SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE

GHORAWARI OC PATCHES

(1.50 MTPA IN AREA OF 1296 HA) EC NO. - J-11015/367/2008/IA.II (M) dated 26.12.2008



WESTERN COALFIELDS LIMITED KANHAN AREA PO: DUNGARIA, CHHINDWARA (MP)-480553

Period - April 2022 to September 2022

Part-IV Status of Compliance

<u>Name of the Project</u>:- Ghorawari Opencast Mine Project 1.50 MTPA <u>Lease Area</u> :- 1296.011 ha . <u>MOEF Environmental clearance letter No</u>. –J-11015/367/2008-IA.II (M) Dated 26 Dec.2008

| SN | Conditions of Environment clearance | Compliance |
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| Α | Specific Conditions | |
| (i) | No mining operations shall be undertaken in the forest land until clearance for renewal has been obtained under the provisions of F.C. Act 1980 | Forest Clearance has been obtained for the patches where mining has been undertaken in Forest land. |
| (ii) | The environmental clearance is only for the specific patches consisting of details submitted to the committee as summarized in the table. | Only specific patches, details of which have been submitted, shall be worked. |
| (iii) | OC Mining should be carried out at a safe distance for old underground workings. | OC Mining is carried out as per the permission from D.G.M.S. |
| (iv) | Prior permission of DGMS shall be obtained before start of the working based on the environmental clearance. | Workings are started only after obtaining permission from D.G.M.S. |
| v) | Safe distance shall be maintained for working adjacent to agricultural fields. | Safe distance shall be maintained as per statute. |
| vi) | The entire OB being generated in the balance life of mine shall be backfilled. | Shall be complied with. |
| vii) | No OB generated in the balance life of the mine shall be dumps. Reclamation, monitoring and management of the existing external OB dump site should continue until the vegetation becomes self sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhopal on yearly basis. | Being complied. |
| Viii) | Catch drains and siltation ponds 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 mine area. Roads, green belt development etc. The drains should be regularly de-silted and maintained properly Garland drains (size, gradient & length) and sump capacity should be designed keeping 50% safety margin over & above the peak sudden rain fall 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. | Catch drains are provided and are being de-silted as and when required. Old quarry is being used as settling pond having adequate sump capacity. as there is no necessity of this water for watering the Mine Area, roads, green belt Development etc . The accumulated water is only dewatered when needed. Shall be complied with as desired. |
| (ix) | Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check runoff and siltation should be based on the rainfall data. | Catch drains /garland drains are constructed around the periphery of the OB dump which arrest the flow of silt and sediments. The entire silt gets accumulated in the drains & are de- silted before onset of every monsoon. As such construction of retaining wall is not required. |
| x) | Mining shall be carried out as per statute at a safe distance from the Pench river flowing adjacent to the lease boundary. | Being Complied. Mining is carried out as per the D.G.M.S. Permission. |
| xi) | The road for coal transport shall be black topped and avenue trees developed on both side. | Coal transportation roads are black topped and wherever possible avenue plantation has been carried out. |
| Xii) | Drills should be wet operated or with dust extractor. | The drills are wet operated as and when considered necessary and also implemented as per guide lines of |

| | | DGMS. |
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| (xiii) | Controlled blasting should be practices with use of delay detonators; the mitigative measures for control of ground vibration and to arrest the fly rocks and boulders should be implemented. | Controlled blasting is being carried out according to the D.G.M.S. permission. |
| xiv) | Area brought under a forestation shall be not less than 61.727 ha. and includes external OB dump (9.15 ha), backfilled area (52.077 ha), along ML boundary along roads and area in township located within and out side the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of trees should be around 2500 plants per ha. | Shall be complied with in due course. However this is in practice. |
| xv) | Progress mine closure plan shall be implemented by reclamation of decoaled quarry area and forestation by planting native plants species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. | Being complied. Reclamation is being carried out in de-coaled quarry areas per EIA/EMP. The density of the plantation carried out is 2500/Ha |
| xvi) | Regular monitoring of ground water level and quality should be carried out by establishing a network of exiting wells and construction of new pedometers. The monitoring for quantity 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 & Forests 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-Anancon Laboratories, 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 Oct'21-Mar'22 are enclosed. |
| xvii) | Besides carrying out regular periodic health check up of their workers, 10% of the workers identified from work forced engage in active mining operations shall be subject 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 resulted reported to this ministry and to DGMS. | Periodicmedicalexamination(P.M.E.) are carried outcompulsorily on each employee oncein five years with the purpose ofdetecting and keeping the record ofdiseases with specific importance tothecoalworkersviz.Pneumoconiosis. During P.M.E. thecandidates are subject to completeclinicalexaminationreelingtooccupationaldiseases and hearingimpairment. As WCL is having all theinfrastructurefacilitiestocomplywithallstatutoryobligationsregardingoccupational healthsurveyofall itsemployees, helpfromexternalorganizationi.e.:NIOH,Ahmedabad is not required.PMEPME conducted for WCL, KanhanAreaemployeeswhich hasthreeactiveminesintheFY2021-22-Ambara OC, Mohan UG and TandsiUG.PMEconducted-\$18nosofemployeesand workersduring the FY2021-22against a target of 786 nos. |
| xviii) | An STP shall be provided for the township/colony to treat the domestic effluents to prescribe standards and for their re-use in project activities. | An STP of capacity 0.17 MLD has been commissioned at the colony for treating the domestic effluent. Presently the STP is not in operation as the sewage feed from quarters is |

| | | not sufficient to operate the plant. As the maximum number of quarters have been vacated since nearby Jharna UG mine has been closed permanently and employees have been transferred to other projects. Individual Septic tanks and soak pits have been provided in the colony and are upgraded from time to time as per the requirements. |
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| xix) | For monitoring land use pattern and for post mining land use, a time series of land use map, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of project until end of mine life 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. | 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 - http://103.59.142.228:8081/wclweb/T PK_CF_2020.pdf |
| xx) | Digital processing of the entire lease area using remote fencing technique should be done regularly once in three years for monitoring land use pattern and reports submitted to MOEF and its Regional Office at Bhopal. | Complied. Digital processing of lease area is being done through CMPDIL and the reports are uploaded on the company's website – <u>westerncoal.in</u> Report for the year 2021 is prepared and uploaded on the website <u>www.westerncoal.in</u> |
| В | GENERAL CONDITIONS | |
| i) | No change in mining technology and scope of working should | |
| | be made without prior approval of the Ministry of Environment & Forests. | Noted for compliance. No change in mining plan is proposed |
| ii) | | |
| ii) (iii) | & Forests. No change in the calendar plan including excavation, quantum | mining plan is proposed |
| | & Forests. No change in the calendar plan including excavation, quantum of mineral coal and waste should be made Four Ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for SPM, RPM, SO_{2 and}NOx monitoring. Location of the stations should be decided based on the meteorological data topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control | mining plan is proposedNoted for compliance.The ambient air quality station of thisMine Area is as follows.1. Office of the Manager,Ghorawari Colliery2. SAM, Office Ghorawari ,3. Colony health centre,Ghorawari |

| v) | Data on ambient air quality (SPM,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 and the Central Pollution Control board once in a six months. | Being complied regularly. The details of monitoring stations, methodology and monitoring results are communicated to MOEF, Bhopal and MPPCB regional office |
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| vi) | Adequate measures should be taken for control of noise level below 85 DBA in the work Environment. Workers engaged in blasting and drilling operation, operation of HEMM etc. should be provided with Ear plugs/muffs. | Noted for compliance |
| vii) | Industrial waste water (workshop (waste water from the mine) should be properly collected, treated so as to conform in the standard prescribed under GSR 422 (E) $dtd.19^{th}$ May 1993 and 31^{st} December 1993 or as amended from time to time before discharge .oil & grease trap should be installed before discharge of work shop effluents. | Mine is operated in patches. During operation, mine water quality is monitored every fortnight as per Environmental protection (Amendment) Rules 2000 and all parameters are found to be well within the permissible limits. |
| VIII) | Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the minerals should be covered with tarpaulins and optimally loaded. | Vehicles with valid P.U.C. certificate only are allowed to ply in the mine. The coal transportation trucks are covered with tarpaulin and also optimally loaded. |
| ix) | Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board. | A well-equipped Environmental laboratory which is NABL accredited is already established at C.M.P.D.I.L., Nagpur. (Copy of certificate enclosed). Monitoring and analysis is carried out through CMPDIL. Complied |
| x) | 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 the workers should be undertaken periodically to observe any contraction due to exposure to dust and to take corrective measures if needed. | Periodicalmedicalexamination(P.M.E.) are carried outcompulsorily on each employee oncein five years with the purpose ofdetecting and keeping the record ofdiseases with specific importance tothecoalworkersviz.Pneumoconiosis. During P.M.E. thecandidates are subject to completeclinicalexaminationreelingtooccupationaldiseases and hearingimpairment. As WCL is having all theinfrastructurefacilitiestocomplywithallstatutoryobligationsregardingoccupational healthsurveyofallitsemployees, helpfromexternalorganizationi.e.:NIOH,Ahmedabad is not required.PMEconducted for WCL, KanhanAreaemployees which has threeactive mines in the FY 2021-22-Ambara OC, Mohan UG and TandsiUG.PMEconducted-818PMEconducted-818ofemployees and workers during the FY2021-22against a target of 786 nos. |
| xi) | 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 | 2021-22 against a target of 786 nos.Thereiswellestablishedenvironmental cell at corporate HQ,headedbyGM(Env)reporting to |

| | Company. | Director (Tech) P & P .He is assisted |
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| | Company. | 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 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 at Bhopal. | A separate revenue and capital budget for Environment protection works in WCL which is not Diverted to any other expenditure head. |
| xiii) | The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated condition .The Project Authority shall extend full co-operation to the office (s) of the Regional office by furnishing the requisite data, information / monitoring report | Noted. |
| xiv) | A copy of the clearance letter shall be marked to concerned Panchayat/ local NGO if any, from whom any suggestion/ representation has been received while processing the proposal. | Complied. |
| xv) | State Pollution Control board should display a copy of the clearance letter at the Regional office, District industry center and collector's. office /Tahsildar office for 30 days. | This is for MPPCB |
| xvi) | 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 Environment al 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 | Advertised in two local news paperswidely circulated around the project i.e. in Dainik Bhaskar and Nav Bharat Hindi news papers (local language of the state). |
| 3. | The Ministry or any other competent authority may stipulated any further condition for environmental protection | Noted. |
| 4. | Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provision of the Environment (Protection) Ac.1986 | Noted |
| 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 public liability insurance Act,1991 along with their amendments and Rules . | Noted |