

Six Monthly Compliance Report of Environmental Clearance

SHIVPURI OPENCAST MINE

[1.0 MTPA in Area of 336.293 HA]

EC No.: J-11015/365/2008-IA.II(M), Date-02.02.2009



Western Coalfields Limited
Pench Area

Po: Parasia, Chhindwara (MP)- 480441

PERIOD: 01.04.2022 to 30.09.2022

Compliance report of EC conditions vide no. J-11015/453/2007-IA.II(M)
dt. 19/02/2008

A. SPECIFIC CONDITIONS

S.N.	CONDITIONS	COMPLIANCES
1.	No external dumping of O.B. The entire OB being generated in the balance life of mine shall be backfilled.	All dumping of OB is being made inside the mine boundary and is backfilled over the worked-out mine area.
2.	Reclamation, monitoring and management of the existing external OB dumpsite should continue until the vegetation becomes self sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office at Bhopal on yearly basis.	Noted for compliance. The report is regularly sent as required.
3.	Catch drains and siltation pond of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine side sump capacity should also provided adequate retention period to allow proper settling of silt material.	Garland drain around the mine embankment has been provided and it is cleaned before onset of monsoon. Mine sump is maintained of such a size to ensure 50% safety margin over and above the peak sudden rainfall.
4.	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run- off and siltation should be based on the rainfall data.	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run off & siltation is maintained as required. Catch drains have also been constructed around the OB dump.
5.	Mining shall be carried out as per statute at a safe distance from the Pench River following adjacent to the lease boundary	Mine is situated on a hilly Terrain and is nearly 2-3Km. away from the nearest river edge of Pench River. As such there is no danger of inrush of water from the river.
6.	The road for coal transport shall be black topped and avenue trees developed on both sides.	Coal transportation from Shivpuri OCM to BG Siding is black topped and avenue plantation has been done where land is available.
7.	Drills should be wet operated only.	Presently we are having drills with dust extractor and some improvised arrangement

		has been made for wet drilling.
8.	Controlled blasting should be practiced with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Controlled blasting with use of appropriate detonators & relays is practiced to avoid ground vibrations and fly off rocks.
9.	Area brought under afforestation shall be not less than 126.55 ha and include external OB dump (4.13 ha) backfilled area[86ha],along ML boundary, along roads and infrastructure [1.50ha],vacant land [34.92ha]and area in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density; of the tree should around 2500 plants per ha.	Till now plantation on 82.32 ha. has been done. Backfilling of OB is continuing. By the time of closure total plantation area of 126.55 ha. will be achieved.
10.	A progressive Mine closure plan shall be implemented by reclamation of decoaled quarry area and afforestation of an area of 86 ha by planting native plant species in consultation with the coal DFO/Agriculture Department. The density of the trees should around 2500 plants per ha. The balance excavated area [void] covering an area of 15.52 ha should be converted in to a water body, the higher benches of which shall be gently sloped.	Noted for compliance and appropriate action is being taken as per the statute. Till now excavated area is 101 ha. Out of which 82 ha. has been physically reclaimed by back filling of OB.
11.	Regular monitoring of Ground water level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity should be done four times a year in pre-monsoon [may]monsoon [august], post monsoon [nov]and winter [January]season and for quality in May. Data thus collected should be submitted to the ministry of environment and forest.	Regular quarterly monitoring of ground water level and quality is being carried out by establishing a network of existing wells and construction of new piezometers by CMPDIL, Nagpur (RI-IV). The data, thus, collected is then submitted to the specified authorities.
12.	Besides carrying out regular periodic health check up to their workers 10% of the workers identified from workforce engaged in active mining operation shall be subjected to health check up for occupational diseases and hearing impairment through an agency such as HIHO, Ahmedabad within a period of	Periodic health checks up for all workmen is carried out once in every 5 years and for workers above 45 years of age, the same is carried out once in 2 ½ years at Central Hospital, Barkuhi of the company.

	one year and the result reported to this Ministry and to DGMS	
13.	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 ,from the start of the project until the present shall be prepared once in three years [for any one particular season which is consistent in the time series] and the report submitted to MOEF and its Regional Office at Bhopal.	Satellite imagery of the land used pattern is taken up through CMPDIL (HQ) RI-IV Nagpur.
14.	The detailed Final Mine closure Plan along with details of Corpus fund should be submitted within six months to the Ministry of Environment & Forests Regional Office Bhopal.	Final Mine closure plan has been approved. ESCROW Account (No – 8973161002393) is operational at Oriental Bank of Commerce, Jaripatka, Nagpur.

B. GENERAL CONDITIONS

SN	Conditions	Compliance
1.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.	No change in mining technology and scope of working has been done.
2.	No change in the calendar plan including excavation quantum of micro coal and waste should be made.	No change in the calendar plan including excavation quantum of mineral coal and waste has been made.
3.	Four ambient air quality monitoring station should be established in the core zone as well as in the buffer zone for SPM, RPM, PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, Pb, Cr, As etc. Location of the station should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the state Pollution Control Board.	Ambient Air monitoring station has been fixed as per EC in consultation with MP State Pollution Control Boards. Fortnightly monitoring of ambient air & water quality & noise levels is done by CMPDI Nagpur & the data is then furnished to the Ministry in the form of quarterly monitoring reports and six-monthly compliance reports.

4.	Fugitive dust emissions (SPM and RPM) from all the sources should be controlled, regularly monitored and data recorded properly. Water spraying arrangement on haul road, wagon loading, dump trucks (loading and unloading) points should be provided and properly maintained.	Fugitive dust emissions are being controlled by regular water spraying arrangements on haul roads. Fortnightly monitoring of ambient air is done by CMPDI Nagpur & the data is then furnished to the Ministry in the form of quarterly monitoring reports and six-monthly compliance reports.
5.	Data on ambient air quality (SPM and RPM, SO ₂ and NO _x) should be regularly submitted to the ministry including its Regional office at Bhopal and to the State Pollution Control Board, Bhopal and Central Pollution Control Board.	Data on ambient air quality (SPM, RPM, SO ₂ and NO _x) is 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.
6.	Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations of HEMM etc should be provided with ear plugs/ muffs.	Adequate measures have been taken to control noise level below 75 dBA. Workers engaged in blasting and drilling operations, operation of HEMM, etc. have been provided with earplugs/muffs.
7.	Industrial waste water (workshop and waste water from mine) should be properly treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st Dec. 1993 or as amended from time to time, oil and grease traps should be installed before discharge of workshop effluents.	Not Applicable since the mine is operated with HOE. There is no workshop in the mine.
8.	Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.	Vehicles engaged in coal mine operation and transportation are monitored for valid PUC Certificate. Vehicles used for transporting the mineral are covered with tarpaulins and optimally loaded. Further coal transportation roads have been blacktopped to minimize air pollution and are maintained regularly.
9.	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	Environmental laboratory has been established at CMPDIL, RI-IV Nagpur which is having adequate number and type of pollution monitoring and analysis equipments. The lab. is NABL accredited.
10.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of workers should be undertaken periodically to observe any contraindications due to exposure to coal dust and take	All workers who are exposed to dust are provided with dust masks. Persons working in dusty areas are given training in Environment as per Vocational Training rules & Mines Act 1952 at VTC Pench Area. Occupational Health survey programme of workers are taken as per Mines Rules by way of periodical medical Examination of every worker.

	corrective measures if needed.	
11.	A separate environment 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 Company.	An Environmental Management Cell is in existence at project level, Area level and at company HQs. The cell at project level is headed by SAM and assisted by the manager of the mine. At area level, Cell is headed by AGM & assisted by Area Nodal Officer. -Company HQs Cell is headed by GM (Env.) and duly assisted by a team of qualified personnel.
12.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purposes. Year wise expenditure should be reported to Ministry and the Regional Officer at Bhopal.	There is separate account for the funds earmarked for environment protection measures and is being utilized for the said purpose only.
13.	The Regional office of this Ministry situated at Bhopal shall Monitored compliance of the stipulated conditions. The Project authorities should extend full co-operation to the officers of the Regional Office by furnishing the requisite data/information/monitoring reports.	Full co-operation is extended to officers of MOEF, Regional office Bhopal and all requisite information data etc. is provided as and when required.
14.	A copy of the EC will be marked to concerned Panchayat/local NGO, if any from whom any suggestion / representation has been received while processing the proposal	A copy of environment clearance letter was forwarded to village Panchayat.
15.	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District industry Centre and collector's Office/ for 30 days.	Action to be taken at SPCB Madhya Pradesh.
16.	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 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 web site of the Ministry of Environment & Forests at the http://envfornic.in	Advertisements in two local newspapers were given.
0.3	The Ministry or any other competent authority may alter/modify the above	Noted

	conditions or stipulate any further condition in the interest of environment protection.	
0.4	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act. 1986.	Noted
0.5	The above conditions will be enforced inter-alia, under the provisions of the Water Prevention & Control of Pollution) Act, 1974 the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act. 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted



**Mine Manager
Shivpuri OC Mine**



**Sub-Area Manager
Shivpuri OC Mine
Shivpuri Sub-Area**