

**SIX MONTHLY COMPLIANCE REPORT**  
**OF**  
**ENVIRONMENTAL CLEARANCE**

**AMBARA OC PATCHES COAL**  
**MINE**

**(1.00 MTPA IN AREA OF 162.153 HA)**

**EC NO. - J-11015/252/2007/IA.IIM dated 18.03.2008**



**WESTERN COALFIELDS LIMITED**  
**KANHAN AREA**  
**PO: DUNGARIA, CHHINDWARA (MP)-480553**  
**Period - April 2022 to September 2022**

**Compliance of conditions of Environmental Clearance accorded by M.O.E.F. for  
Ambara OC Patches (including Mohan OC patches) (1MTPA)**

Vide letter No. 11015/252/2007-II (M) Dated 19<sup>th</sup> March 2008

Status as on 30.09.2022

S.NO.	CONDITIONS OF ENVIRONMENTAL CLEARANCE	STATUS OF COMPLIANCE / ACTION PLAN				
	A) SPECIFIC CONDITIONS					
(I)	No external dumping of OB. The entire OB being generated in the balance life of mine shall be back filled.	Entire OB excavation is being back filled into de-coaled void. No OB is dumped externally.				
(ii)	The road for coal transport shall be black topped and avenue trees developed on both side.	The existing road for transport of coal is already black topped. Coal transport road from Weighbridge to Palachourai siding has been widened and strengthened.				
(iii)	Drills should be wet operated	The drills are wet operated as and when considered necessary and also implemented as per guide lines of DGMS.				
(iv)	High efficiency bag filters / water sprinkling system to check fugitive emissions from crushing operation conveyor system / rope way haulage roads, transfer points etc. shall be installed and operated effectively at all times of operation. The water sprinklers should be of mist type with fine nozzles to avoid slurry formation along the roads Plantation should be developed in the area around the CHP with native species.	Sprinklers have been installed around CHP hopper and conveyor using pipe arrangement. Also, arrangements have been made for sprinkling by mobile water tankers around CHP.				
(v)	Controlled blasting should be practiced with use of delay detonators. The initiative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Blasting is being done in a scientific manner so that no damages occur to nearby settlements. Furthermore no subsidence has been observed during the mining operation. The blasting is done as per permission of DGMS so as to effectively control ground vibration and fly rock and bolder using delay detonators.  Use of locking caps for control of ground vibrations, fly rock control and improvement in blasting performance is being practiced.				
vi	Area bought under afforestation shall be not less than 50 Ha and include. Back filled area (50Ha) along ML boundary, along roads and vacant area within and outside the lease by planting native species in consultation with local DFO / Agriculture Department. The density of the trees should be around 2500 plants per hectare.	Till date 144678 nos. plants has been planted in 57.87 ha. of backfilled area by planting native species with a density of 2500 plants per hectare. The plantation work has been awarded to Madhya Pradesh Rajya Van Vikas Nigam along-with maintenance of 04 years. The details of Plantation carried out in the recent years are tabulated below-				
		S. No.	Year	Location	Plantation Back-filled	Total
		1	2009-10	Ambara O/C & Mohan O/C	20000	20000
		2	2010-11	--,,--	20000	20000

		3	2011-12	--,,--	Nil	Nil
		4	2012-13	--,,--	20000	20000
		5	2013-14	--,,--	20000	20000
vii	A progressive mine closure plan shall be implemented by reclamation of decoaled quarry area and afforestation by planting native plant species in consultation with local DFO/Agriculture Department. The density of the trees should be around 2500 plants per had.	Approved Mine Closure Plan for the mine exists and accordingly funds are deposited in an Escrow account. Copy of Approved Mine Enclosure Plan enclosed. Plantation on OB dump and surrounding areas is carried out through MP Rajya Van Vikas Nigam Limited (MPRVVN) and the density of plantation is 2500 nos. per hectare.				
viii	Mine discharge water shall be treated to conform to prescribed standards particularly for pH and TSS before discharge into any natural watercourse or nallah outside the mine. Quality of water at discharge points shall be monitored regularly and records maintained thereof.	<p>Mine has been discontinued since September 2022 due to exhaustion of the reserves. Further extension of mine is proposed for which mining plan is being prepared. Mine shall start its operations after obtaining all the statutory clearances.</p> <p>The mine water, during operation of the mine is dewatered into an adjacent abandoned quarry for storage. The water from the abandoned quarry is supplied to WCL colony and nearby Ambara village for domestic use, after adequate treatment in the filtration plant. Quality of the water is monitored periodically and records are maintained.</p>				
ix	Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quality should 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 should be submitted to the Ministry of Environment & Forest and to the Central pollution control Board quarterly within one month of monitoring.	Monitoring of ground water level along with quality is being done through a certified agency, four times a year as specified. The annual ground water monitoring and groundwater quality reports are submitted to Regional Offices of MOEF Bhopal and CGWB Bhopal. Reports for the period FY 2021-22 is enclosed.				
x	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, Ahmedabad within a period of two yrs. and the results reported to this ministry and to DGMS.	<p>Periodical medical examination(P.M.E.) are carried out compulsorily on each employee once in five years with the purpose of detecting and keeping the record of diseases with specific importance to the coal workers viz. Pneumoconiosis. During P.M.E. the candidates are subject to complete clinical examination relating to occupational diseases and hearing impairment. As WCL is having all the infrastructure facilities to comply with all statutory obligations regarding occupational health survey of all its employees, help from external organization i.e.: NIOH, Ahmedabad is not required.</p> <p>PME conducted for WCL, Kanhan Area employees which had three operational mines-Ambara OC, Mohan UG and Tandsi UG during FY 2021-22.</p> <p>PME conducted- 818 nos of employees and workers of Kanhan Area, WCL during the FY 2021-22 against a target of 786 nos.</p>				
xii	A detailed mine closure plan along with details of Corpus Fund should be submitted five years to the Ministry of Environment and Forests RO, Bhopal for Approval.	Copy of Approved Mine Closure Plan enclosed with six monthly EC compliance report. Total Amount deposited in Escrow account of Ambara OC mine is 1503.7145 lakhs till				

		date and balance as on 31/03/22 is INR 15,16,42,291/-
Xii	For monitoring land use pattern and for post mining land uses 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 consistence in the time series) and the report submitted to MOEF and its regional office at Bhopal	Land Use monitoring is being done through satellite imagery as specified. The land use monitoring report for Pench-Kanhan- Tawa valley for the year 2020 is uploaded on the website of WCL (westerncoal.in). The hyperlink of the report is - <a href="http://103.59.142.228:8081/wclweb/TPK_CF_2020.pdf">http://103.59.142.228:8081/wclweb/TPK_CF_2020.pdf</a>
<b>B</b>	<b>General Conditions</b>	
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	No change in mining technology is proposed
(ii)	No change in calendar plan including excavation, quantum of mineral coal and waste should be made.	No change in calendar program is proposed.
iii	Four ambient air quality monitoring stations should be established in the core zone as well in the buffer zone for SPM , RPM , SO <sub>2</sub> and Nox monitoring Location of the stations should be decided based on meteorological	Four air quality - monitoring station already exist at this mine. Monitoring reports for period Apr'22-Sept'22 are enclosed.  Also, CAAQMS Monitoring station has been established in the buffer zone of the mine, to monitor the air quality parameters in compliance of the CTO conditions issued by MPPCB.
iv	Fugitive dust emissions (SPM and RPM) from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading and dump trucks (loading and unloading) point should be provided and properly maintained.	Fugitive dust emission is being controlled by water spraying through mobile water tankers of capacity 4500 litres and 12000 litres (Photographs enclosed). The SPM and RPM is also regularly monitored every fortnight at four locations in the core and buffer zone around the mine. Coal transportation trucks are optimally loaded and covered with tarpaulin. Presently mine has been temporarily discontinued since Sep'22.
v	Data on ambient air quality (SPM, RPM, SO <sub>2</sub> and NO <sub>x</sub> ) should be regularly submitted to the Ministry including its Regional Office and to the state pollution Control Board and Central Pollution Control Board once in six mont hs.	Ambient Air Quality monitoring is being done regularly as per GSR 742 (E) dated 25/09/2000. The monitoring reports are submitted along with six monthly EC compliance report to MOEF Regional Office, Bhopal and MPPCB, Bhopal.  Also, CAAQMS Monitoring station has been established in the buffer zone of the mine, to monitor the air quality parameters in compliance of the CTO conditions issued by MPPCB.
vi	Adequate measures should be taken for control of noise levels below 85 dBA in the work enrichment workers engaged in blasting and drilling operation, operation of HEMM etc should be provided with ear plugs / muffs.	All measures for noise pollution control are taken, regular monitoring is also carried out & workers are provided with ear plugs / ear muffs.
vii	Industrial waste water (workshop and waste water from the mine) should be properly collected treated so as to conform to the standard prescribed under GSR 422 (E) dated 19 May 1993 and 31 December or as amended from time to time before discharge. Oil and grease trap should be installed before discharge.	Mine does not have Workshop, so no workshop effluent is discharged. However mine pumped out water is regularly monitored and collected in old abandoned quarry and being used for domestic purpose. Regular water quality monitoring is done, same is periodically submitted to Pollution Control Board

viii	Vehicular emissions should be kept under control and regularly monitored vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.	All vehicles used in the project are mandated to have a PUC certificate. Coal truck are covered with tarpaulin and optimally loaded.
ix	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with state pollution control board.	Environmental monitoring is done by CMPDIL. A well established environment laboratory exists in CMPDIL which is NABL accredited. (Copy of NABL Certificate enclosed)
x	Personal working in dusty areas should wear protective respiratory device and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programs of the worker should be undertaken periodically to observe any contraction due to exposure to dust.	Workers are provided with protective gears. Occupational health surveillance is carried out for every worker once in five years.  PME conducted for WCL, Kanhan Area employees which had three operational mines-Ambara OC, Mohan UG and Tandsi UG during FY 2021-22.  PME conducted- 818 nos of employees and worker of Kanhan Area, WCL during the FY 2021-22 against a target of 786 nos.
(xi)	A separate environmental management cell with suitable qualified personal should be set up under the control of a Senior Executive, who will report directly to the Head of the company.	There is well established environmental cell at corporate HQ, headed by GM (Env) reporting to Director (Tech) P & P .He is assisted by well qualified & well trained team of Engineers of Mining, Civil & Environment disciplines.  At area level, the team is headed by General Manger (Operations) & assisted by Area Nodal Officer (Environmental) under the overall control of General Manger of the Area.  At project level the team is headed by Sub Area Manger of the project & assisted by project Nodal officer (Environment).
xii	The funds earmarked from incremental protection measures should be kept in separate account and should not be diverted for other purposes. Year wise expenditure should be reported to this Ministry and its Regional Office at Bhopal.	A separate budget for Environmental Cell is provided and the funds are utilized for the assigned purposes only.  Year-wise Environmental expenditure is reported in the Six Monthly EC compliance report and Environmental Audit Statement submitted yearly.
xiii	The Regional Office of this Ministry located at Bhopal shall monitor compiled 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 for compliance
xiv	A copy of environmental clearance letter will be marked to the concerned Panchayat / Local NGO if any, from whom any suggestion / representation has been received while processing the proposal	Copies of letters marked to panchayat enclosed
xv	State pollution control board should be display a copy of the clearance letter at the regional office, District industry center and collector's office / Tehsildar office for 30 Days.	This is for MPPCB

xvi	The project authorities should advertise at least in two local newspapers widely circulated around the project / one of which shall be in the vernacular language of the locality concerned with in seven days of the clearance of the latter, informing that the project has been accorded environmental clearance letters is available with the state pollution control board and may also be sent at the website of Ministry of Environment and forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Already advertised in English and Hindi Newspaper by WCL.
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