

Six Monthly Compliance Report of Environmental Clearance

VISHNUPURI NO. 2 UNDERGROUND MINE

[0.26 MTPA in Area of 321.985 HA]

EC No.: J-11015/229/2005-IA.II(M), Date-03.03.2006



Western Coalfields Limited
Pench Area
Po: Parasia, Chhindwara (MP)- 480441

PERIOD: 01.04.2022 to 30.09.2022

VISHNUPURI-II UNDER GROUND EXPANSION PROJECT

Compliance of Environmental Clearance Condition

**MOEF Environmental Clearance Letter No.-
J-11015/229/2005-IA.II (M) dated 3rd March, 2006**

S.N.	Condition	Compliance
1.	Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation structures, roads, and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and material, Cracks should be effectively plugged with ballast and clayey soil/suitable material.	Coal seam at this mine is presently under development. There is no subsidence movement on surface over and around the working areas during development stage. Subsidence movement occurs on surface only after the depillaring operations are started. Hence, regular monitoring of subsidence on surface will be done during depillaring operations and corrective measures will also be taken for plugging the cracks.
2.	Garland drain (size, gradient & length around the safety areas such as mineshaft and low-lying areas and sump capacity should be designed keeping 50% safety margin discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper setting of silt material.	This is an underground mine. All precautions under coal mines regulations 1957 have been taken to protect mine entries from danger of inundations. The underground sump is of capacity of 250000 gallons which is capable of taking care of heavy rainfall as well as peak strata seepage. The garland drain around the mine entries have been made. Sump capacity is of sufficient capacity to provide adequate retention period for proper silting of silt materials.
3.	Crushers at the CHP should be operated with high efficiency bag filters, fugitive emission from crushing operations, haulage roads, transfer points etc.	In this mine there is no crushing arrangement at the surface and coal produced from underground doesn't require any crossing. CHP is only having two Nos of over head storage bunkers of capacity 50 Tonners each. As such there is no fugitive emission from CHP. Spraying arrangement has been provided along the belt conveyor.
4.	Drills should be wet operated or with dust extractors and operated only during day time.	Drilling operations in underground mining are carried out under wet conditions as per Coal Mines Regulations. Drilling operation in underground mine are at very small scale as compared with opencast mines. It is carried out in all three shifts.
5.	Controlled blasting should be practiced with the use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Blasting operations are carried out at small scale and as per permission of D.G.M.S. Delay detonators are used during blasting as per statutory permission.

6.	A progressive afforestation plan shall be prepared and implemented for the undisturbed area and shall include 3 ha brought under green belt development, areas along roads, along ML boundary, township outside the lease area etc. by planting native plant species in consultation with the local DFO/ Agriculture department. The density of the trees should be around 2500 plants per ha.	The total plantation done so far is 12800 in the surface right area. Being underground mine, there is limitation of space for plantation.
7.	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village (s) in case the village wells go dry due to dewatering of the mine.	At present there is an old quarry abandoned(Kukurmunda OC) filled up with water 120 MG which is serving as recharge system of ground water in the surrounding area. The company is committed to supply water to nearby villages in case village wells go dry. But till now such situation has not arisen.
8.	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers. The monitoring for water levels should be done at least 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 MOEF & CGWB Regional Office quarterly within one month of monitoring.	Monitoring of ground water level & quality in villages is being done by CMPDIL on a quarterly basis and the report is being submitted.
9.	The Company shall put artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village (S) in case the village wells go dry due to dewatering of the mine.	Stop dams have been provided at the natural nallah to recharge artificially ground water level. Compliance of condition at sr.no.7 may also been seen
10.	Digital processing of the entire lease area using remote sensing techniques should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its regional office at Bhopal.	This being an underground mine there will not be a change in the surface land due to mining. However, digital processing of the entire lease area using remote sensing techniques is done through Central Mine Planning & Design Institute Ltd (CMPDIL), Ranchi
12.	A final mine closure plan along with details of Corpus fund should be submitted to the Ministry of Environment & Forest 5 years in advance of final mine closure for approval.	The mine closure plan for Vishnupuri – II UG is approved and its ESCROW account is operational. Account No – 8973161002331.

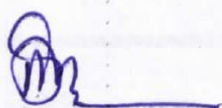
13.	Consent to operate shall be obtained before starting mining operations	Consent to operate has been obtained from MPPCB and is valid up to 28/02/2023 for both Air & Water.
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General Conditions

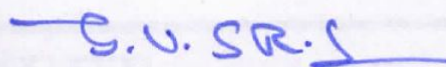
S.N.	Condition	Compliance
1.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Agreed. No change in mining technology & scope of working has been made.
2.	No change in the calendar plan including excavation quantum of mineral coal and waste should be made.	Noted. No change in calendar plan has been made.
3.	Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , NO _x & CO monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultations with the State Pollution Control Board.	The present monitoring of four ambient monitoring stations have been charged as below. 1. SAM Office 2. Sub Station 3. Chhinda Village 4. Shivpuri Guest House The above stations have been selected on the ground as suggested.
4.	Data on ambient air quality (RPM, SPM, SO ₂ , NO _x & CO) should be regularly submitted to the Ministry including its regional office at Bhopal and the state pollution Control Board/ Central Pollution Control Board once in six months.	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.
5.	Fugitive dust emissions from all the sources should be controlled, regularly monitored and data recorded properly. Water spraying arrangements on haul roads, wagon loading dump truck, (loading & unloading) should be provided and properly maintained.	There is no fugitive emission in this mine except for coal transportation as there is no OB dumping, wagon loading involved. Still water spraying with the help of mobile tankers is being done to prevent air pollution at the surface.
6.	Adequate measures should be taken for control of noise levels below 85 dB (A) in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc should be provided with ear plugs/muffs.	Adequate measures are being taken for control of noise levels below 85 dB (A) in the work environment. This is an underground mine; hence operation of HEMM is not involved. Still workers working in noisy areas are provided with ear plugs.
7.	Industrial waste water (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 19th May 1993 and 31 st December, 1993 or as amended from time to time, oil & grease trap should be installed before	The strata water gets accumulated in the mine sump below ground having a capacity of 250000 gallon which acts as initial sedimentation pond. This is then pumped out of the mine to the sedimentation tank at the surface where it goes secondary sedimentation. Mine water pumped out is monitored every fortnight and quality,

	discharge of workshop effluents.	parameters have been found to be well within the permissible limits. The water requirements of mine premises, dust suppression, domestic use are made from this tank. The entire quantity of water is used within the mine premises.
8.	Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting and mineral should be covered with tarpaulin and optimally loaded.	Vehicles engaged in coal mine operation and transportation are monitored for valid PUC Certificate. Vehicles used for transporting the mineral is 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.
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 surveillances program of the workers should be undertaken periodically to observe any contractions due to exposure to coal dust and take corrective measures, if needed.	Personnel working in dust area are provided with protective devices, adequate training & retraining along with safety and health aspects are given to workers regularly in vocational training centre of area as per statutory requirement. Every worker is subjected to periodic medical examination once in every five year. So, as to detect any disease due to exposure to coal dust. The corrective measure as per medical advice is taken in company Hospital.
11.	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 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. -The Area 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 purpose. Year wise expenditure should be reported to the Ministry and its Regional office located 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 located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full co-operation to the officer(s) of the Regional office by	Full cooperation is extended to the officers of MOEF Regional office, Bhopal and requisite information, data etc. is provided to them as and when required.

	furnishing the requisite data/information/monitoring reports.	
14.	A copy of clearance letter will be marked to concerned panchayat/local NGO, if any from whom any suggestion/representation has been received while processing the proposal.	Copy of clearance letter was forwarded to Gram 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/ Tehsildar office for 30 days	This is related to state Pollution control Board.
16.	The Project Authorities should advertise at least in two local news papers 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 also be seen at web site of the Ministry of Environment & Forests at http://nic.in	Advertisements was given in two local Newspapers namely, Raj Express and Dainik Bhaskar, as under - 1. Raj Express, Bhopal, Tuesday dated 21st March 2006 and 2. Dainik Bhaskar, Bhopal, Tuesday dated 21st March 2006
3.0	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted and agreed.
4.0	Failure to comply with any of the conditions mentioned above may result withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986	Noted and agreed.
5.0	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 and agreed.



Mine Manager
Vishnupuri No.2 UG Mine



Sub-Area Manager
Vishnupuri No.2 UG Mine
Shivpuri Sub-Area