# WESTERN COALFIELDS LIMITED (MINIRATNA COMPANY)

# SIX MONTHLY ENVIRONMENTAL COMPLIANCE REPORT

(From 01/10/2022 to 31/03/2023)

## IN RESPECT OF GOKUL OPEN CAST PROJECT

MURPAR SUB AREA UMRER AREA

### Compliance of Environmental Clearance conditions in respect of Gokul OC Project of WCL as on 31/03/2023

Ref: MOEF Environment Clearance Letter No.J-1 1015/1001 /2007-IA.II (M) dated13<sup>th</sup> February, 2017 and J-1 1015/1001 /2007-IA.II(M) dated10<sup>th</sup> January, 2018

#### A. Specific Conditions:

S.No	Compliance Condition	Status		
(i)	The maximum production from the	Agreed.		
	mine at any given time shall not exceed the limit as prescribed in the EC.	Production will not exceed the limit as prescribed in the EC i.e. 1.875 MT/Y.		
		Coal production details since commencement of mine are as follows:		
		Year Coal production in MT		
		2015-16 0.51		
		2016-17 1.875		
		2017-18 1.875		
		2018-19 1.875		
		2019-20 1.875		
		2020-21 1.875		
		2021-22 1.875		
		2022-23 1.875		
(ii)	The validity of the EC is for the life of the Mine or as specified in the	Noted.		
	EIA Notification, 2006, whichever is earlier.	Project was granted Environmental Clearance for 1.875 MTPA from MoEF & CC vide OM No. no: J - 11015/1001/2007-IA.II (M) dated 13/02/2017. (Copy Enclosed as Annexure-I)  Date of commencement of the mine is 25/05/15. The life of mine as per the PR is 11 years. Hence EC is valid till		
(iii)	The project proponent shall produce	2026.  Complied.		
(m)	Consent to Operate from the State Pollution Control Board for the existing production capacity of 1 MTPA and also the Consent to Establish for the proposed capacity	Consent to Establish has been secured from MPCB vide: Format1.0/ BO/ CAC-Cell/ RO (Nagpur)/ CAC-0287 dated 04/03/17 for 1.875 MTPA.		
	of 1.875 MTPA prior to enhancing the production capacity.	Subsequently, consent to operate (1 <sup>st</sup> ) has been secured from MPCB vide letter no: Format1.0/BO/CAC-Cell/CAC-UAN No. 43038/ CAC-1901000314 dated 05/01/2019 which was valid up to 31/08/2021.		
		CTO has been renewed (2 <sup>nd</sup> renewal) and consent letter has been secured from MPCB vide: Format1.0/CAC/UAN No. MPCB-CONSENT -0000160271/CR/2305000845 dated 12/05/2023 which is valid upto 31/03/2024.		
		(Copy enclosed as Annexure-II).		

(iv) Transportation of coal should be carried out by covered trucks. Mitigative measures to be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers.

#### Being complied.

All the vehicles transporting coal are properly covered with tarpaulin and are loaded within permissible limit. Monitoring of all the vehicles going out is done through camera surveillance.

Presently water sprinkling for dust suppression on coal transportation and OB road is being done by 6 nos. of mobile sprinklers. In addition, 15 nos of fixed water sprinklers (Throw: 30 m) are also provided.

(v) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.

#### Being complied.

Skill training as per safety norms specified by DGMS is being given to workmen including the outsourcing employees to ensure high safety standards in mines on regular basis.

Number of persons given training in last 3 years are given below:

Year	No. of workers			
1 ear	Departmental	Contractual	Total	
2020-21	40	100	140	
2021-22	76	357	433	
2022-23	43	172	215	

For surveillance of occupation health among workers periodic medical examination is done for every employee once in three year as per statute in all the mines.

Details of IME/PME done in last 7 years are given below:

Year	No. of v	No. of workers		
i ear	IME	PME		
2016-17	39	33		
2017-18	26	10		
2018-19	85	45		
2019-20	98	31		
2020-21	72	29		
2021-22	179	74		
2022-23	201	56		

(vi) Controlled blasting techniques should be adopted to control ground vibration and fly rocks.

#### Being complied.

Controlled blasting techniques with use of delay detonators are being practiced to control the ground vibration and to arrest the fly rocks.

At present, permission from DGMS has been obtained & blasting is being carried out accordingly.

(vii) A progressive afforestation plan shall be implemented covering an area of 376.04 Ha at the end of mining, which includes reclaimed External OB dump area (123.9 Ha), Internal OB dump area (115.39 Ha) and Green belt (Included in total

#### Being complied.

During Current monsoon, i.e in 2022-23, 20,000 nos of trees have been planted over 8.00 Ha of plain land through Madhya Pradesh Van Vikas Nigam.

In 2019-20, 50,000 nos of plants over 20.0 ha of plain land and in 2018-19, 25,000 nos of trees over 10.00 ha of

	plantation) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and a 3-tier avenue plantation along the main approach roads to the mine.	plain land have been planted.  Further on, as proposed in the EMP, plantation will be done on external OB dumps, backfilled area, along road sides, vacant land and township by planting native species in consultation with State Forest Department. Density of the plants will be maintained at 2500 plants per ha.
(viii)	An estimated total 135.84 Mm <sup>3</sup> of	Being complied.
	OB will be generated during the entire life of the mine. Out of which 41.75 Mm <sup>3</sup> of OB will be dumped in one external OB Dumps an earmarked area covering 123.9 ha of land. 94.09 Mm <sup>3</sup> of will be one	Project has commenced on 25/05/15. Till March 2023, 98.58 Mm³ of OB has been generated. Out of which, 61.597 Mm³ of OB has been backfilled in the decoaled area, i.e in internal dumps. Rest of the OB has been stacked at external OB dump.
	internal OB dump in covering an area of 115.39 ha.  The maximum height of external OB dump will not exceed 90 m and that for soft OB shall not exceed 60 m. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self-sustaining and compliance status shall be submitted to MOEFCC and its Regional Office on yearly basis.	The maximum height of external OB dump will not exceed 90 m and that for soft OB will not exceed 60 m.
(ix)	Of the total quarry area of 231.73 Ha (On floor) & 291.21 Ha (On surface), the backfilled quarry area of 115.39 ha shall be reclaimed with plantation in conformity with the post mining land use plan, which remains an integral part of the approved mining plan and the EIA/EMP submitted to this Ministry.	Being complied.  During Current monsoon, i.e in 2022-23, 20,000 nos of trees have been planted over 8.00 Ha of plain land through Madhya Pradesh Van Vikas Nigam.  In 2019-20, 50,000 nos of plants over 20.0 ha of plain land and in 2018-19, 25,000 nos of trees over 10.00 ha of plain land have been planted.  The mine has started operations on 25/05/15. The backfilled quarry will be reclaimed with plantation as per EMP in consultation with State Forest Department. Density of the plants will be maintained at 2500 plants per ha.

#### **B.** General Conditions:

S.No	Compliance Condition	Status	
(a)	Mining		
(i)	No change in mining technology and	9	
	scope of working should be made without prior approval of the Ministry of Environment, Forest and Climate	Method of mining is opencast with shovel-dumper combination. There has been no change in scope of work	

	Change.	and production programme beyond EC.
		No change in mining technology and scope of working will be made without prior approval of MOEF & CC.
(ii)	No change in the calendar plan including excavation, quantum of coal and waste should be made.	Agreed.  No change in the calendar plan including excavation, quantum of mineral coal and waste will be made without prior approval of the MOEF&CC.
(iii)	Mining shall be carried out as per the provisions outlined in approved mining plan as well as by abiding to the relevant laws related to coal mining and the circulars issued by Directorate General Mines Safety (DGMS).	Agreed.  Mining is carried out as per the provisions outlined in approved mining plan as well as by abiding to the relevant laws related to coal mining and the circulars issued by Directorate General Mines Safety (DGMS).
(iv)	A progressive Mine Closure Plan duly approved by the Ministry of Coal/company Board as applicable should strictly be complied with.	Agreed. The detailed progressive mine closure plan has been incorporated in the approved Project Report along with a provision of Corpus Fund.
( <b>b</b> )	Land Reclamation	Complet
(i)	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.	Complied.  A recent Land use/Land cover map is provided in Approved EMP. All the stipulated conditions will be implemented.  Digital processing of the entire lease area using Remote sensing technique is being done regularly by CMPDIL. Reports of which are available on WCL website. The same is submitted to Ministry of Environment, Forest and Climate Change/ Regional Office on regular basis.
		Land Restoration / Reclamation monitoring report of Gokul OC mine based on satellite data for the year 2022 is enclosed as <b>Annexure –III</b> for your reference.
(ii)	The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species adopted to that micro climate.	Being complied.  The mine has started operations on 25/05/15 and reclamation of backfilled area will start after the dumping is finalized. Till March 2023, 61.597 Mm³ of OB has been backfilled in the decoaled area of mine.
(iii)	Final mine void depth of 100 m shall be in conformity with the post mining land use plan, which remains an integral part of the approved mining plan and the EIA/EMP submitted to this Ministry.	Agreed.  The proposed water body within decoaled void will be gently sloped and upper benches will be terraced and stabilized with plantation.  Final mine void depth will not be more than 100 m.
(iv)	The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land	Being complied.  Till March 23, 6.239 Mm <sup>3</sup> of Top soil has been removed and till 2019-20, 4.172 Mm <sup>3</sup> of top soil has been stacked
(iv)	be stored at earmarked site(s) only and it should not be kept unutilized for	Till March 23, 6.239 Mm <sup>3</sup> of Top soil has been remove

burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan.

Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

Top soil generated after 2020-21,i.e 2.067 Mm<sup>3</sup> of Top soil has been spread over the OB dump for the reclamation of external OB dump.

Compliance status will be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis along with the Six Monthly Compliance Report.

(v) Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.

#### Being Complied.

During Current monsoon, i.e in 2022, 20,000 nos of trees have been planted over 8.00 Ha of plain land through Madhya Pradesh Van Vikas Nigam.

In 2019-20, 50,000 nos of plants over 20.0 ha of plain land and in 2018-19, 25,000 nos of trees over 10.00 ha of plain land have been planted.

The backfilled quarry will be reclaimed with plantation as per EMP in consultation with State Forest Department. Density of the plants will he maintained at 2500 plants per ha. The proposed water body of 40 ha of decoaled void shall be gently sloped and upper benches shall be terraced and stabilized with plantation.

#### (c) Emissions, Effluents, and Waste Disposal

Effective safeguard measures such as (i) regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub> such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

#### Being complied.

Presently water sprinkling for dust suppression on coal transportation and OB road is being done by 6 nos. of mobile sprinklers.

In addition to this, 15 nos fixed water sprinklers (Throw: 30 m) are also provided.

Proposal for the procurement of 10 nos of trolley mounted Mist/ Fog generator was approved by competent authority and the same will be procured in

(ii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be

#### Being complied.

Environmental Monitoring has started in September 2015. Monitoring is being carried out fortnightly basis.

decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.

4 nos Ambient air quality monitoring stations have been established to monitor  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  and  $NO_x$  as per Environment (Protection) Act Amended Rule 2000 which are as follows.

- Besur Village
- Contractor Camp
- Nand Village
- Polgaon

Maximum and minimum concentration of parameters (SPM,  $PM_{10}$ ,  $NO_X$ ,  $SO_X$  and  $PM_{2.5}$ ) as per Environmental monitoring report (from Oct 22 to March 23) is as follows:

Paramete rs	Core Zone/ Buffe	Permissib le limit	Concentration (24 hourly values in µg/m³)	
	r Zone	10 111111	Min	Max
CDM	Core Zone	600	235	315
SPM	Buffer Zone	-	102	156
DM	Core Zone	300	156	216
$PM_{10}$	Buffer Zone	100	44	89
NO	Core Zone	120	12	21
$NO_2$	Buffer Zone	80	10	15
50	Core Zone	120	BDL	12
$SO_x$	Buffer Zone	80	BDL	BDL
DM	Core Zone	-	41	64
PM <sub>2.5</sub>	Buffer Zone	60	20	46

Monitoring reports are submitted to R.O, MoEF & CC on regular basis. The Monitoring Report is enclosed as Annexure-IV.

Monitoring of heavy metals is being carried out once in six months by CMPDIL. Copy of heavy metal monitoring report is enclosed as Annexure –V.

(iii) Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of

#### Being complied.

Data collected on air quality is being submitted regularly to the MOEF's Regional Office, Nagpur &MPCB etc as being practiced in all operating mines.

The Monitoring Report is enclosed as Annexure-IV.

Monitoring of heavy metals is being carried out once in six months by CMPDIL. Copy of heavy metal

	samples through analysis from independent laboratories recognized under the EPA rules, 1986 shall be furnished as part of compliance report.	monitoring report is enclosed as Annexure – V.
(iv)	Transportation of the coal by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the coal so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.  Furthermore, transportation of coal by road should be carried out by covered trucks only. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads.	Being complied.  BT road of 5.9 Km is constructed for the transportation of coal. All the vehicles transporting coal are loaded within permissible limit and trucks leaving the mine premises are covered with tarpaulin.
(v)	The pollution due to transportation road on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centers.	Being complied.  Presently water sprinkling for dust suppression on coal transportation and OB road is being done by 6 nos. of mobile sprinklers. In addition to this, 15 nos fixed water sprinklers (Throw: 30 m) are also provided.  As per the present practice, the PUC certificate are obtained for all light, passenger vehicles, transportation vehicles and the same will be continued.
(vi)	Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.  Crusher and material transfer points should invariably be provided with Bag filters and or dry fogging system. Belt-conveyors should be fully covered to avoid air borne dust.  Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured. Drills shall be wet operated.	Being complied.  Presently water sprinkling for dust suppression on coal transportation and OB road is being done by 6 nos. of mobile sprinklers. As well as 15 nos fixed water sprinklers (Throw: 30 m) are also provided.
(vii)	The Project Proponent should not alter the major channels around the site.	There are no major channels around the project area.

	Appropriate embankment should be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary should be of suitable dimensions and critical patches should be strengthened by stone pitching on the river front side and stabilized with plantation so as to withstand the peak water flow and prevent mine inundation.	
(viii)	There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.	Being complied.  The Mine sump (Capacity: 346 Million gallons) is unlined and have potential for augmentation of ground water resources.
(ix)	The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.	Being complied.  OB dumps are compacted with the help of dozers. It is a regular practice in all mines of Umrer Area.
(x)	Sufficient number of Gullies to be provided for better management of water. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, coal heaps and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site.  Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals. Dimension	Complied.  To arrest the flow of silt and sediments, following actions are taken:  i) To arrest flow of silt & sediment during monsoon, catch drain of size (top width 2 m, bottom width 1 m & height 1 m) has been constructed.  ii) The silt and sediment from OB benches are guided through cross drainage into the mine sump having sufficient capacity to allow settlement of suspended particles. The supernatant from these sumps is then pumped out on surface. This mine water is used for industrial purposes such as dust suppression, firefighting and plantation etc.  iii) The drain and sump is being desilted regularly.

(xi)	of the retaining wall to be constructed at the toe of the dumps and OB benches within the mine to check runoff and siltation, retaining wall of adequate dimension to be constructed at the toe of OB Dumps and OB benches, as applicable, based on the rainfall data.  Industrial waste water (CHP, workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents. Sewage treatment plant of adequate capacity shall be installed in the existing colony and offices.	Complied.  The effluent from workshop is treated in ETP (capacity: 200 KLD) so as to conform to the prescribed standards. Oil & grease trap is provided.  The quality of water is monitored fortnightly and adequate measures will be taken (if need arises) to maintain the quality of water within permissible limits.  The Monitoring Report is enclosed as Annexure-IV  The domestic sewage disposal arrangement of 0.3 MLD capacity using Phytorid technology is provided in combined township of Umrer area where employees of Gokul OC project reside.	
(d)	Noise & Vibration Control		
(i)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.	Being complied.  Noise pollution control measures are being implemented. Workers engaged in blasting and drilling operations, operation of HEMM, etc are being provided with PPE like Ear plugs/ muffs.  Numbers of Ear plugs issued in last 3 years are given below:	
		Year Ear Plugs issued	
		2020-21 150	
		2021-22 100 2022-23 95	
(ii)	Controlled blasting techniques should be practiced with use of delay detonators to mitigate ground vibrations and fly rocks.	Agreed.  Controlled blasting techniques with use of delay detonators are practiced to control ground vibration and to arrest the fly rocks. Controlled Blasting Technique as	
(iii)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping	permitted by DGMS is being adopted.  Being complied.  It is ensured that the biological clock of the villages is not disturbed as well as no floodlights are oriented in the direction of villages.  Noise level monitoring station is established at contractor Camp. Day time & night time noise level data are monitored fortnightly as per Env.(protection)	

the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

Amendment Rule, 2000. Report of the same is being submitted to MoEF&CC on six-monthly basis.

The Monitoring Report is enclosed as Annexure-IV

Noise levels are well within the prescribed limits for day light/night hours.

(iv) Measures should be taken for control of noise levels below 85 dB (A) in the work environment.

Workers engaged in operations of Coal Handling Plants and HEMM, etc. should be provided with ear plugs / muffs.

#### Being complied.

Noise pollution control measures are being implemented. Workers engaged in blasting and drilling operations, operation of HEMM, etc are being provided with PPE like Ear plugs/ muffs.

Numbers of Ear plugs issued in last 3 years are given below:

Year	Ear Plugs issued
2020-21	150
2021-22	100
2022-23	95

#### (e) Occupational Health & Safety

(i) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The prevention measure for burns, malaria and provision of anti-snake venom including all other paramedical safeguards may ensured before initiating the mining activities.

#### Being complied.

Periodical Medical Examination (PME) is carried out compulsorily for each employee once in three year with the purpose of detecting and keeping records of diseases with specific importance of Coal Workers Pneumoconiosis. This is covered under Statute.

Moreover, for every new employee Initial Medical Examination (IME) is also carried out for both departmental and contractual employee as per the provisions of the statute.

During PME, the candidates are subjected to complete clinical examination (including acuity of vision and hearing) radiological examination of chest and routine examination of blood and urine.

All the activities within the mine are carried out with complying safety aspect and regular awareness is created among employees regarding safety and to avoid any accidents. All the employees working in projects are provided with PPE like mask, ear muffs, helmets and protective shoes.

Various national and International Days are observed to increase awareness and educate general population (e.g. No Tobacco Day/ No Smoking Day, World AIDS day, World Breast Feeding Week etc.).

Regular Family Welfare (L.T.T.) Camps organized with the help of State Govt. Full Co-operation is extended to State Govt. for Pulse Polio immunization. Medical facilities are being extended to non-employees in all sorts of acute emergencies.

The details of the set up at Umrer Area Hospital are as

#### follows:

- Periodical Medical Examination (PME) Centres:
   1 (Occupational Health Centres)
- No. of Doctor engaged in Periodical Medical Examination: 3
- No. of Doctor trained in Periodical Medical Examination: 2
- No. of X-Ray machines (500 mA): 1
- No. of Audiometer units: 1
- No. of Spirometer units: 1
- No. of pathology Labs: 1
- No. of X-Ray Technicians: 1
- No. of Laboratory Technicians: 3
- No of ECG Technicians:2

As seen from the above details that Area Hospital, Umrer Area, WCL is having all the infrastructural facilities to comply all the statutory obligations regarding occupational health survey of all employees.

Details of IME/PME done in last 7 years are given below:

Year	No. of workers		
i ear	IME	PME	
2016-17	39	33	
2017-18	26	10	
2018-19	85	45	
2019-20	98	31	
2020-21	72	29	
2021-22	179	74	
2022-23	201	56	

(ii) Besides carrying out regular periodic health check-up of their workers, 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, through an specialized agency /institution within the District/State and the results reported to this Ministry and to DGMS.

#### Being complied.

Periodical Medical Examination (PME) is carried out compulsorily for each employee once in three year with the purpose of detecting and keeping records of diseases with specific importance of Coal Workers Pneumoconiosis. This is covered under Statute.

Moreover, for every new employee Initial Medical Examination (IME) is also carried out for both departmental and contractual employee as per the provisions of the statute.

Details of IME/PME done in last 7 years are given below:

Voor	No. of workers	
Year	IME	PME
2016-17	39	33
2017-18	26	10
2018-19	85	45
2019-20	98	31
2020-21	72	29
2021-22	179	74
2022-23	201	56

(iii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and

#### Being complied.

The persons exposed to dusty areas are provided with protective gears like dust masks with goggles which is also a statutory requirement.

	information on safety and health aspects. Supervisory staff shall be held responsible for ensuring compulsory wearing of dust mask.	Skill training as per safety norms specified by DGMS is being given to workmen including the outsourcing employees to ensure high safety standards in mines on regular basis.  Number of persons given training in last 3 years are given			
		below:			
		Year	No.  Departmental	of workers  Contractual	Total
		2020-21	40	100	140
		2021-22	76	357	433
		2022-23	43	172	215
		periodic medic	ce of occupation al examination is in three year as pe	also being done f	or every
(iv)	Provision shall be made for the	Complied.	in tinee year as pe	a statute iii aii tile	mines.
(21)	housing of construction labour within		using is provided	for construction	n labour
	the site with all necessary	with all necess			
	infrastructure and facilities such as fuel				
	for cooking, mobile toilets, mobile				
	STP, safe drinking water, medical health care, crèche etc as applicable to				
	the project. The housing may be in the				
	form of temporary structures to be				
	removed after the completion of the				
	project as applicable.				
(v)	In case of outsourcing of work through				
	MDO, the project proponent shall ensure the strict compliance				
	enforcement of the above conditions.				
<b>(f)</b>	Biodiversity				
(i)	The project proponent shall take all precautionary measures during mining		as there are no ear er zone as per ba		
	operation for conservation and	EIA/EMP.	er zone as per ba	iseime data gene	rated III
	protection of endangered fauna, if any,		precautionary m	easures are nee	ded for
	spotted in the study area. Action plan		nd protection of e		
	for conservation of flora and fauna				
	shall be prepared and implemented in				
	consultation with the State Forest and Wildlife Department. A copy of action				
	plan as applicable shall be submitted to				
	the Ministry of Environment, Forest				
	and Climate Change and its Regional				
	Office.				
(g)	Implementation of Action Plan as Per	Public Hearing	& CSR Activitie	es	
(i)	Implementation of Action Plan on the	Being complie	ed.		
	issues raised during the Public Hearing	A 11 th a ta alsa -	o non the Astics F	lon anhomittad 1	mina tha
	shall be ensured. The Project Proponent shall complete all the tasks		s per the Action P g are complied		_
	as per the Action Plan submitted with		as per the norms		
	budgetary provisions during the Public	the Company.	per the horins		-1105 01
	Hearing. Land oustees should be				

compensated as per the norms laid out R&R Policy of the Company or the National R&R Policy or R&R Policy of the State Government, whichever is higher.

- 740.85 ha land notified u/s. 9 of CBA Act on 22<sup>nd</sup> November, 2010. Gazette published on 27<sup>th</sup> November, 2010.
- Compensation bill against 695.96 ha tenancy land approved by MOC on 02.07.2014for Rs.159 Crs.
- Total 528 agreements executed out of 634.
- 565 Employment/MC have been approved by District Collector, Nagpur on 04.09.2014 as per CIL R&R policy 2012.
- Compensatory jobs provided: 428 nos
- Monitory compensation provided: 100 nos
- Total: 528 nos
- Land compensation paid till date: 165.50 Crore
- Monitory compensation paid: 21.88 Crore
- (ii) The Board of every company shall ensure that the company spends, in every financial year, at least two per cent. of the average net profits of the company made during the three

immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy under Section 135 of the Companies Act, 2013, for the Socio Economic Development of the neighborhood Habitats which could be planned in consultation with the Panchayat of the local administration, and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. A report, in consonance with the format prescribed in Annexure of the Companies (Corporate Social Responsibility

Policy) Rules, 2014, shall be submitted to the Ministry of Environment, Forest and Climate

Change and its Regional Office on six monthly basis.

#### Being complied.

Coal India Limited has framed an Environment Policy which is being complied with in all the mines.

The activities undertaken for the specific villages adopted under CSR are displayed on the company website and are updated accordingly. Every year areawise detailed CSR plan is prepared after due consultation with local beneficiaries. As such Gokul OC is no exception.

In every year area-wise detailed CSR plan is prepared after due consultation with local beneficiaries. Umrer Area has spent the following under CSR in last 12 years:

Year	Rs. in lakhs
2022-23	54.79
2021-22	46.84
2020-21	53.17
2019-20	64.80
2018-19	12.01
2017-18	15.84
2016-17	6.09
2015-16	8.46
2014-15	39.98
2013-14	216.88
2012-13	152.98
2011-12	85.80
2010-11	49.59

\*CSR funds for the year 2015-16 and 2016-17 were diverted to Swaccha Bharat Abhiyan.

The activities broadly include:

- Construction of WBM and CC road at nearby villages
- Construction of Well and Storage arrangement and pipe line for providing drinking water
- Installation of RO plant at nearby villages and ZP schools.

		Construction of Green Haat at village
		<ul> <li>Construction of Compound wall at ZP Schools.</li> <li>Skill development training for nearby villagers.</li> </ul>
(:::)	The gradest arrange of the H College dis-	Details enclosed as Annexure VI.
(iii)	The project proponent shall follow the mitigation measures provided in Office Memorandum No.Z-11013/57/2014-IA.I1 (M), dated 29th 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".	Not applicable.  There is no village in the mine lease area or surrounded by the mine lease area.  Nearest village is approx. 500 m away from the mine boundary.
(iv)	The Project Proponent shall make	Not applicable.
	necessary alternative arrangements, wherever required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court for acquiring grazing land. The sparse trees on such	There is no grazing land in the core zone of the project. So, there is no necessity of making alternate arrangement for livestock grazing.
	grazing ground, which provide mid- day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees shoulbd be promoted.	
(h)	Corporate Environment Responsibilit	y
(i)	The Company should have a well laid	Complied.
	down Environment Policy approved by the Board of Directors.	Coal India Limited has framed an Environment Policy which is being complied within all the mines. Copy is enclosed as <b>Annexure -VII</b> .
(ii)	The Environment Policy should	Complied.
	prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.	The Environment Policy includes standard operating procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
(iii)	The hierarchical system or	Complied.
	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.	The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions is displayed on company website <a href="https://www.westerncoal.in">www.westerncoal.in</a> .
(iv)	To have proper checks and balances,	Complied.
	the Company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large.	To deal with environmental issues and for ensuring compliance with environmental clearance conditions, at corporate level (at HQ), there is a fully fledged Environment Department which is headed by General Manager (Env.) with a multi-disciplinary team of qualified and experienced environments. The head of

(vi)	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.  The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office.	company. At Area level, the Environmental management cell is headed by Area General Manager, Umrer Area, assisted by Area Nodal Officer (Environment) Umrer Area, Project Officer/Sub Area Manager, Umrer Sub Area, Staff Officer (Civil), Umrer Area. At Project level, it is headed by Sub-Area Manager, Umrer Sub Area and assisted by Mine Manager/Safety Officer, Umrer Sub Area, Survey Officer, Umrer Sub Area and Nodal Officer (Environment) of the project.  Complied. The Environmental Management cell at corporate level is headed by GM (Env) and assisted by a multidisciplinary team of qualified and trained engineers under the control of Director (Tech.)  At Area level, the cell is headed by Area General Manager, Umrer Area, assisted by Area Nodal Officer (Environment) Umrer Area, Project Officer/Sub Area Manager, Umrer Sub Area, Staff Officer (Civil), Umrer Area.  At Project level, it is headed by Sub-Area Manager, Umrer Sub Area and assisted by Mine Manager/Safety Officer, Umrer Sub Area, Survey Officer, Umrer Sub Area and Nodal Officer (Environment) of the project.  Being complied. The Action Plan for implementing EMP/EIA conditions are in built in the mining plan approved by Company Board.  The funds earmarked for environment will not be diverted for other works.		Manager, Umrer Area, assisted r (Environment) Umrer Area, as Manager, Umrer Sub Area, rer Area. headed by Sub-Area Manager, sisted by Mine Manager/Safety ea, Survey Officer, Umrer Sub (Environment) of the project.  lagement cell at corporate level (Env) and assisted by a f qualified and trained engineers ctor (Tech.)  l is headed by Area General assisted by Area Nodal Officer Area, Project Officer/Sub Area rea, Staff Officer (Civil), Umrer headed by Sub-Area Manager, sisted by Mine Manager/Safety ea, Survey Officer, Umrer Sub (Environment) of the project.  lementing EMP/EIA conditions and plan approved by Company  for environment will not be
		_		date is given below:
		Financial Year	Expenditure (Rs. Lakhs)	Remarks
		2015-16	23.52	Construction of effluent treatment plant 200 KLD for Gokul opencast project under Murpar Sub Area of Umrer Area
			5.93	Construction of settling tank for mine water for Gokul OCP of Murpar Sub Area of Umrer Area
		2016-17	19.83	Pipeline network and ground water storage tank for water sprinkling at Coal Stock Yard and Weigh Bridge at Gokul OCP of Murpar Sub Area of Umrer Area
		2010-17	6.64	Fixed type water sprinkling arrangement by providing rain guns at coal stock yard and weigh bridge at Gokul Opencast mine of Murpar Sub Area of Umer Area.
(i)	Statutory Obligations  Environmental clearance is granted	Noted		
(i)	Environmental clearance is granted	Noted		

	subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, NGT and any other Court of Law, if any, as may be applicable to this project.	
(ii)	This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife, if any, as applicable for this Mining project.	Not applicable.
(iii)	The Project Proponent shall obtain Consent to Establish and Consent to Operate from the concerned State Pollution Control Board prior to commencement of mining operations and effectively implement all the conditions stipulated therein.  The project proponent shall obtain necessary prior permission of the competent authorities for drawl of	Consent to Establish has been secured from MPCB vide: Format1.0/ BO/ CAC-Cell/ RO (Nagpur)/ CAC-0287 dated 04/03/17 for 1.875 MTPA.  Subsequently, consent to operate (1 <sup>st</sup> ) has been secured from MPCB vide letter no: Format1.0/BO/CAC-Cell/CAC-UAN No. 43038/ CAC-1901000314 dated 05/01/2019 which was valid up to 31/08/2021.  CTO has been renewed (2 <sup>nd</sup> renewal) and consent letter has been secured from MPCB vide: Format1.0/CAC/UAN No. MPCB-CONSENT - 0000160271/CR/2305000845 dated 12/05/2023 which is valid upto 31/03/2024.(Copy enclosed as Annexure-II).  Complied.  Obtained NOC from CGWA for abstracting Ground
(v)	requisite quantity of water (surface water and ground water) for the project.  Project Proponent shall obtain the	Water (NOC No. CGWA/ NOC/ MIN /ORIG/ 2022/ 14744) which was valid up to 06/03/2024.  Copy of NOC is enclosed as Annexure-VIII.  No surface water is being used for mining and allied works.  Complied.
	necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydro geological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.	Obtained NOC from CGWA for abstracting Ground Water (NOC No. CGWA/ NOC/ MIN/ ORIG/ 2022/ 14744) which was valid up to 06/03/2024.  Copy of NOC is enclosed as Annexure-VIII  Regular monitoring of ground water level from existing wells at 20 locations of Buffer zone done for four times a year i.e. during pre-monsoon (May), monsoon (August), post-monsoon (November), and winter (January).  Quality of groundwater as per IS: 10500: 2012 is analysed once in a year.  Ground water level and quality monitoring report is being sent to R.O., MoEF&CC, Nagpur along with the

		six monthly EC compliance report.	
		Copy of Ground water level and quality monitoring report is enclosed as Annexure-IX.	
<b>(j</b> )	Monitoring of Ambient Air & Water Quality and Reporting		
(i)	Monitoring of Ambient Air Quality to be carried out based on the Coal Industry Standards notified vide GSR 742(E) dated 25.09.2000 and as amended from time to time by the Central Pollution Control Board. The critical parameters as per the Notification such as PM <sub>10</sub> , PM <sub>2.5</sub> , NOx, and SOx etc. in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.1I (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	Being complied.  4 nos Ambient air quality monitoring stations have been established to monitor PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> as per Environment (Protection) Act Amended Rule 2000 which are as follows:  • Besur Village • Contractor Camp • Nand Village • Polgaon  The quality of mine pumped out water is monitored fortnightly and adequate measures will be taken (if need arises) to maintain the quality of water within permissible limits.  Environment monitoring reports are sent to R.O, MoEF, Nagpur and MPCB on regular basis.  Reports are enclosed as Annexure-IV.	
(ii)	The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at least at three locations as per wind direction.  Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site.	Noted for compliance.  Procurement of 01 no of CAAQMS at Gokul OC mine is under process. Tender for the same has been floated on 15/12/2022 through GEM portal vide Bid No. GEM/2022/B/2840226, which is under technical scrutiny. CAAQMS will be installed in current FY. i.e. in 2023-24.	
(iii)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring	Being complied. Regular monitoring of ground water level from existing wells at 20 locations of Buffer zone is being done, for four times a year i.e. during pre-monsoon (May), monsoon (August), post-monsoon (November), and winter (January).  Quality of groundwater as per IS: 10500: 2012 is analysed once in a year.	

	shallbe carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministryof Environment, Forest and Climate Change and its Regional Office, Central Ground WaterAuthority and Regional Director, Central Ground Water Board.	Ground water level and quality monitoring report is being sent to R.O., MoEF & CC, Nagpur along with the six monthly EC compliance report.  Copy of Ground water level and quality monitoring report is enclosed as Annexure-IX.
(iv)	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table.	Complied.  There are no springs and perennial nallahs flowing in and around the mine lease. The natural water bodies and or streams which are flowing in an around the village, will not be disturbed. There has been no impact on ground water level in buffer zone villages.  However the water shortage in the villages (if any) will be supplemented by project authorities.
(v)	Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	Not applicable. There are no springs and perennial nallahs flowing in and around the mine lease.
(vi)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.	Being complied. Six monthly reports on the status of the implementation of the stipulated environmental safeguards are submitted regularly to Regional office of Ministry of Environment, Forest and Climate Change.  The six monthly report for the period from April 2022 to Sep 2022 was submitted to MoEF & CC through email dated 30/11/2022.
(vii)	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.	Noted.

(viii)	The activities pertaining to development of green belt horticulture shall be reported to concerned DFO/Collector on six monthly basis from the date of commencement of mining operations.	Noted.
(k)	Miscellaneous	
(i)	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 and submitted to the concerned authorities within 2 months of the completion of periodicity of monitoring. Similarly, the annual reports for the financial year should reach the office of the concerned authority on or before 1st June of following year.	Being complied. Half yearly monitoring reports are submitted to the concerned authorities regularly.  The six monthly report for the period from April 2022 to Oct 2022 was submitted to MoEF & CC through email dated 30/11/2022.
(ii)	Efforts should be made to reduce	Being complied.
	energy consumption by conservation, efficiency improvements and use of renewable energy.	Efforts are being made for the uses of Solar energy and conventional light bulbs are replaced by LEDs to reduce energy consumption.
		01 no of 40 KWp On-Grid-Connected Roof Top Mounted solar power plant is installed at AGM Office of Umrer area and 01 no of 12 KWp On-Grid-Connected Roof Top Mounted solar power plant is installed at Area Hospital, Umrer Area.
		Copy of the commissioning report of solar plant is enclosed as Annexure - X.
(iii)	The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Noted for compliance.
(iv)	A copy of clearance letter will be	Complied.
	marked to concerned Panchayat/local NGO, if any, from whom suggestion/representation has been received while processing the proposal.	A copy of Environmental Clearance letter has marked to concerned Panchayat vide letter no.WCL/ UA/ MUR/ GOCM/ 2017/ 2838 dated 25/02/17.  Copy enclosed as <b>Annexure – XI</b> .
(v)	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar Office for 30 days.	Does not Pertain to the project.
(vi)	A copy of the EC letter shall be shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's	Does not Pertain to the project.

	Office/Tehsildar Office for 30 days.	
(vii)	The EC letter shall be uploaded on the	Complied.
	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.  The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO (ambient) and critical sectorial parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.	The Environmental clearance letter and the six monthly compliance report had been uploaded on the company's website ( <a href="www.westerncoal.in">www.westerncoal.in</a> .) so as to bring the same in the public domain.  The monitoring reports of environmental quality parameters are also uploaded on the company's website.
(viii)	The project authorities should 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 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 also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.	Complied. Advertisements given in two Local News Papers:  1. `Lokmat' (Marathi daily, Nagpur) dated 17/02/17  2. 'The Hitvada' (English daily, Nagpur) dated 17/02/17  (Copy Enclosed as Annexure: XII)
(ix)	The Environmental Statement for each financial year ending 31 March in Form-V is mandated to be submitted by the PP 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.	The environmental statement for each financial year is submitted regularly to the MOEF's Regional Office, Nagpur along with the status of compliance of EC conditions as being practiced in all operating mines.  The Audit report for year 2021-22 was submitted online on 28/09/2022. (Enclosed as Annexure-XIII).

Sub Area Manager Gokun C Mine Murpar Sub Area Colliery Manager Gokul OC Mine Murpar Sub Area Nodal Officer (Env.)
Gokul OC Mine
Murpar Sub Area