

SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE

BHAKRA UG MINE

(0.27 MTPA IN AREA OF 183.731 HA)

EC NO. - J-11015/48/2009-IA-II(M) Dated 03.01.2014



WESTERN COALFIELDS LIMITED

KANHAN AREA

PO: DUNGARIA, CHHINDWARA (MP)-480553

Period - April 2022 to September 2022

Part-IV
Status of Implementation of Environmental Clearance conditions
Name of Project :Bhakra Underground Coal mine Project
(0.27 MTPA in 183.731 Ha)
MOEF Environmental Clearance Letter No. J-11015/48/2009-IA-II(M)
Dated 03.01.2014

S. No.	Condition	Remarks / Action
A	Specific Conditions	
i.	The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC	Shall be complied.
ii.	Environmental clearance to the proposal is subject to obtaining clearance under the Wildlife (Protection) Act, 1972, as applicable	There is no national park, biosphere reserve in the 10 km buffer zone of the mine.
iii.	The project proponent would be required to obtain the Stage-I FC for the entire forest area within mining lease by 31/01/2015. If not, they would surrender forest land for which such clearance has not been obtained and enter into a revised mining lease accordingly.	Application for FC for forest area is under process. No mining has commenced yet.
iv.	The approved mine plan includes forest land. Since forest clearance is awaited and there is urgency to meet coal demand the proponents have divided the project in two phases- phase - 1 without forest land for opening of mine construction and development in non-forest area and phase- 2 with forest area after forest clearance. Phase - 1 in ML area of 183.731 ha in non-forest area only is recommended	Noted for compliance. No mining has been undertaken in the entire ML area.
v.	The proponents may come again to the Committee for Bhakra Phase-II project after obtaining the Stage –I Forestry Clearance	Noted for compliance.
vi.	A separate team for subsidence monitoring and surface mitigation measures be constituted and continuous monitoring and mitigation measures be carried out	Noted for compliance. No mining has been undertaken in the entire ML area.
vii.	Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence	Noted for compliance. No mining has been undertaken in the entire ML area.

	movement, appropriate effective corrective measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clay soil/suitable material.	
viii.	If subsidence is found exceeding the permitted limits, then the landowners shall be adequately compensated with mutual agreement of the landowners	Noted for compliance.
ix.	Mining shall be carried out as per statuette at a safe distance from river/nalla following within adjacent to the lease boundary at the time of depillaring, protective bunds and garland drains shall be provided so that no water from the surface enters the subsidence area and the shaft.	All DGMS norms regarding distance from river/nallah etc shall be followed. Drain shall be provided so that no water from surface enters the mine.
x.	Sufficient coal pillars shall be left unextracted around the air shaft (within the subsidence influence area) to protect from any damage from subsidence, if any.	Noted for compliance. All norms as per statute shall be obeyed.
xi.	Areas along roads, infrastructure, along ML boundary and township outside the lease area etc. shall be Developed as green belt by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Plantations shall be carried out Immediately after the onset of monsoon.	Noted for compliance.
xii.	Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads	Noted for compliance.
xiii.	Diversion of Land shall be done with approval of the Competent Authorities	Necessary approvals shall be taken before diversion of land.
xiv.	Coal Extraction shall be optimised in areas where agricultural production is continuing. Some pillars shall be left below the agricultural land. No depillaring & coal extraction should be carried out below habitation, H.T. Lines & beneath road, water bodies, railway track.	Noted for compliance. All norms as per statute shall be obeyed.

xv.	The mined out land should be used for agriculture purpose	Noted for compliance.
xvi.	<p>Safety measures and health issues need to be addressed for workers and surrounding villagers.</p> <p>Proponent shall implement all the related safety measures with safety equipments</p>	<p>The Area hospital of WCL Kanhan Area is having well equipped computerized PME center. All the workers are periodically examined every 5 years and for those in age group 50-60 years once in every 2.5 years.</p> <p>Periodic medical camps are undertaken in surrounding villages as part of CSR activity.</p>
xvii.	The CSR cost should be Rs 5 per Tonnes of Coal produced which should be adjusted as per the annual inflation.	CSR cost is as per the revised Companies' Act, 2013.
xviii.	Coal transportation in pit by Belt Conveyors up to surface, Surface to Siding by Trucks to Nandan Washery and siding to loading by pay loaders.	The same shall be adhered to.
xix.	At the time of establishing the CHP, it is proposed to establish mist spray arrangements and also enclosing the ground level bunkers up to the level of gantry	No mining activity has been commenced yet. Effective arrangements for dust suppression shall be made when mining commences.
xx.	An afforestation plan to be prepared for implementation after stabilization of subsidence.	Noted for compliance.
xxi.	Water spraying arrangements at loading points and mist spray arrangements are to be provided.	Noted for compliance.
xxii.	No additional land, manpower and equipment and water shall be used for the expansion project.	Shall be complied.
xxiii.	<p>Mine closures activities include sealing of incline mouth dismantling of haulage system, clearing and afforestation of coal stock area, plantation on barren land and old abandoned mine.</p> <p>3-tier plantation should be developed 2 km stretch of road from the mine using native species</p>	<p>All mine closure activities as per Mine Closure Guidelines 2009 shall be undertaken including proper sealing of incline mouth, haulage system etc.</p> <p>Plantation shall be carried out on vacant land and along coal transport road.</p>

xxiv.	Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.	Noted for compliance.
xxv.	Water sprinkling system shall be provided to check fugitive emissions from loading operations, conveyor system, haulage roads, transfer points, etc. Major approach roads shall be black topped and properly maintained.	Effective arrangements for dust suppression shall be made during mining operations.
xxvi.	Transportation of coal from the mine to railway siding should be by 20T mechanically covered trucks	Noted for compliance.
xvii.	A progressive afforestation plan shall be prepared and implemented over the mine lease area acquired and shall include areas under green belt development, areas along roads, infrastructure, along ML boundary and township etc., by planting native species in consultation with the local DFO/Agriculture Department	Noted for compliance. No mining operations have been commenced yet.
xxviii.	Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring	Regular groundwater monitoring, four times a year is being done through an accredited agency for other nearby mines of Kanhan Area. Other mines of WCL are in operation in the surrounding region. Annual groundwater monitoring reports and groundwater quality reports are submitted to MOEF Regional Office and CGWB Regional Office .
xxix.	Acid Water Treatment Plant, volume of water to be treated and disposal of brine should be provided	In case mine water is found to be acidic, suitable treatment mechanism for the same shall be provided.
xxx.	High root density tree species shall be selected and planted over areas likely to be affected by subsidence	Noted for compliance.
xxxi.	Monitoring of drinking water should be carried out	Drinking water quality is being

	regularly	monitored along with routine environmental monitoring of the operational mines of Kanhan Area. The same shall be followed for this mine when mine operations begin.
xxii.	Sewage treatment plant shall be installed in the township. ETP shall also be provided for treating workshop and CHP effluents.	Noted for compliance.
xxiii.	For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a 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 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bangalore	Land use monitoring report based on satellite imagery for Pench-Kanhan-Tawa valley coalfield is prepared by CMPDIL and uploaded on the company website http://103.59.142.228:8081/wclweb/TPK_C_F_2020.pdf
xxiv.	If the water quality parameters such as F, pH, heavy metals, etc. exceed the prescribed limits, suitable measures by the proponent be taken to ensure that the local communities are provided alternate source of water for their livelihood	Noted for compliance.
xxv.	Medical camps should be organized in the area for regular check-up of workers/ villagers/population. Detailed prevalent disease pattern in the area should be documented and details of medical facilities provided for the same be made available to the MoEF	Periodic medical camps are undertaken in surrounding villages as part of CSR activity
xxvi.	Proponent should make written submission on the compliances/clarifications to the MoEF on the above cited issues	Noted for compliance
xvii.	Mine discharge water outside the ML shall be monitored, particularly for TDS and treated to conform to prescribed levels before discharge into the natural environment	Noted for compliance.
xviii.	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource, in case water table shows a declining trend. The project authorities shall meet water requirement of nearby village(s) in case the village	Noted for compliance. Water shall be supplied to nearby villagers if required. So far, in the operation of nearby mines, no wells have been reported to have run dry.

	wells go dry due to dewatering of mine	
xxix.	Besides carrying out regular periodic health check-up of their workers, 10% 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 agency such as NIOH, Ahmadabad within a period of one year and the results reported to this Ministry and to DGMS	All workmen shall be provided with protective wear as per statute. Occupation health survey i.e. PME shall be carried out once in a five years for workers of age below 50 years and every 2½ year for those aged between 50 to 60 years.
xl.	The mining in the existing mines should be phased out after expiry of the current mining lease and after reclamation of mined over area. The operating mines may be analysed and monitored for compliance of conditions, bearing with movement of wildlife and until such time they are closed/phased out.	Noted for compliance
xli.	Project specific CSR for an amount of Rs5/Tonne of coal production, as adjusted as per the annual inflation, should be provided for the CSR activities undertaken and the progress made thereon shall be uploaded annually on the company website. Monitoring of the impacts of activities under CSR shall be carried out periodically	Amount for CSR activities shall be prescribed based on the new Companies Act, 2013.
xlii.	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Noted for compliance.
xliii.	Corporate Environment Responsibility: <ul style="list-style-type: none"> a) The Company shall have a well laid down Environment Policy approved by the Board of Directors. b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions. c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance 	Coal India Limited has an approved Corporate Environmental Policy. The policy delineates the hierarchy for dealing with environment issues at units, sub-area, area and corporate HQ levels along with a commitment to review the policy every 5 years.

	<p>conditions shall be furnished.</p> <p>d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large</p>	
	General Conditions	
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests	No change in mining technology is proposed
ii.	No change in the calendar plan including excavation quantum of mineral coal and waste shall be made.	Noted
iii.	Four ambient air quality monitoring stations shall be established in the core zone as well as in the Buffer zone for PM10 PM2.5 SOX and NOx monitoring Location of the stations shall be 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 atleast once in 6 months	Mining operations have not started yet.
iv.	Data on ambient air quality (PM10 PM2.5 Sox and NOx) shall be regularly submitted to the ministry Including its regional office at Bhopal and to the state pollution control board and the Central Pollution Control Board once in six months	Noted for compliance
v.	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.	Noted. This condition is not applicable to the mines as there is no usage of HEMM machine. However the haulages, belt conveyor etc. are deployed in U/G. The noise level control measures in U/G are covered vide CMR 1957.
vi.	Industrial wastewater (workshop and wastewater from the mine) shall be property collected treated so to as to conform to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time before discharge Oil and grease trap shall be installed before discharge of workshop effluents.	Noted. This condition is not applicable to the UG mine as there is no usage of HEMM machines and therefore the usage of oil & grease trap for workshop does not arise.
vii.	Vehicular emissions shall be kept under control and regularly monitored Vehicles used for transporting	Noted. All light vehicles like jeep, school buses, Ambulance used for

	the mineral shall be covered with tarpaulins and optimally loaded.	mining activity will have valid PUC certificate and the coal transporting vehicle shall be covered with tarpaulins.
viii.	Monitoring of environmental quality parameters shall be carried out through the establishment of adequate number and type of pollution monitoring and analyses equipment in consultation with SPCB and data got analysed by laboratory recognized under EPA Rules, 1986	Well established environmental laboratory exist at CMPDI, NGP.
ix.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contraction due to exposure to dust and to take corrective measures if needed and records maintained thereof.	All workmen shall be provided with protective wear as per statute. Occupation health survey i.e. PME shall be carried out once in a five years of age below 50 years and 2 ½ year for the age between 50 to 60 years.
x.	Occupational Health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures if needed and records maintained thereof. The quality of environment due to outsourcing and health and safety issues of outsourced manpower should be addressed by the company while outsourcing.	Noted for compliance.
xi.	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive who will report directly to the Head of the Company.	There is a well established environmental cell at corporate HQ headed by GM (Env) reporting to Director (Tech) P&P. He is assisted by well qualified and trained team of Engineers of Mining, Civil and environment discipline. At Area level, the team is headed by GM (Operation) and assisted by Area Nodal Officer (Env). At project level the team is headed by Sub Area Manager of the project and is assisted by project Nodal Officer (Env).
xii.	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose Year-wise expenditure shall be reported to this ministry and its Regional Office at Bhopal.	A separate account shall be maintained for environmental work and year wise expenditure shall be reported to the ministry and Regional Office at Bhopal.
xiii.	The Project authorities shall advertise at least in two local newspaper widely circulated around the project one of which shall be in the vernacular language of	Complied. Advertisement of Environmental Clearance was published in 'The

	the locality concerned within seven days Of the clearance letter informing that the project has been accorded environmental clearance and a Copy of the clearance letter is available with the state pollution control board and may also be seen at the website of the ministry of Environment & Forests at http://envfor.nic.in	Hitavada, Nagpur' on date 25/01/2014 and 'Jabalpur Express, Chhindwara' on date 25/01/2014 (Copy enclosed)
xiv.	A Copy of the will be marked to concerned Panchayat /local NGO if any from whom any suggestion representation has been received while processing the proposal.	Complied. The grant of EC was communicated to the gram-panchayat vide our LN NDSA/SAM/2014-645 dated 10.02.2014 (Copy attached)
xv.	A copy of EC shall be displayed on the website of State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District industry centre and Collectors Office /Tahsildar's Office for 30 days.	This is for MPPCB
xvi.	The clearance letter shall be uploaded on the company's website. The compliance status shall also be uploaded on the company's website atleast once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameters shall be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.	Noted for compliance.
xvii.	The project proponent shall submit six monthly compliance reports to the respective zonal office of the ministry and respective zonal offices of CPCB and SPCB.	Noted for regular compliance
xviii.	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated Condition the project authorities shall extend full cooperation to the office (s) of the Regional Office By furnishing the requisite date/ information/ monitoring reports.	Noted.
xix.	The Environment Statement for each financial year ending on 31 March in Form V is mandated to be submitted to SPCB as prescribed under Env Protection Rules, 1986 as amended subsequently shall also be uploaded on the company's website alongwith status of EC compliance shall be sent to respective zonal office by e-mail	Mine operations not started yet. Shall be complied after mine operations begin.
5	The proponent shall abide by all the commitments	Noted for compliance.

	made in EIA/EMP report so also during their presentation in EAC	
6	The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The ministry or any other competent authority may stipulate any further condition for environmental protection.	Noted for compliance.
7	The ministry or any other competent authority may stipulate any further condition for environmental protection.	Noted.
8	Failure to comply with any of the condition mentioned above may result in withdrawal of the clearance and attract the provisions of the Environment (Protection) Act. 1986..	Noted.
9	The above condition 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, 1988 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.	Noted.