, Ni, Cd, Cr, etc to be carried out at least once	
	in six months.	
ii	The Ambient Air Quality monitoring in the core	It is being complied. Data is regularly submitted to
	zone shall be carried out to ensure the Coal	ministry along with compliance report. Annexure
	Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to	XII
	time by the Central Pollution Control Board. Data	
	on ambient air quality and heavy metals such as	
	Hg, As, Ni, Cd, Cr and other monitoring data shall	
	be regularly reported to the Ministry/Regional	
	Office and to the CPCB/SPCB.	
iii	The effluent discharge (mine waste water,	It is being complied. Effluents discharge standards
	workshop effluent) shall be monitored in terms	are regularly monitored by CMPDIL for cluster VII
	of the parameters notified under the Coal	
	Industry Standards vide GSR 742 (E) dated	group of mines. Mine water is being treated using
	25.9.2000 and as amended from time to time by	filter plants (Pressure, Sand filters etc.) for its further
	the Central Pollution Control Board.	use in industrial purpose and supply to the
		community. Mine water monitoring report has been
		enclosed as Annexure XIII
iv,	The monitoring data shall be unleaded on the	
iv	The monitoring data shall be uploaded on the company's website and displayed at the project	It is being Complied.
	site at a suitable location. The circular No. J-	
	20012/1/2006-IA.11 (M) dated 27.05.2009	
	issued by Ministry of Environment, Forest and	
	Climate Change shall also be referred in this	
	regard for its compliance.	
	Togara for its compliance.	

V	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to Ministry of Environment, Forest and Climate	Tender for piezometer installation was done on 1.03.2019 No bidder participated in the tender. Hence, that tender was cancelled and re-tendering in process.
vi	Change/Regional Office. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	It is being complied. CMPDI RI-II is regularly conducting study of groundwater level and quality of areas within Cluster VII. Groundwater monitoring data has been enclosed as Annexure XIV .
vii	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental conditions to the Ministry of Environment, Forest and Climate Change/Regional Office. For half yearly monitoring reports, the data should be monitored for the period of April to September and October to March of the financial years.	It is being complied.
viii	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Agreed.
K.	Miscellaneous	
i	Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.	It is being complied. Conventional bulbs are being replaced by LED Bulbs.
ii	The project authorities shall inform to the Regional Office regarding commencement of mining operations.	Agreed.
iii	A copy of the environmental clearance shall be marked to concerned Panchayat. A copy of the same shall also be sent to the concerned State Pollution Control Board, Regional Office, District Industry Sector and Collector's Office/Tehsildar Office for information in public domain within 30 days.	It has been complied.

	The EC shall be uploaded on the company's website. The compliance status of the stipulated EC 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.	It has been complied.
v	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of this clearance, informing that the project has been accorded environmental clearance and a copy of the same is available with the State Pollution Control Board and also at website of the Ministry.	It has been complied. Enclosed in Annexure XV
vi	The environmental statement for each financial year ending 31 March in Form-V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) 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&CC by e-mail. Concerns raised during public hearing.	It is being complied. EC Compliance is regularly updated on company's website.
vii	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.	Agreed

Project Officer

Project Officer

Project Office

Project Office

Ena OC

ADIC

Project Office Kusunda OC Rajapur/S-Jharia

AEBSC

Project Office

Alksusa UG Bhutgoria UG

Project Officer

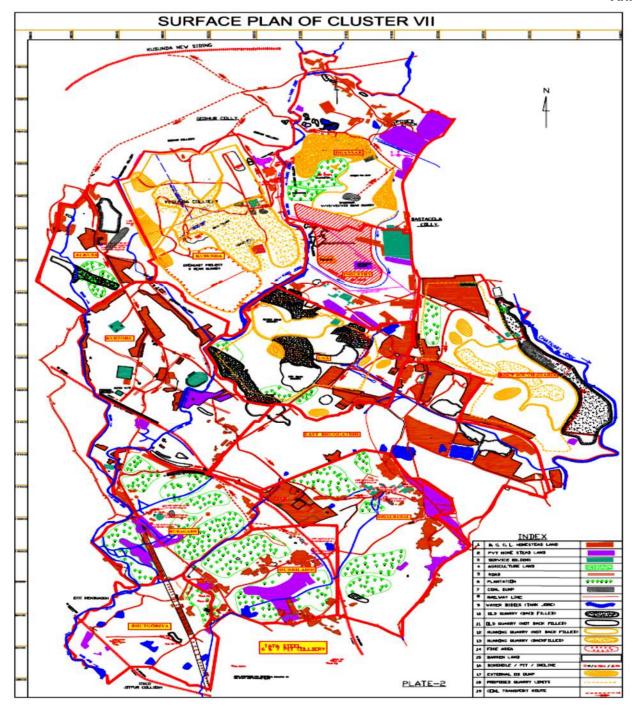
Burragarh UG

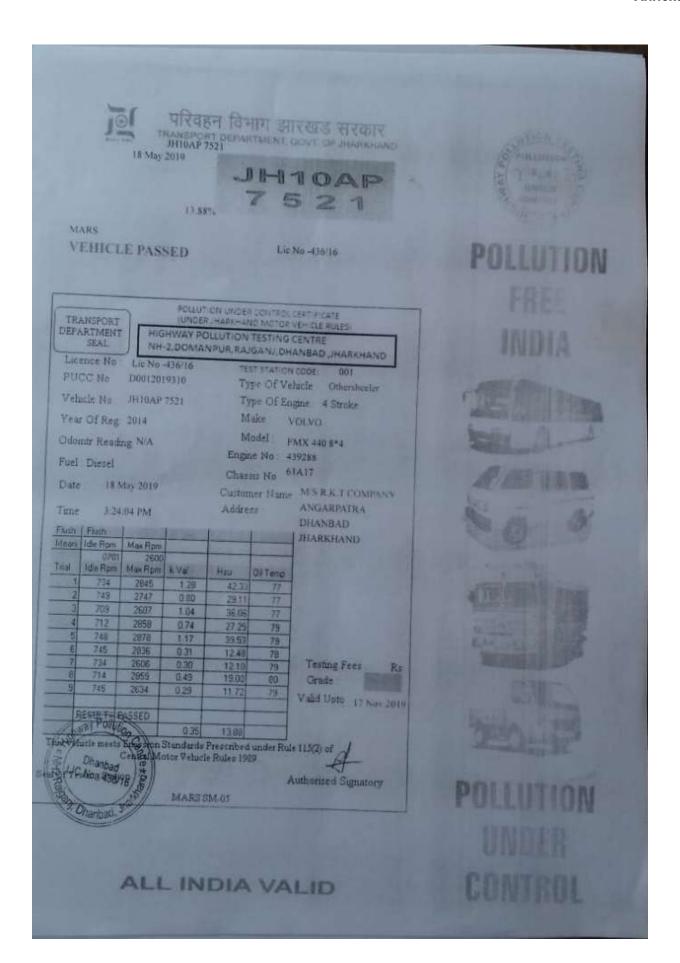
Project Officer

Hurriladih UG

Kustore UG

Annexure I







परिवहन विभाग झारखंड सरकार TRANSPORT DEPARTMENT OF THE POTANT

JH10AP 9806 18 May 2019

II-1-10AP

14.34%

MARS

VEHICLE PASSED

Lic No -35/16

TRANSPORT DEPARTMENT SEAL

FOLLUTION UNDER CONTROL CERTIFICATE (UNDER PHARKHAND MOTOR VEHICLE BULES)

HIGHWAY POLLUTION TESTING CENTRE NH-2, DOMANPUR, RAJGANI, DHANSAD, JHARKHAND

Licence No. PUCC No

Lie No -176/16

D0012019313

TEST STATION CODE

Type Of Vehicle : Othershoder.

Velucie No JH10AP 9806

Type Of Engine 4 Stroke

Year Of Reg 2014

Make VOLVO

Model

Odomtr Reading N/A

FMX 440 8*4 Engme No 39687

Fuel Diesel

54A17 Charms No.

Drate: 18 May 2019

Customer Name M/S R.K.T.COMPANY

Address

ANGARFATRA

DHANBAD

Tene 3:35:29 PM

JHARKHAND

التلبسطا	No. of Contrast of	_			
Mean	Ide figm	Max Rom			
	5701	5600			70
Trial	Idle Rpm	MacFignt	k.Val.	CHINA	DiTung
- 1	738	2940	0.37	34.71	154
2	735	2784	0.35	13.9?	85
3	7.49	2858	0.44	17/24	83
4	751	2630	0.28	11.34	84
1	ECHILIT	MASSED		Harries .	
		110	0.35	14.34	
1015 1 107 A	PRINCIPLE DESCRIPTION OF THE PERSON OF THE P	Control of the Control	THE RESERVE OF THE PARTY OF THE	arrange of the same of the sam	Variation with page

Testing Fees

Grade

Valid Upto

makion Standards Prescribed under Rule 115(2) of entral Motor Vehicle Rules 1939

Authorized Squatory

MARS SM 03

ALL INDIA VALID



BUNDA

POLLUTION UNDER CONTROL CERTIFICATE

Gove Of Marchand Transport Dep

Reg No.: Make:

Computerized Emission Test Certificate (Rule 163E (6) of BMV Rule 1992)

Licence No.: 590/ 2017 ALL INDIA VALID

RUDRA ENTERPRISES

JAMUATAND, HIRAK ROAD, BAGHMARA, DHANBAD(JH) 02-APR-2019

2A-590/20170000204586

JH 10AF 8134

TATA

Reg. Year : 11 MAR 2012

DIESEL

Fuel: Eng. No.: Chasis No: NA Test Date 00:00 Test Time : 00:00

Category - GOODS CARRIER (HGV)

TIPPER

JH 10AF

IVA	CONTRACTOR OF THE PARTY.			
FLUSH	CYCLE			LI STEEL
(C)		AVERAGE	The state of the s	Marie Bott
BUL SHE	RPM Min	RPM Max	Oil Temp	
EST. IN	910	4910	78	
ET SVIDS		DETAILS	10035-	191 053
RPM Min	RPM Max	Temp	HSU	K Value
870	4880	69	52.93	1.75
940	4890	65	57.08	1.97
920	4890	69	50.63	1.64
MEAN	Pallen		53.66	1.78
PEGILIT	ARCHEUM	100000000000000000000000000000000000000	No. Committee	P. Committee

01-0CT-2019

me; the standard prescribed by rule 115 (2) c' central Motor Vehicle Rule 1989.

cetticate sy Alid for six Months only.

Test Station Code: 590/2017

RASHEDGILLER





POLLUTION UNDER CONTROL CERTIFICATE

Computerized Emission Test Certificate KOYLANCHAL VAHAN PRADUSHAN JANCH KENDRA KARKEN BAZAR, KUSUNDA, DHANBAD

License No: 284/2016

No:

000000040

Regis Date:

2001

Test Time:

02 17 PM

JH10R 5703

Fuel:

DIESEL 18113

Odometer:

hide No:

TML

Engine No:

12568

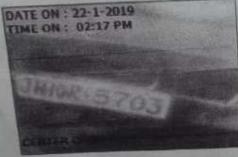
Owner Name:

ke: del: TIPPER TIPPER Chassis No: Test Date:

22-1-2019

Remark:

tegory:



FLUSH	CYCLE			
ATTION OF THE PARTY OF		AVERAGE		
	RPM Min	RPM Max	Oil Trip	
	0890	2910	72	
		DETAIL		
RPM Min	RPM Max	Temp	HSU	K value
870	2940	59	20.59	0.54
890	2910	62	21 11	0.55
850	2880	61	16.93	0.43
	2000		19 54	0.51
MEAN.	1	PASS		

Result: Pass

Valid Up To: 21-7-2019

SHAN JANC 59 Standards Prescribed By Rule 115 (2) of Central Motor Vehicle Rule 1989.

MAKEND BAZAR

Test Station Code: 284/2016

gnatory Authorize

Memorandum of Understanding

for

Utilization of mine water by villages situated near mines of CIL in command area of Central Coalfields Limited, Bharat Coking Coal Limited and Eastern Coalfields Limited in the State of Jharkhand

This Memorandum of Understanding "MoU" ("Agreement") is made on 30thday of October 2017at Ranchi

By and Between

Government of Jharkhand (hereinafter referred to as "GoJ"), represented through Department of Industries, Mines & Geology and Department of Drinking Water & Sanitation, Government of Jharkhand having its office at Ranchi which expression shall, unless the context otherwise requires, includes its successors and assignees of the FIRST PART:

And

Coal India Limited (hereinafter referred to as "CIL"), a Government of India Enterprise having its Registered Office at Coal Bhawan, Premise No-04 MAR, Plot No- AF-III, Action Area- 1A, Newtown, Rajarhat, Kolkata-700156 and represented by General Manager, Corporate Social Responsibility, which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors, and permitted assignees of the SECOND PART:

The expressions GoJ and CIL shall hereinafter, as the context may admit or require, be individually referred to as the 'The Party' and collectively as 'the Parties'.

Whereas:

- A. The Government of Jharkhand (GoJ) and Coal India Limited (CIL) both parties have agreed in principle to the objective of achieving the common goal of providing surplus water from suitable mines for use by habitations, located in the command area of subsidiaries of CIL in the state of Jharkhand for their various needs. These subsidiaries are Central Coalfields Limited (CCL), Bharat Coking Coal Limited (BCCL) and Eastern Coalfields Limited (ECL).
- B. Mine wateravailable in mine voids and from mine discharge in Central Coalfields Limited (CCL), Bharat Coking Coal Limited (BCCL) and Eastern Coalfields Limited (ECL), subsidiaries of CIL are presently supplied to several colonies of these subsidiary companies of CIL. At some places mine water is drawn by Department of Drinking Water & Sanitation and other agencies/ organizations of Government of Jharkhand. Surplus mine water available at other mines can be used by surrounding habitations for their various needs.
- C. Presently, about 25250 million gallon of water is estimated to be available in 88 opencast mine voids of CCL, and about 31million gallon/ day of water is estimated to be available as surplus/excess mine water discharge at 23 mine sites of BCCL and 07 mine sites of ECL in State of Jharkhand . The list ofmines where water is available in mine voids in CCL and in mine water discharge in BCCL and ECLare enclosed at Annexure I, Annexure II, and Annexure III respectively.

- D. The Parties hereby agree, undertake and affirm as under:-
 - I. That sampling and analysis of quality of water available at variousmine sites(voids ormine discharge), to assess the suitability for potability, agricultural or other uses will be done by a third party having a recognized environmental laboratory andthe party will be selected by mutual consent between CIL(represented by its subsidiaries CCL, BCCL and ECL) and GoJ.
 - The report of analysis of quality of water of various mine sites will be submitted by the selected third party to GoJ and CIL (represented by its subsidiaries CCL, BCCL and ECL).
 - That cost of sampling and analysis of quality of water of various mine sites will be borne by CIL (represented by its subsidiaries CCL, BCCL and ECL).
 - iv. That CIL (represented by its subsidiaries CCL, BCCL and ECL) shall bear all initial cost for construction of civil works like foundation, platform and shed for installation of motor and pumps for drawal of water at identified mine sites.
- v. That Government of Jharkhand shall bear the cost of pumps, motors, associated power supply, pipelines and ≠their installation at identified mine sitesfrom where water is to be drawn. The cost of running these facilities would be borne byGovernment of Jharkhand or community benefitted.
- vi. The construction, operation and maintenance cost for treatment and distribution facilities of water from identified mine sites will be borne by GoJ.

- vii. The list of mine sites where water is available in voids or as mine discharge are placed at Annexure I, Annexure II, and Annexure III for CCL, BCCL, and ECL respectively. The number of mine sites may increase / decrease in future. So modalities for pumping water from the additional sites will be same as laid down at serial no D (i) to D (vi).
- viii. In case of dispute, the matter shall be mutually resolved and either party will not be held responsible for non discharge of responsibility under this agreement.
- ix. In case of force majeure or an Act of God, preventing the parties from fulfilling part or all the obligations, both parties shall be exonerated from carrying out further action as per MoU until the force majeure no longer exists.
- The MoU will be in force for 30 (thirty) years. The MoU may be renewed as mutually agreed upon by CIL (represented by its subsidiaries CCL, BCCL and ECL) and GoJ beyond the mentioned period of MoU.
 - Provided further that in case dewatering is required to start coal production in national interest from these mines then the parties will sit together and mutually decide modalities for the same.
- xi. The sustainability of mine sites in respect of future availability of water will be assessed/ studied by CIL.
- xii. This MoU shall be in accordance with applicable Acts, Rules and Guidelines for coal mining including mine closure guidelines and shall not be in contravention with provisions made therein.

IN WITNESS THEREOF, both parties hereto have signed this MoU in two original copies in English on the date indicated above.

P	Ph	4 44 1		á
POL	Coal	India	Limiter	1

For Government of Jharkhand

Department of Industries, Mines & Geology

- 1. Siddh Nath Singh, General Manager, CSR,
 - Coal India Limited

1. AboobackerSiddique P., I.A.S. Mines Commissioner, Mines & Geology Department, Government of Jharkhand.

Drinking Water Sanitation Department

2. Ramesh Kumar, Engineer in Chief, Drinking Water & Sanitation Department, Government Jharkhand.

Witness 1

301101 was Nath The

Witness 2

Witness 2

(EFFLUENT WATER- FOUR PARAMETERS)

N	lame of the Cluster: Cluster -VII	Month: MARCH, 2019	Name of the Station: Mine Discharge of Dhansar UGP					
SI. No.	Parameters	MW7 First Fortnight 15.03.19	MW7 Second Fortnight 30.03.19	As per MOEF General Standards for schedule VI				
1	Total Suspended Solids	26	24	100 (Max)				
2	рН	7.53	7.32	5.5 - 9.0				
3	Oil & Grease	<2.0	<2.0	10 (Max)				
4	COD	32	28	250 (Max)				

All values are expressed in mg/lit except pH.

खुमा सीमैन, रुद्

Analysed By JSA/SA/SSA Checked By Lab In Charge RI-2, CMPDI, Dhanbad Approved By HOD(Mining/Environment) RI-2, CMPDI, Dhanbad

NOISE LEVEL DATA

Nan	ne of the Project: CI	uster -VII	Month: MARCH, 2019					
SI. No.	Station Name/Code	Category of area	Date	Noise level dB(A)LEQ	*Permissible Limit of Noise level in dB(A)			
1	Kusunda OCP (N10)	Industrial area	15.03.19	60.6	75			
2	Kusunda OCP (N10)	Industrial area	29.03.19	62.2	75			
3	Dobari UGP (N11)	Industrial area	15.03.19	54.2	75			
4	Dobari UGP (N11	Industrial area	29.03.19	60.5	75			
5	Hurriladih UGP (N28)	Industrial area	07.03.19	59.6	75			
6	Hurriladih UGP (N28)	Industrial area	29.03.19	64.9	75			
7	Moonidih Washery (N29)	Industrial area	08.03.19	61.4	75			
8	Moonidih Washery (N29)	Industrial area	22.03.19	71.5	75			

^{*}Permissible limits of Noise Level as per MOEF Gazette Notification No. GSR 742(E) dt. 25.09.2000 Standards for Coal Mines and Noise Pollution (Regulation and Control) Rules, 2000.
* Day Time: 6.00 AM to 10.00 PM,

Analysed By JSA/SA/SSA

उपम सीमेन, रुद्

Lab In Charge RI-2, CMPDI, Dhanbad

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

			PME				
	Oct	Nov	Dec	Jan	Feb	March	Total
ROCP	15	56	6	0	14	12	103
AEBSC	7	19	25	0	8	10	69

Date of	7206021	0231	BIN CARI GROU Local Store	dia Limited) UP tion Bin No			
Code Pa	art No		F MEASU				
	g Fev	••••••	Mine	Level Ity. to Orde	r1.1/o		
	REC	EIPT	CK ACCO	National Property and Personal Property lies	Balance	Checked	
Date	G. R. Note	Qty.	Red No.	Qty.	Qty.	in Date	
71218 71218 071218	800078 Advance Cosp EOCP 0616 DOCP 0610 Godhwl 0609 80092 Ayush &	(3003) (3003)	67)	40 200 175	NiL 500 460 260 85	13/15	

T	T	-	_	-						_		0	138	8	37	4	श्र	श्ल	13	ণ	5	9	ग	_	465		\top	1	١
1	F	6.5		2	_	, .	_	-		_		-	1	0	_		ၧ			_		\perp	╬		16		+	\vdash	1
1	\vdash		_	2	_		-	• •	۱ ر			0	0	-	15	52	2	77	2	ョ	~	7	m		정		+	┞	1
1	.l	_	I	3	_	_		_	-	. 0	-	0	5	2	0	급	7	- -		7	ᅱ	ᆔ	7	_	19		+	╀	1
1	TOAT		_				_	B •	4 0	, –	. 0	38	84	09	94		_	22		\perp	56	33	9	_		_	84		1
L	의		~	-		٠.	* '	w	ν I		. «	3	8	9 1	9	1 5	0	3	9	<u></u>	8	_	긞	_	5 596		4	945	4
1	_ }				_	2	٠ ١	ш (٠ -	- <	ر _	0	0	0	0	0	0	0	0	0	0		-	_	-		+	╀	4
	읽	_		_	- 1	_ '	~ .	4 ·	0 +	- 0	~	0	0	0	0	0	0	0	0	0	0	-	긞	_			+	╀	4
-	<u>s</u>	_	, =	_		-	0		_	_	_	0	4	0	0	0	_	3	-	0	1	0	=	_	=	_	+	+	4
1	A.A.W	_	_	_	_		- 1	Φ.	۷ ۷	<u> </u>	- 0	0	7	0	-	0	0	0	0	2	0	0	2	_	7	_	+	Ļ	+
1	⋖	_	~	_		_	œ.				u &	-	17	m	12	7	0	2	4	0	2	0	0	_	38	-	+	T	٦
1	ŀ	_	_	_							<u> </u>	6	-	1-	-	0	6	6	0	0	0	6	0	_	6	-	+	+	+
	. }	_	, ,		2 1		~	<u>«</u>		_	2 ~	1	_	L	_	L	-	6	6	0	0	0	0	_	0	_	\dashv	+	7
M	ENA OCP	Ľ	בינ	•	_	_	0	_			O #	-	1	L	1	1	-	L		6	6	0	0	_	0	ř	\dashv	+	\dashv
¥	Ĭ.	H	_	_			_		4		- 0	1	-	-	10	1	-	L	_	7	-	4	2	_	13		ᆔ		H
TRAINING APR. 2018 - MAR.2019 OF KUSUNDA AREA	ш	\vdash	-		_		_				ш а -	-	0 0	1 10	┸	L	上	┺	上	上	1	m	0	-	29 1		\dashv	Ť	٦
3		H		_	_		_	_		_	4 -	1	,	,	, -			-	-	-	10	-	0	\vdash	0	-	\dashv	+	\dashv
ns	M	H		<u>-</u>	_	_	-		_	-	0 0	+	5	1	1			L	0	1-	10	10	6	┞	0	_	\dashv	+	┨
포	E.BASSURIA	H	υ :	_	_	_	0	-	_	_	- 1	+	5	5	5	5	1	1	-	10	,	-	6	\vdash	0	_	\dashv	+	┨
90	BA	H		~			~		-	-	- 4	-	7 0	+	7	1	1	, ,	0 4	-	, -	4	4	\vdash	33	-	m	٦,	36
2	ш	╁		_		-	_		0	_	۷.	_	9	5	+	5	1	1	5	-	1	-	10	╁	0	_	\dashv	T	٦
3		H	U	0	z	_	_	-	<u> </u>	_	_	<u> </u>	4	5	9	5	1	1	5	5	10	10	-	╁	0	\vdash	\dashv	+	7
È	≥ا	H	_	Ŧ	-	_	-	-	_	_	_	-	0	5	9	5	1	5	5 0	9	1	10	10	+	0	\vdash	\neg	7	
÷	BASSURIA	H	_	_			_		4	S	-	_	0	=	-	=	5	5	5	5	3	10	10	十	0	Н		7	
泛	ASS	-	_	~	ш	ш	~	- 100		I		_	허	m	7	7	╛	7	9	5	5 0	1	10	寸	6	T	г	_	77
~	۳	+	-			s	_		U	_	A	#	허	7	78	5	~ t	=	9 1	7	5	9	10	寸	83	T		П	Г
B		H	U	0	z	_	~	. A	٠	-	0	~	0	히	히	-	ব	=	न	ল	न	5	9	1	7	1			Т
9	l	H	Ü		_		-	, u		_	0	ᇑ	허	히	ᅱ	ল	7	ᅙ	न	m .	7	5	1	7	5	1			T
₫	ပ္	ŀ			_	_		~	×	s	_	히	0	히	ㅋ	히	9	히	न	ল	ল	ব	ব	7	-	寸		Г	T
RA	G.K.C	H		œ	ш	u	. ~		. s	=	ш	~	4	91	ョ	77	扫	7	4	ज	m	6	ৱ •	4	;	1	0	١,	801
-		+	_	_		_	_			_	4	7	0	45	22	m	뗽	2	힑	77	히	41	5	하	-	5		T	T
SO	1	ŀ		_	_				_	-		œ.	0	0	0	0	허	0	0	0	히	0	न	ᆉ	_;	5		t	t
5		H	0	_	_	_	_	, u	_	_	0	8	0	0	0	22	2	22	41	7	힑	7	7	ᆉ	- ;	\$		t	†
STATUS O	\¥	=	_	_	_	_	_	_	- A	_	_	J	0	0	-	_	_	0	_	_	_	히	ᆔ	히		7		t	†
	GODHAR	5	_	_			_	_		-	_		18	36	59	\$	22	23	2	E	2	7	허	4		2	0	<u> </u>	91
	<u>©</u>	4		_				2 4		_	_	_	0	53	12	15	10	10	7	9	0	m	19	ᅱ	- 10	0 146 225		+	Т
	1	1				. "	2		u (۷.	_	0	0	0	-	0	0	0	-	0	0	급	-		끕		+	+
		Ţ			, Z	-	_		۷ ۷	, -	· °	~	0	0	0	0	0	0	0	0	0	0	0	0		ၧ	-	+	+
	A P	5	U	=	_	•	_	0 4	_	_	. 0	8	0	F	-	0	0	0	0	0	7	0	0			4		+	+
	DHANSAR	3	_	_	_	_		_			. –	0	3	18	15	34	19	21	28	19	91	14	4	0				2	_
	Ē	5		~				~ '	ш и	ם ת	ш	~	-	F	1	<u>س</u>	-	-	1-	⊢	-	-				195	-	7	0
									∑ () z	z	I	APRIL	MAY	IUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	ACHIEVEME	Ā	MONTHLY	TARGET	YEARLY
	1								_			_	+	+	+	+	S	9	+-	+=	+	g	ᆵ	17	_	13	_	퍾	\neg

4	A	В	c	D	E	F	G	н	
1				VTC					
2		Oct	Nov	Dec	Jan	Feb	March	Total	
3	ROCP	65	74	78	85	94	105	501	
4	AEBSC	116	125	149	152	152	159	853	
5									
6									

CSR and other welfare activities of BCCL

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

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

The CSR activities presently being done by BCCL

- To meet the acute shortage of drinking water in peripheral villages' drinking Water is provided through deep borewells, tubewells, pumps/motors, in the peripheral villages of BCCL. Water supply through pipeline, through water tanker is provided also to the villages. Mine water is supplied after proper filtration in Filter Plants.
- **Education**: BCCL adopts a multi-pronged approach to promote quality education in backward areas. The measures taken by BCCL comprise Construction, Extension, and Renovation of school buildings etc are done to promote quality education in the nearby villages. BCCL is Extending financial aid for educational facilities to 83 nos. Private Committee Managed schools. Measures are taken to promote women literacy and carrier development.
- Health Care: BCCL Conducts medical/health camps for dwellers of peripheral villages for rendering free medical consultancy. CSR Clinics, wellness clinics, artificial limbs centers are organized for the benefit of the needy section of the society.. Mobile medical vans are deployed as special arrangement for medical services. AIDS awareness camps are organized as special drive to develop awareness and to render free consultancy. In Kusunda Area many medical /health camps in peripheral villages and in collieries and various awareness programmes have already been conducted, and is being conducted regularly by Area Medical Team.
- Occupational health: awareness programme are organized.
- Other Welfare Activities: this includes Construction / renovation of Community Halls, construction / repair of roads, construction of Health-sub centres, construction of drain, construction of Chhat Ghat in the ponds, Construction of Boundary wall, providing Choupal for community gatherings, etc.
- Mashla Chakki centres: Mashla Chakki centres has been established with machines to promote self employment.
- **Sports & Cultural**: Various activities are organized to propagate sports and cultures. Sports/games items and instruments are also provided with play ground.
- **Village adoption**: Lahbera A SC/ST village nearby Dhansar Mine has been adopted for its all round development and a number of development activities have been carried out including school, health care and Ambulance facility, Mashla Chakki Centre, Community Centre, Play ground, etc.

IN KUSUNDA AREA:

A lot of CSR activities have been done in the peripheral villages in the field of medical and civil and welfare.

	Health Campaigning at surrou	unding villages by MN	IV (Mobile Medical Van):
--	------------------------------	-----------------------	--------------------------

<u>Year</u>	No. of MMV camps	<u>Beneficiaries</u>
2013-'14	298	11,171 patients
2014-'15	306	11,884 patients
2015-'16	380	11,013 patients

2015-16	380	11,013 patients
Village Health Camps- 2017-'18	No. of camps 109	<u>Beneficiaries</u> 2556
Special Health Camps in		
2015-′16	5	354 patients
2016-′17	2	62 children
2017-′18	1	46 patients
2018-19	5	946 patients
CSR Clinic :		
2015-'16		5842 patients
2016-′17		1387 patients
2017-18		1069 patients
Welness Clinic		
2015-′16		6244 patients
2016-'17		3922 patients
2017-18		2194 patients

In 2013-'14 & 2014-'15 and 2015-16 following civil work have been completed under CSR Activity

- Construction of compound wall for Lahbera School at Dhansar
 Deeping of Pond at Lahbera Basti at Dhansar
 -- work completed
 -- work completed
- Constr. of pcc road from Dom tola to Kali Mandir at -- work completed

Barki Bowa Village

- Constr. of pcc road from near house of Vikash Rajak -- work completed

 to main road at Satisfand Village.
- to main road at Satitand Village
 Constr. of pcc road from Parduman Singh Chowk to near
 -- work completed
- house of Sri Kishore Pandey at Ranguni Panchayat
 - Constr. of Yatri shed at Dutta Tola near Hanuman Mandir -- work completed of Ranguni Panchayat
- Constr. of boundary wall, Chabutra and a shed near Gram Dewata -- work completed at Dhansar
 - Construction of PCC road in Lahbera Basti at Dhansar -- work completed
 - Construction of 318 toilets in 179 schools in Chaibasa
 has been undertaken by Kusunda Area under the Pradhan Mantri
 Swatchh Vidyalaya Yojana . Construction of toilets in 25 boys' school,

15 girls' schools and 139 Co-education

School have been undertaken. -- Out of 318, 236 toilets have been completed.

Financial grants given to various privately managed schools is Rs 21,54,000.00 for the period of 1.04.2018 to 31.03.2019



COAL INDIA LIMITED



CORPORATE ENVIRONMENT POLICY

Environmental Policy Statement:

Coal India Limited(CIL) is committed to promote sustainable development by protecting the environment through integrated project planning & design, prevention

/ mitigation of pollution, conservation of natural resources, restoration of ecology & biodiversity, recycling/ proper disposal of wastes, addressing climate change and inclusive growth. It also aims to bringing awareness amongst its stakeholders for continual improvement in environmental performances following best practices.

OBJECTIVES:

Coal India Limited shall endeavor to:

- 1. Plan & design projects with due consideration to environmental concerns for Sustainable Development.
- 2. Conduct mining and associated operation in an environmentally responsible manner to comply with applicable laws and other requirements related to environmental aspects.
- 3. Prevent pollution of surrounding habitation by continuous monitoring and adopting suitable measures for environment protection.
- 4. Implement Environment Management Plans in all our mines / projects effectively to mitigate pollution, conservation of natural resources and restoration of ecology & biodiversity.
- 5. Ensure compliance of all applicable Environmental Clearance& Forestry Clearance conditions and other statutory conditions issued by regulatory agencies.
- 6. Recycling of wastes on the principle of REDUCE, REUSE and RECYCLE.
- 7. Put special thrusts on efficient energy utilization / renewable energy as a measure to reduce carbon foot-print.
- 8. Strive for continual improvement in our environmental performances by setting targets, measuring progress and taking corrective action.
- 9. Taking measures to render productive post mining land use.
- 10. Implementation of activities applicable to CIL arising out of International Conventions.
- 11. Create environmental awareness among the employees and the local communities through pro-active communication and training.

STRATEGIES FOR IMPLEMENTATION OF ENVIRONMENTAL POLICY:

Back Ground:

Coal India Limited subscribes to the view of Sustainable Development. Unless the environment can sustain all the developmental activities, any pursuit of development in isolation can cause irreparable damage to the ecosystem and associated environmental attributes. Keeping this view in mind, Coal India Limited attaches top priority towards sustainable development and approved its 'Corporate Environmental Policy' in December 1995, which was subsequently revised in 2012. However the present policy is the amendment of the 2012 Policy and is complimentary to the National Environmental Policy, 2006.

This modification in the present policy is the outcome of the experience gained since 2012 keeping in view the modifications / amendments made time to time in environmental policies and additional stipulation notified by MoEF&CC (Ministry of Environment, Forest& Climate Change) and other organisations concerning mine closure, reclamation of degraded land, environmental clearance etc. and also with the objective of revisiting the corporate policy.

This Policy has a vision of Green Mining and mission of 100% compliance of environmental statutes applicable to coal mining industry.

Strategies: Coal India adopts the strategies appended below for effective implementation:

1. MINE/ PROJECT PLANNING & DESIGN FOR SUSTAINABLE DEVELOPMENT:

- a) Coal being a non-renewal energy source, extraction shall be planned prudently to meet national requirement in a planned way. The projects shall be designed on the principle of Sustainable Development with due consideration to environment, mine closure, safety and aspirations of the stakeholders at the planning& design stage itself with due regard to mine closer plan.
- b) While preparing the Mining plan/project reports, the effort shall be to incorporate latest mining technologies and equipment's with optimal capacity, which are more environment friendly.

c) All Mining Plan/ project reports will be provided with detailed provisions for ensuring environmental compliances.

2. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) & ENVIRONMENT MANAGEMENT PLAN (EMP)

- a. All mine planning and design shall be environmentally acceptable and operation shall be carried out in such a way as to facilitate the compliance of stipulated environmental standards.
- b. EIA& EMP for all projects shall be formulated as per the approved ToR (Terms of Reference) and pubic consultations for obtaining Environmental Clearance (EC) from MoEF&CC. Similarly, in the existing projects needing enhancement of production capacities with or without increase in land, change of technology, renewal of lease and change in land use etc. fresh EC is required to be sought as per norms. The projects shall be operated after obtaining Consent to Establish (CTE)/Consent to Operate (CTO) from State Pollution Control Boards (SPCB).
- c. Detailed Mine Closure Plans shall be prepared for all existing and new mines as per the MoC (Ministry of Coal) guidelines.

3. COMPLIANCE OF THE STATUTORY REQUIREMENTS:

The implementation of EMP and fulfillment of all other statutory requirements like conditions of EC, FC and consents to establish & operate, including timely submission of returns to statutory bodies and various agencies, are to be ensured at all levels.

4. MEASURES TO MITIGATE POLLUTION:

a) Air Pollution:

- i) Generation of dust is to be controlled at the source to the possible extent with necessary control measures during drilling, blasting, loading, unloading, CHP transfer points etc.
- ii) Deployment of eco-friendly mining technologies.
- iii) Dust generation is to be minimized along coal / waste transportation routes.
- iv) Mechanized transportation of coal to be encouraged.
- v) Green belt is to be created around the source of dust.

b) Water pollution:

- i) The mine water and other effluent shall be treated to ensure the discharge norms as per statute. The treated effluent shall be utilized to the extent possible with a view to achieve maximum water conservation.
- ii) Oil & grease from the effluent shall be removed by Oil & Grease Traps for proper disposal.

c) Noise / ground vibration:

- i) All measures to minimize noise pollution will be taken including maintenance of HEMM, equipment and provision of PPE where required.
- ii) Suitable controlled blasting techniques shall be followed to reduce ground vibration as well as noise pollution.

d) Land reclamation:

- i) Progressive and concurrent reclamation of mined out areas will be carried out as per approved EIA/EMP and Mine Closure Plan (MCP).
- ii) Slopes of external dumps are the important area to be suitably graded / terraced for effective reclamation and plantation.
- iii) Preservation of top soil is required for future use. Old as well as existing non-active dumps are to be technically and biologically reclaimed.
- iv) Monitoring of reclamation work of all opencast mines will be done through Satellite Surveillance. The outcome shall be put in the websites.

e) Mine closure plans:

Mine Closure Plan (MCP) shall be prepared for each mine. MCP are being delineated in two phases viz. progressive and final mine closure. Appropriate funds are set aside and deposited under a special Escrow fund every year as per MoC guidelines, to be utilized for proper and final mine closure.

For mines closed prior to issuance of MoC guidelines (i.e. 27th August, 2009) suitable action to be taken as per provisions of Mines Act 1952.

f) Mine fire

CIL shall endeavour to reduce occurrence of mine fire and subsidence due to mining activity. Monthly report shall be submitted to top management of the subsidiary and CIL and Quarterly to company board. Action Plan for mine fire control shall be implemented. Monitoring will be done through Satellite Surveillance/other suitable technology.

g) Monitoring:

- I. All receptors in and around the mining projects shall be monitored regularly to assess the efficacy of the pollution control / mitigation measures within stipulated standards.
- II. Effect of mining on the hydrology of the area will be monitored through measurement of water level and its quality of nearby wells and bore holes provided for this purpose. Conservation of water through rainwater harvesting shall be taken up.
- III. Area and Unit environmental cells shall have regular interaction with the people in and around the coal mines and other allied units on matters related to environment to take necessary and timely corrective actions.
- V. Environmental initiatives and monitoring through self and third party environment audit shall be conducted for generating useful data for taking corrective actions and mitigation measures as per guidelines.

h) Other measures:

- I. Special emphasis shall be given to undertake R&D related to various facets of coal mine environmental management in collaboration with Central Mine Planning and Design Institute (CMPDI) and other competent institutions.
- II. Besides ensuring statutory compliance, the CIL desires to set high standards and continual improvement.
- III. A number of mines and establishments of CIL are ISO 14001 certified and balance mines & establishments shall be ISO 14001 certified in phased manner.
- IV. CSR and R&R policies of CIL are to be incorporated for better planning and implementation of the socio-economic issues of coal mining areas.
- V. The coal mining environmental issues are complex and require multidisciplinary approach to address the same. CIL will endeavor to enter into MoUs with expert agencies of repute to assist in environment issues and also help in capacity building of CIL executives.
- VI. CIL conduct periodical medical examination (PME) of its work force on routine basis in compliance of the requirement mining rules and regulation, additional test will be done as and when require.

5. PRESERVATION OF BIO-DIVERSITY:

a) This will start from mine planning including technically and biologically reclamation of mined out areas in collaboration with State Forest Departments, Wild Life Divisions, NGOs etc. working in the fields of bio-

- diversity conservation.
- b) The selection of species for plantation shall be done in consultation with the local community to include the local species and their preferences, if any.

6. COAL BENEFICIATION / COALWASHERIES:

- a) For beneficiation of Runoff Mines (ROM) coal, washeries are being set up in a phased manner as per requirement and statutes.
- b) Slurry Management System (SMS) in all washeries shall be organized to ensure collection of fines, gainful utilization of rejects viz. power generation in Fluidized Bed Combustion (FBC) plants, selling to brick manufacturers or adopting other environmental friendly disposal options as feasiable.
- c) The reject dumps and tailings shall be suitably handled to avoid any contamination.
- d) The effluent from washeries including tailings pond shall be suitably treated and reused to minimize water consumption with zero discharge concept.

7. CONSERVATION AND CLEAN TECHNOLOGY:

- a) R&D projects shall be taken up to promote clean coal technology and improve the existing technologies.
- b) Energy saved is energy produced. Voluntary energy audit to be done for corrective action to reduce carbon footprint.
- c) Clean Development Mechanisms will be explored for reducing emission of Green House Gases by exploration, identification, preparation of projects reports for extraction of methane from Coal Bed, Coal Mine, Abandoned Mine, Ventilation Air, UG Coal Gasification, generation and utilization of renewable energy etc.

8. AWARENESS PROGRAMME:

 a) Publicity to generate awareness through exchange & communication of information, newsletters and periodicals on environment, seminars, work- shops, celebration of World Environment Day etc. at CIL / Subsidiary HQs, Areas & units to be undertaken. Regular training

- programs to be organized at various levels to inculcate awareness among employees.
- b) Courses on environmental and forestry laws and Environmental Protection Measures and the Corporate Policy to be organized for project executives for improving knowledge.
- c) CIL to give annual awards for achieving excellence in environment related issues and activities. These awards will be in recognition for implementation of EMP, land reclamation and compliance of statutes, proper maintenance of air & water quality and noise level.

9. WASTE MANAGEMENT:

CIL will undertake appropriate action for safe handling, storage and disposal of solid waste and hazardous waste generated from its industrial set up and colonies as per relevant rules. The biomedical waste generated from hospitals and dispensaries will be collected and disposed in appropriate facilities created as per statutes. E-waste management and handling of various types of e-waste generated in its operations will be done as per rule.

10. CORPORATE ENVIRONMENT RESPONSIBILITY:

Corporate Environment Responsibility (CER) is mandatory for issuing environmental clearance for all the Greenfield and Brownfield projects as per directives of MoEFCC with effect from 1st May, 2018 (O.M.No.22-65/2017- IAIII dt. 19.06.2018). Budgetary provisions should be kept for implementation of provisions of CER for all the projects which will be submitted to MoEFCC for grant of environmental clearance.

11. INCORPORATION OF VIEWS OF STAKEHOLDERS:

CIL will critically examine and incorporate the viewpoints of various stakeholders like PAPs/PAFs, Parliamentary Committees, Standing Sub-Committees, NGOs etc. CIL being a listed entity with stock exchange, it will also take into consideration the observations/viewpoints of international investors.

12.IMPLEMENTATION OF POLICY:

- i) Manpower: CIL shall have environmental divisions at decision making & operational levels in its structure. The environment department shall be set up and strengthened at:
 - i) CIL Corporate HQ at Kolkata
 - ii) Subsidiary HQs
 - iii) Areas / Units / Collieries / Workshops / Washeries

- iv) CMPDI (HQ) & CMPDI Regional Institutes
- **ii) Roles and Responsibilities:** The environmental department, set up at company HQs, Areas and Unit levels with appropriate manpower and resources, shall be responsible for implementation of policy, obtaining EC, FC, consent to establish

& operate, statutes requirements and undertaking mitigation measures besides preparation of action plan every year and also to intimate the status of implementation to the management regularly.

iii) Annual Environment Budget (Revenue & Capital): The Annual Environment Budget (revenue & capital) shall be prepared based on the action plan including monitoring of various bench marks and the budget utilization. The year wise funds earmarked for environmental protection measures shall be kept in separate accounts with Environmental cost code.

13. FLEXIBILITY TO THE SUBSIDIARY COMPANIES:

CEP 2018 will be applicable for all subsidiaries of CIL. The subsidiary company Boards have been authorized to approve necessary modifications in CEP 2018 with reference to unique conditions prevailing at the concerned subsidiary.

REVIEW OF ENVIRONMENTAL POLICY:

In view of the present fast changing social, economic and environmental scenario, this Policy shall be reviewed every 5 years to incorporate the changes in the legal, technical, environmental, economic and social inputs prevailing at that time. Whenever, there is change in National Environmental Policy or other National / State relevant policies, Acts etc, this Corporate Environmental Policy would be reviewed and suitably revised.



Ph: 0326-2204933



झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद् Jharkhand State Pollution Control Board HIG-1, Housing Colony, Dhanbad-826001

Letter No.... 2650

Dated 6/2/13...

From,

Regional Officer,

Dhanbad

Io.

HOD (Envt.), M/s. B.C.C.L.,

Koyla Bhawan, Koyla Nagar,

Dhanbad.

Sub:

Fixing up monitoring station/Sampling location of Air, Water & Noise.

Sir,

With reference to you letter no. GM(Env.)/F-JSPCB/2013/783, dt. 06.07.2013 We have approved Air, Water & Noise monitoring Station/Sampling location after verification and return a copy of the map.

Encl-A/a.

Your's faithfully,

(Dinesh Prasad Singh) Regional Officer.

Memo.....

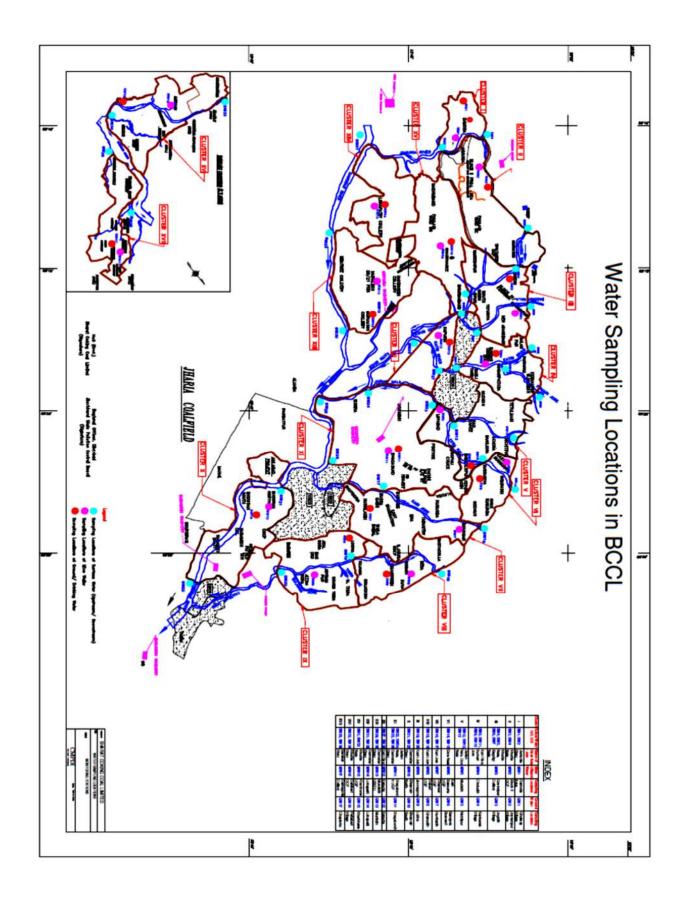
Dhanbad, dated.....

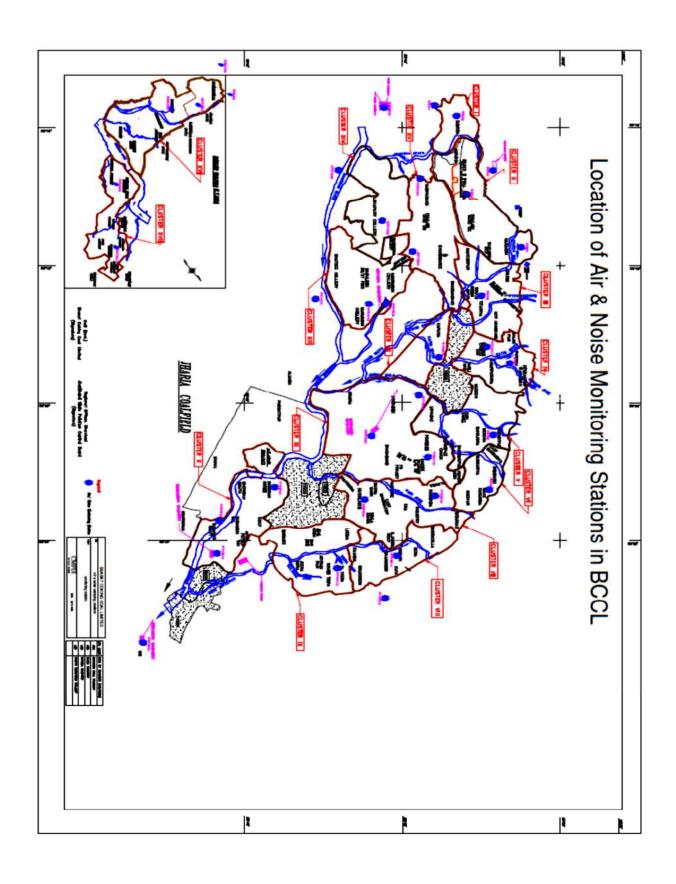
Copy to: The Member Secretary, Jharkhand State Pollution Control Board for information & enclose a copy of the map for necessary action.

Encl-A/a.

(Dinesh Pd. Singh) Regional Officer.

19





AMBIENT AIR QUALITY MONITORING

2.1 Location of sampling station and their rationale:

(As per G.S.R. 742 (E) dt. 25th December, 2000)

Ambient Air Quality Sampling Locations

- I. CORE ZONE Monitoring Location
- i) Kusunda OCP (A10): Industrial Area The location of the sampling station is 23⁰46' 49.07" N & 86⁰ 24' 15.71" E. The sampler was placed at 1.5 m above the ground level of Safety Office.
- ii) Hurriladih UGP (A28) The location of the sampling station is 23⁰44' 4.18" N & 86⁰ 24. 6.21 E. The sampler was placed at 1.5 m above the ground level of Safety Office.

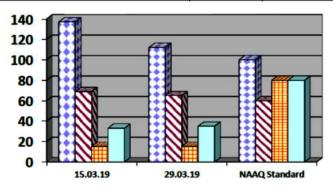
II. BUFFER ZONE Monitoring Location

- i) Dobari UGP (A11):Industrial Area The location of the sampling station is 23°45′50.00" N & 86°26′ 1.00" E. The sampler was placed at 1.5 m above the ground level of Safety Office.
- ii) Moonidih Washery (A29): Industrial Area The location of the sampling station is 23°44'26.00" N & 86°21'16.00"E. The sampler was placed at 1.5 m above the ground level of Project office.

AMBIENT AIR QUALITY DATA

Cluster -VII, Bharat Coking Coal limited Month: MARCH, 2019

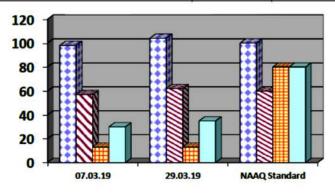
Station Name: Kusunda OCP (A10)		Zone: Core		Category: Industrial	
SI. No.	Dates of sampling	PM 10	PM 2.5	so ₂	NOX
1	15.03.19	137	69	15	33
2	29.03.19	112	65	15	35
	NAAQ Standard	100	60	80	80



■ PM 10
PM 2.5
⊞ SO2
□NOx

Year: 2018-19.

Station Name: Hurriladih UGP (A28)		Zone: Core		Category: Industrial	
SI. No.	Dates of sampling	PM 10	PM 2.5	so ₂	NOX
1	07.03.19	98	57	13	30
2	29.03.19	104	62	13	35
	NAAQ Standard	100	60	80	80



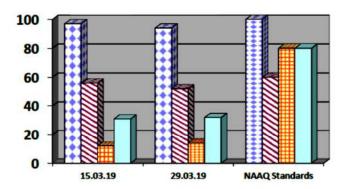
□ PM 10 □ PM 2.5 □ SO2 □ NOx

खुमन सीमैन, राद्र

Analysed By JSA/SA/SSA Checked By Lab In Charge RI-2, CMPDI, Dhanbad

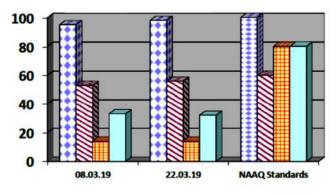
Approved By HOD(Mining/Environment) RI-2, CMPDI, Dhanbad

Station Name: Dobari UGP (A11)		Zone: Buffer		Category: Industrial	
SI. No.	Dates of sampling	PM 10	PM 2.5	SO2	NOx
1	15.03.19	97	56	12	31
2	29.03.19	94	52	14	32
	NAAQ Standards	100	60	80	80



□ PM 10
☑ PM 2.5
■ SO2
□NOx

Station Name: Moonidih Washery (A29)		Zone: Buffer		Category: Industrial	
SI. No.	Dates of sampling	PM 10	PM 2.5	SO2	NOx
1	08.03.19	95	53	14	33
2	22.03.19	98	56	14	32
	NAAQ Standards	100	60	80	80



□ PM 10 □ PM 2.5 □ SO2 □ NOx

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

खुमन सीमैन, राद्र

Analysed By JSA/SA/SSA Checked By Lab In Charge RI-2, CMPDI, Dhanbad

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

WATER QUALITY MONITORING

3.1 Location of sampling sites

(Refer Plate No. - II)

i) Mine Discharge of Dhansar UGP (MW7)

A sampling point is fixed to assess the effluent quality of Mine discharge. This location is selected to monitor effluent discharge in to Kari jore.

3.2 Methodology of sampling and analysis

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

3.3 Results & Interpretations

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

WATER QUALITY DATA (EFFLUENT WATER- FOUR PARAMETERS)

Name of the Cluster: Cluster -VII		Month: MARCH, 2019	Name of the Station: Mine Discharge of Dhansar UGP		
SI. No.	Parameters	MW7 First Fortnight 15.03.19	MW7 Second Fortnight 30.03.19	As per MOEF General Standards for schedule VI	
1	Total Suspended Solids	26	24	100 (Max)	
2	pH	7.53	7.32	5.5 - 9.0	
3	Oil & Grease	<2.0	<2.0	10 (Max)	
4	COD	32	28	250 (Max)	

All values are expressed in mg/lit except pH.

खुमर सीमैन, रुद्

Analysed By JSA/SA/SSA Checked By Lab In Charge RI-2, CMPDI, Dhanbad

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

Ambient Air Quality Standards for Jharia Coal Field As per the Environment (Protection) Amendment Rules, 2000 notified vide notification G.S.R. 742(E), dated 25.9.2000.

Category	Pollutant	Time weighted average	Concentration in Ambient Air	Method of Measurement	
1	2	3	4	5	
III Coal mines located in the coal fields of • Jharia	Suspended Particulate Matter (SPM)	Annual Average * 24 hours	500 μg/m³ 700 μg/m³	- High Volume Sampling (Average flow rate not less than 1.1	
Raniganj Bokaro	Respirable Particulate Matter (size less than 10 µm) (RPM)	Annual Average * 24 hours **	250 μg/m ³ 300 μg/m ³	Respirable Particulate Matter sampling and analysis	
	Sulphur Dioxide (SO ₂)	Annual Average * 24 hours	80 μg/m ³ 120 μg/m ³	1.Improvedwest and Gaeke method 2.Ultraviolet	
	Oxide of Nitrogen as NO ₂	Annual Average * 24 hours	80 μg/m³ 120 μg/m³	fluorescene 1. Jacob & Hochheiser Modified (Na- Arsenic) Method 2. Gas phase Chemilumine- scence	

Note

Annual Arithmetic mean for the measurements taken in a year, following the guidelines for frequency of sampling laid down in clause2.

²⁴hourly/8hourlyvaluesshallbemet92%ofthetimeinayear. However, 8% of the time it may exceed but not on two consecutivedays.



STRICTLY RESTRICTED FOR COMPANY USE ONLY

RESTRICTED

The information given in this report is not to be communicated either directly or indirectly to the press or to any person not holding an official position in the CIL/Government.

GROUNDWATER LEVEL & QUALITY REPORT FOR CLUSTER OF MINES, BCCL

(Assessment year - 2017)

[CLUSTER – I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XIII, XIV, XV & XVI of Mines, BCCL]

JHARIA COALFIELD AND RANIGANJ COALFIELD (PART)

For

(BHARAT COKING COAL LIMITED)

(A Subsidiary of Coal India Limited)

KOYLA BHAWAN (DHANBAD)

MARCH - 2018

3.3 G Monitoring of Ground Water Levels of Cluster-VII

Cluster-VII consists of fourteen mines namely; Dhansar mixed mine, Kusunda OCP, Viswakarma OCP, Industry UG (closed), Alkusa UG, Ena OCP, S.Jharia/Rajapur OCP, Burragarh UG, Simlabahal UG, Hurriladih UG, Bhutgoria UG, Kustore UG (closed) and E.Bhuggatdih UG (closed) under the administrative control of Kusunda Area and Kustore Area of BCCL. This Cluster of mines is located in east central part of Jharia Coalfield in Dhanbad district of Jharkhand.

The present leasehold area of Cluster-VII is 2127.70 Ha. The area has a general undulating topography with general slope towards south. The RL varies from 172 m to 221 m above M.S.L. Kari Jore, Chatkari Jore and its tributaries are controlling the drainage pattern of the area. The area comes under the watershed of Kari Jore and Chatkari Jore.

7 hydrograph stations (**D-3**, **D-4**, **D-33**, **D-34**, **D-47**, **D-55** and **D-80**) are located in the core zone of the mine area. Water level monitoring in these monitoring stations has been done in the months of February, April, August & November '2017 and the Ground water level data is enclosed in the table below:

SI	Well	Location	Water level (bgl in meters)				
No.	No.		Feb'17	Apr'17	Aug'17	Nov'17	
1	D-3	Dhansar	1.30	2.15	1.25	2.30	
2	D-4	Jharia	1.11	1.21	0.91	1.46	
3	D-33	Kustore	0.60	0.75	0.60	0.75	
4	D-34	Kusunda	0.35	0.80	0.90	0.55	
5	D-47	Parastanr	3.20	3.15	1.92	2.85	
6	D-55	Hariladih	4.52	6.42	2.12	2.37	
7	D-80	Bastacolla	3.70	8.65	2.15	3.70	
Ave	Average WL (bgl)		2.11	3.30	1.41	2.00	

Ground Water Level (in bgl) varies from 0.35 to 4.52 m during February, 0.75 to 8.65 m during April, 0.60 to 2.15 m during August and 0.55 to 3.70 m during November within the Core Zone of Cluster-VII area.



थाना - मुफरिसल, जिला - पश्चिम पिन 833201 जो प्रबंधक, कटिहार गंत कनीय वाणिज्य मालुका रोड स्टेशन ना सक्षम प्राधिकारी नांक 29-05-2015 अनुपस्थित है। मोरंडम के अंतर्गत ड एआर के लिए श्रुक्त की जा चुकी

नि चार्ज शीट के

किया और न ही धिकरण को अपने

किया गया है कि शन के बाद, 15 डल रेल प्रबंधक लवे, कटिहार के रूप से रिपोर्ट नुदा डी एंड ए कतरफा निर्णय

पक, कटिहार मा रेलवे पर्यावरणीय स्वीकृति प्राप्त हुई है। विवरण निम्न है:-

खान का नाम

क्लस्टर-सात (धनवाद जिले में स्थित भारत कोकिंग कोल लिमिटेड के 14 OC/UG खदानों समूह) को पर्यावरण , वन एवं जलवायु परिवर्तन मंत्रालय के द्वारा पूर्व प्राप्त 8.16 MTPA अधिकतम क्षमता से बढ़ी हुई अधिकतम क्षमता 11.42 MTPA के लिए पर्यावरणीय स्वीकृति हुई है।

स्वीकृति आदेश संख्या एवं तिथि J-11015/238/2010-IA

11(M) Pt. दिनांक : 12th अक्टूबर, 2018

पर्यावरणीय स्वीकृति की प्रतिलिपि झारखण्ड राज्य प्रदुषण नियंत्रण बोर्ड के पास उपलब्ध है तथा इसे पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय की आधिकारिक वेबसाईट www.environmentclearance.nic.in और भारत कोकिंग कोल लिमिटेड के आधिकारिक वेबसाईट www.bcclweb.in पर उपलब्ध है।