WESTERN COALFIELDS LIMITED <u>SIX MONTHLY</u>

ENVIRONMENTAL MONITORING REPORTS

FOR PERIOD OF

1stAPRIL- 2022 to 30thSEPT - 2022



KOLGAON OPENCAST PROJECT WCL, WANI AREA.

STATUS OF COMPLIANCE OF ENVIRONMENT CLEARANCE CONDITIONS OF KOLGAON OPENCAST MOEF CLEARANCE LETTER NO J-11015/228/2009/IA-II(M) DATE 16.02.2012

☐ A) SPECIFIC CONDITIONS

S.N.	Conditions	Status	of Com	pliance (as	on 30/10/2	.022)		
1	No washery shall be established within the ML without prior environmental clearance from this ministry.	No wa		installed wit		¥		1
Ii	Topsoil shall be stacked properlywith proper slope at earmarked 'site(s) of	Topso as on Sr. No.	30.09.20 Dump Name	Type of Soil(BC/	eparately an External/ Internal	Area (in Ha)	tails are giv Height of Dump(in	Volu me(in Mm3)
	the two top soil			Hard Soil)		110)	m)	
	dumps shall not be kept active and shall	1	TS1B	BC	External	17.74	30	2.2
	be used within a year	2	TS4	ВС	External	10.16	30	1.4
lii	greenbelt. The embankment constructed alongthe river boundary shall be of suitable dimension and stabilized with plantation so as to withstand the peak water flow and prevent mine inundation OR shall be stacked	plants An er and h	ation. nbankmo eight 6m	dump is find ent is constru in the mine	ucted for to	tal lengtl	n 6km with	width 3
iv	OB shall be stacked at the six earmarked external	prese	ent 2 Nos	s. external O 0.09.2022 a	B dumps e: re given be	xists. low:	Height of	iparteo.
1	OB dumpsite(s) only	1	Dump	Type of Soil	External/	Area	neight of	Volum
	OB dumpsite(s) only covering an area of 65 ha and shall no	Sr. N	Name	(BC/ Hard Soil)	Internal	(in Ha)	Dump (in m)	e (in Mm3)
	OB dumpsite(s) only covering an area of 65 ha and shall no exceed the max	Sr. N o. 1	Name HS1B	(BC/ Hard Soil) Hard Soil	Internal External	(in Ha) 21.96	Dump (in m) 52	e (in Mm3) 4.99
	OB dumpsite(s) only covering an area of 65 ha and shall no	Sr. N o. 1	Name	(BC/ Hard Soil)	Internal	(in Ha)	Dump (in m)	e (in Mm3)

dump shall not exceed 28" Bamboo other native and species shall be planted OB on dumps for slopes stability, Monitoring and management of the reclaimed dumpsite shall continue until the vegetation becomes sustaining Compliance status shall be submitted to Ministry the Environment & Forests and its Regional offices located at Bhopalon yearly basis

Proper benching of OB dumps are done to maintain ultimate slope of OB is less than 28 degrees. Six monthly compliance report is submitted to RO, MoEF & CC Nagpur.

Catch drains and siltation ponds of appropriate size should be constructed to arrest site and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green development etc. The drains should be regularly desilted and maintained properly.

V)

Garland drains gradient (size, and sump length) capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall maximum and discharge in the area adjoining the mine site, sump capacity should also provide retention adequate period to allowproper of silt settling material. Dimension of the retainingwall

Garland drain along the periphery of the embankment has been provided for a length 8370m, width 3m and height 3m. Catchdrains of dimension 3000 m length, 3.5m width and 3m height is provided around OB dump as well as around the quarry. Desilting is done before every monsoon.

The sump of adequate capacity ,considering peak rainfall to provide initial settlement of suspended particles. The water then is being pumped out on surface & led into surface sedimentation tank of size 2 Nos. of each 22 m x 4m x2.5m

vi)	at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data. CrusheroftheCHPof adequate capacity for	At mining lease area of Kolgaon OC mine, no CHP is present. The coal from Kolgaon Mine is crushed at dedicated CHP located at
	the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive	Ghugus OC. The CHP is fully covered with GI sheets and mist sprinklers are installed inside CHP.
	emissions from crushing operations, conveyor, haulage roads, transferpoints. Etc.	
vii)	Drill shall be wet operated.	1No.drill is present which is fixed with wet drilling technology and dust extractor.
viii)	The project authorities shall ensure that the roads used for mineral transportation are black topped and are properly maintained A-3 tier green belt comprising of a Mix of native species shall be developed all along the major approach roads and major haul roads.	The length of road within mining lease area is given below: 1. Bitumen road is 1.6 km and 2. Concrete road is 200m The coal transportation road from Kolgaon mine to Ghugus has an average lead of 13.163 Km. The complete road is black top with few concrete sections at critical areas. Till date 2500 Nos. of plants have been planted near roadsid within EC area of mine.
ix)	The capacity oftrucks used for transportation shallbe minimum 25T trucks and shall be mechanicallycovered.	The capacity of trucks deployed for coal transportation is as per approved guidelines. All the trucks are covered with Tarpaulin before leaving mine premises.
x)	Controlled blasting shall be practical with use of delay detonators and only during daytime. The mitigative measures for control ofground	Controlled blasting is in practice with due permission from DGMS. All conditions stipulated by DGMS for control of ground vibration and for arresting fly rocks & boulders are strictly followed during actual operation.

	vibrations and to	
	arrest the fly rocks	
	and boulders shallbe	
	implemented.	
xi)	A progressive	48100 nos. of plants have already been planted in and around the
,	afforestation plan	mine . The species planted are Neem, Karanj, Arjun, Mango,
	shall be implemented	Jamun, Gulmohar, etc. 45600 Nos. plants have been planted in
	covering an area not	plain land 19.25 Ha area and 2500 Nos. plant planted in 1.25 Ha
	less than 160.77 ha,	area have been planted near road within mine premises.
	which includes	area have been planted near road within time premises.
	reclaimed external	
	OB dump and	
	embankment area and	
	(71.8 ha). Backfield	
	area(30 ha), alongML	
	boundary, alongroads	
	and infrastructure (3	
	ha), embankment	
	(16.85 ha) and within	
	vacant land (55.92	
	ha) and in township	
	located outside the	
	lease by planting	
•	native species in	
	consultation with the	- (36)
П	local DFO /Agriculture	
1	Department. The	
	density of the trees	
	shall be around 2500	1,000
	plants per ha.	264
	Massive plantation	A10.7
1	shall be	
	carried out in open	
	spaces in and around	
	the mine and avenue	168
	plantation along the	
	main approach roads	
	to the mine.	91
xii)	Of the total quarry	Plantation on backfilled area will be done in future after mine
,	area of 116.56 ha, the	
4	backfield quarry area	
	of 65.20 ha shall be	
	reclaimed with	
1	plantation using	
	native species and a	
	void of 72.38 ha	
	proposed at the post	
	mining stage and to	Transfer of
	be converted into &	
	water body shall be	
	gently sloped and the	
	upper benches shall	
		1100000
	be terraced and	1-1-128-121-12-12-12-12-12-12-12-12-12-12-12-12
	be terraced and stabilized with plantation /a	

	no had	
	afforestation by	
	planting native plant	
	species in	
1	consultation with the	
	local DFO/	
	Agriculture	
	Department. The	
	density of the trees	
	shall be around2500	x *
	plants per ha.	in the section
xiii)	No groundwater shall	At present no Ground water is used for mining operation.
	be used for the mining	
	operation	
xiv	Regular monitoring	Regular monitoring of ground water level from existing wells at 20
XIV	of ground water level	to set and of Duffer zone is being done by third party 1975. Allancon
	and quality should be	t al anatonica Dut Ltd Nagpur for four times a year i.e. during pie-
	and quality should be	monsoon (May), monsoon (August), post-monsoon (November),
	carried out by	and minter (Innuary) seasons
	establishing ane	The monitoring report is regularly sent to Regional Officer,
	twork of existing	CGWB Nagpur with a copy to MoEF & CC & CPCB.
	wells and	Copy of ground water monitoring report and forwarding letter is
	construction of new	Copy of ground water monitoring report and research
	piezometers. The	enclosed.
	monitoring for	
	quantity should be	
	done four times ayear	
	in pre-monsoon	
	(May), monsoon	
	(August) post-	
	monsoon (November)	
	& winter (January)	
	seasons and for	
	quality in May. Data	
	thus collected should	
1	be submitted to the	
	Ministry of	
	Environment	4100
	&	
	Forests and the	NEW STATE OF THE S
1	Central Pollution	
	Control Board,	
1	quarterly within one	
	month ofmonitoring. The company shall	Deepening of pond under CSR have been done at Takli and Shivni
xv)		
	put up artificial	- Company Control of the Control of
	groundwater recharge	
	measures for	1 7012-417-3-3
	augmentation of	
	groundwater resource	
	in case monitoring	
	indicates a decline in	7.00247.00
	water table. The	
	project authorities	
	shall meet water	16. 115
	requirement of	
	nearby village(s) in	
	case the village wells	
-		(France) to the control of the contr

	go dry due to dewatering of mine						
vi)	0	There is no dedic	ated co	lony for	Kolgaon OC mine, in its mining		
		lease area. People working at Kolgaon OC mine resides at Kailash					
	Figure 1 and 1	nagar colony (township with in mining lease area of Mungoli					
		OC).AtKailashnagar,0.40MLDcapacitySTPisprovided.					
	for workshop and		ontractu	al thus no	o workshop exists. Therefore, no		
	CHP waste water.	ETP is provided.					
vii)					ME) is done for the workers		
	regular periodic						
	health check upof their workers, 10 % at	examination (PME) of all the workmen once in 5 years as per the statue and workers above 55 years of age once in a year is					
	the workers identified						
	from workforce	conducted. All the works are being carried out with all the safety measures and awareness is being created among employees for					
	engaged in active	safety and to avo			H I		
	mining operations	,					
	shall be subjected to	Year	PME	IME	1		
	health check up for		7	(Cont)			
	occupational diseases	2017	19	115	1		
ě	and hearing	2018	11	119			
	impairment, if any, through an agency /	2019	24	46			
	institution within the	2020	46	46			
	district as within a	2021	10	330			
	period of one yearand	2022	04	30			
	the recruits reported	(upto Mar.22)	04	30			
	to this ministry and to	April 2022 to	23	35			
	DGMS as part of	Sept 2022	23	33	3.000434		
	compliance report.	Sep. 2022	1	1			
xviii	ii) For monitoring land use pattern and for postmininglandusea time series of landuse maps based on satellite imagery (ona scale of 1:5000) of the core zone and buffer zone from the start of the project until end of mine life shall be prepared once in years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and it Regional officerat Bhopal.	less than 5 milli 3 year by Satell The satellite da Data is submitte monthly basis.	on cum ite and t ta for K	. (Coal+C the data is olgaon O	oring of all mine of WCL having DB)capacity is being done once is available in the website of WCDC mine for year 2020 is enclose Office, MoEF & CC, Nagpur on s		
xi	plan along wit details of corpusFun shall be submitted t the ministry of	h done as per ap d The Mine Clo to by the WCL F having account	proved sure Pla Board al et no. 08	Mine clos n for this ong with 89731610	ackfilling, afforestation etc. will sure plan. project was approved on June 20 opening of a corpus fund / accorpus fund / acco		

forests 5 years before mine closure for approval, in case the deep side extension project is not planned / implemented The XX) project authorities shall in consultation with the panchayat of the local villages identify socio-economic and measures welfare under CSR to be carried out over the balance life of the mine. A budget / provision of Rs 5 per tonne of coal shall be earmarked for CSR activities. The villages to be adopted under CSR shall include kolgaon, Chikhali Takli, Jugad Sindola and Sakhara. The budget and expenditure village-wise therein and activity-wise for CSR shall be displayed on WCL website and also included as part of the AnnualPlan.

amounts available in the account as on date 31.03.2022 is 486892447.80 INR (Including the principal along with the interest).

For welfare of nearby villages regular CSR activities are also executed. The activities carried out in last 3 year is given below:

Works carried in Mungoli

- 1. 2020-21-ConstructionofBusstandatSakharaVillage
- 2. 2019-20 Tree plantation at Sakharaschool
- 2019-20 Construction of community toilet at Matholi village
- 4. 2018-19 Deepening of pond in Takli village at Kolgaon
- 2018-19 Construction of cement concrete road at Shivni (New)Village
- 6. 2018-19 Construction of cement road at Dalit basti of Sakhara

The sanctioned CSR fund and expenditure (workwise, village wise along with amount) is displayed in official WCL portal.

Skill development training is provided to project affected people of all mines of Wani Area at Vocational Training Center, Ghugus of regular basis.

Due to COVID-19 pandemic situation, no training has been provided in FY 2020-21.

The details of Skill development program is given below:

Sr. No	Trade	Duration		Days	Partic ipant
1	Welding & Fabrication	15/10/2015 05/11/2015	to	18	35
2	Electrician	15/10/2015 05/11/2015	to	18	40
3	Agrobased	15/10/2015 05/11/2015	to	18	20
4	Beauty Parlour	15/10/2015 05/11/2015	to	18	35
5	Solar System	23/01/2017 22/02/2017	to	25	30
6	Basic Tailoring Course	14/09/2018 13/10/2018	to	25	60
7	Beauty Parlour	09/02/2019 10/02/2019	to	25	30
8	Electrical gadget repairing course	09/02/2019 10/02/2019	to	25	30
9	Tailoring course	14/11/2019 12/12/2019	to	25	41
10	Beautician Course	27/02/2020 17/03/2020	to	Stopped due to COVID 19 (8 days of class remaini ng)	30
	Total				351

In addition to this people from nearby villages are employed in contractual mining and civil works.

		Health camps are being conducted in nearby villages with our company doctors and medical staff for improving awareness and health consciousness among people. Last program was conducted on 12/11/2021 at Mungoli village benefiting 132 Nos. villagers. CSR clinic is provided at Area Hospital, Rajiv Ratan Central Hospital for PAF. CSR day is scheduled on Monday and Thursday. An average of 1100 Nos. of people from project affected families from nearby villages of mines of Wani Area gets treated in the hospital every month. Approved CSR policy of CIL is being followed.
xxi)	The company shall have a well laid down Corporate Environmental policy approved by the Board of Director. The Environment Policy shall prescribe for standard operating process / procedures to bring in to focus any infringement / deviation/ violation of the environmental norms /condition to provide for checks and balances the company should have a well laic out system of reporting on non compliances/ violations of	Coal India Limited (CIL) has formulated a comprehensive Environment Policy only in March 2012, followed by a revised policy in December 2018 approved by CIL Board in its 377th Meeting held on 20th December'2018 for implementation at CIL and its subsidiaries. This Corporate Environment Policy 2018 of CIL was subsequently discussed in the 309th Meeting of the Board of Directors of WCL heldon04.03.2019.After deliberation ,WCL Board has adopted the policy in principle for implementation in WCL and the same was communicated vide Ref: WCL/BD/SECTT/BM-309/2019/267dated 15.03.2019.
	environmental norms to the Board of Directors of the company and /or shareholders or stakeholders at large.	

GENERAL CONDITIONS:

S.N.	CONDITIONS.	STATUS OF COMPLIANCE.
i	No change in mining technology and scope working shall be made without prior approval of the ministry of environment and forests.	Noted for compliance. No change has been made or envisaged in future.
ii	No change in the calendar plan including excavation quantum of mineral coal and waste shall be made.	
iii	Four ambient air quality-monitoring stations shall be established in he core	Four monitoring stations has been established in the project. Two core zones stations i.e. SAM office,

So well as buffer zone for PM 10 SO2 & NOx monitoring, location stations shall be decided based on eteorological data topographical . Environmentally & ecologically	Mungoli and Manager Office, Kolgaon. Two buffer zone stations have been established at villages namely Kailas hnagar township filter plant and Kolgaon village. SPM, PM10, PM2.5, SO ₂ , Nox is
targets in consultation with the ollution Control board.	being monitored regularly at these station on fortnightly basis. Ambient air Heavy metal monitoring is being done once in six month. Both the results are being online submitted via email id waniarea.environdept@gmail.com to Regional office MPCB Chandrapur and Regional Office MoEF & CC Nagpur. And reports is been sent to Regional officer, MPCB and MOEF in six monthly compliance.
re dust emissions (PM 10 & PM from all the sources shall be led regularly monitored and data ed properly. Water spraying ement on haul roads, loading & ing / transfer points shall be ed and properly maintained.	Dust emissions is controlled by providing 08 Nos. rain guns along weigh bridge road. Both side, Weigh Bridge approaches of length 700 m have been concreted.
n ambient air quality (PM,10 PM O2,& NOx,) shall be regularly ted to the ministry including its al office at Bhopal and the state on Control Board & the Central on Control Board once in six s.	Ambient air quality results are being online submitted via email idwaniarea.environdept@gmail.com to Regional office MPCB Chandrapur and Regional Office MoEF & CC Nagpur. And reports is been sent to Regional officer, MPCB and MOEF in six monthly compliance.
ate measures shall be taken for l of noise levels below 85 DB (A) e work environment. Worker ed in blasting and drilling ions of HEMM.CHP etc. shall be ed with ear plugs/muffs.	Noise levels are being monitored and all the necessary measure are made to reduce noise pollution in the mines. The required personnels are being given with Personal protective equipment (PPE) like ear plugs/muffs. The issuance of safety equipment like dust mask, safety jacket, helmet, mining shoe and gumboot is given in Specific condition Sr. No.(x)
vater from the mine) shall be y collected treated so as to m to the standards prescribed GSR 422 (E) dated 19 th may 1993 st December 1993 or as amended me to time. Oil grease trap should alled before discharge of workshop ts.	Waste water from the mine i.e. Mine pumped-out water is the strata water, seepage water which gets collected at the mine sump. The sump allows significant retention period for settling of suspended particles. The supernatant water is then pumped out from the mine and fed into the surface sedimentation pond. The water discharged from sedimentation pond is then let off for natural discharge. Sedimentation tank of dimension -2 Nos. of each 22 m x 4m x 2.5m is provided
lar emissions shall be kept under and regularly monitored. lar used for transporting the l shall be covered with tarpaulins	Light vehicles used are having valid PUC certificate Vehicles used for transporting the minerals are covered with tarpaulin and optimally loaded
ıla ıla	and regularly monitored. or used for transporting the

mine. It is well equipped and has NABL accredited established with adequate number and type of pollution monitoring andanalysis laboratory. equipments in consultation with the state pollution controlboard Workers engage in industry areas are provided X Personnel working in dusty areas shall with appropriate dust mask However safety wear protective respiratory devices and measures are being taken. Health aspects are taken they should also be provided with Periodical regular through adequate training and information on examination. The workers are given regular necessary safety and health aspects. training on safety and health aspects. As per Occupational surveillance health statute, Periodical medical examination is carried programme of the workers shall beunder out for each employee once in every 5 years to taken periodically to observe any detect any diseases so that appropriate actions can contractions due to exposure to dust and be taken. PME report enclosed. take corrective measures, if neededand records maintained thereof. Vear Descrip Inde x No. tion 16 18 19 20 17 no 09 Mining Shoo 5 68 Mining Shoe 11 13 60 6 2 6 no 24 50 49 9 2 7 no 125 24 30 14 40 8 no Mining Shoe 49 51 10 8 Mining Shor 8 11 53 2 12 10 no. 40 20 25 56 20 4.14 _ 250 100 .. Dust mast 17 --100 20 Ear plug 50 24 9 Reflective 150 2 --50 140 28 10 jacket Gum Boot -3 .. Gum Boot 3 6 3 _ 12 6 6 no -05 22 12 3 13 6 7 no Gum Bo 26 09 22 _ 12 7 Gum Boot -17 13 15 8 12 3 9 00 7 09 2 ---16 19 658 473 157 656 A separate environmental management deal with environmental issues Xi ensuring compliance with environmental clearance cell with suitable qualified personnel Environmental level conditions at project shall be set-up under the control of a Sr. management cell is headed by Sub Area Manager Executive, who will report directly to the and is assisted by Project Nodal officer (Env). head of the company. At area level, Area General Manager, Heads the environment cell and is assisted by General Manager (Op) and Nodal officer (Env). At corporate level at HQ, there is full fledged Environment Department which is headed by General Manager (Env) with a multi disciplinary team of qualified and experienced engineers. The head of Corporate Environment department reports directly the Director (Tech), who is nominated owner of the company. Funds earmarked for environmental protection The funds earmarked for environmental Xii measure is not being diverted and exclusively used protection measures should kept in

	separateaccountandshallnotbediverted for other purposes. Year-wise expenditure should be reported to the Ministry and its Regional Officelocated at Bhopal.	
Xiii	The regional office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Noted. All assistance required as well as data will be provided to the officials of Regional office, MoEF & CC.
Xiv	A copy of the will be marked to concerned Panchayat/local NGO, if any, suggestion/representation has been received while processing the proposal.	Complied.
Xv	State pollution control Board shall display a copy of the clearance letter at the Regional office, District Industry Center and Collector's office/Tehsildar's office for 30 days.	Not applicable.
Xvi	The project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernicular language of the locality concerned within seven days of issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the state Pollution Control Board and may also be seen at web site of the Ministry of Environment, Forests and Climatic change.	Complied and copies of advertisement submitted to MoEF & CC.

SUB AREA MANAGER
MUNGOLI SUB AREA,
WANI AREA