

**PART – II & III**  
**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE FOR THE PERIOD OF**  
**JUNE, 2017 -DECEMBER, 2017 TO CONDITIONS OF ENVIRONMENTAL**  
**CLEARANCE AND ENVIRONMENTAL MANAGEMENT**

EC No- J-11015/72/2004-IA-II(M), dated. 28<sup>th</sup> July 2005

**A. Specific Conditions**

S. No.	Condition	Compliance status
i	No Mining shall be carried out below the Khairaha village located within the core zone.	PP informed that no mining is being done below Khairaha village. All working including plants and machinery are being done as per DGMS permission.  <b>Being Complied.</b>
ii	Suitable precautionary measures shall be taken to prevent inundation of mine working from peak flow of the Sarpha nallah and Baisaha nallah. Garland drains and protective bunds shall be made before start of actual extraction to prevent entry of water into the workings and avoid inundation in the mine.	The mine opening is more than 5.00 Mtr. HFL comparatively with Sarpha river and Baisaha Nala. At present mine is in developmental stage. Garland drain and protective barrier will be prepared at the time of depillaring of the mine (year of depillaring 2020-21). At present garland drains are provided around the mine premises, and at mine entry.  <b>Being Complied.</b>
iii	Provision of garland drain around the mine should be made to prevent precipitation runoff. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly. Garland drains (size, gradient & 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 site.	PP assured that Garland drain be prepared/construct at the time of depillaring. (year of depillaring 2020-21). At present mine is in developmental stage. At present garland drains of 2.5"x2.5" for about 500meters length has been provided around the mine premises, and at mine entry. Collected water is used in continuous miner after treatment in pressure filter. <b>Agreed to comply with.</b>
iv	Pumps of adequate number and capacity should be provided to drain the mine water even during maximum rainfall.	Sufficient nos. of pumps(4+1=5,1000GPM) installed in mine for dewatering.  <b>Being Complied.</b>
v	A subsidence map showing original surface topography, surface features and super out shall be prepared before expansion is undertaken. A copy of this map shall be furnished to CCF, Bhopal, Regional Office, MoEF, Bhopal.	The surface map shown with all feature and necessary information has been submitted. A subsidence map showing original surface topography, surface features and super out will be prepared before expansion in capacity.  <b>Agreed to comply with.</b>
vi	Monitoring of the subsidence shall be done on a monthly basis up to 3 years after completion of extraction. A qualified and competent person shall be engaged for C He will report to the company on the visual impacts of subsidence such as formation of subsidence through, change in drainage pattern etc. Copies of all monitoring and compliance reports shall be simultaneously furnished to the APCCF, Bhopal, R.O, MoEF, Bhopal.	Till date no depillaring started, Mine is in developmental stage. As Subsidence do not occurs during development stage of mine. However Monitoring of subsidence will be done on the visual impacts of subsidence such as formation of subsidence and change in drainage pattern. <b>Agreed to comply with.</b>

vii	Drills should be wet operated or with dust extractors.	The U/G, Drilling & roof bolting is being done wet only. PP use wet operated Continuous Miner system. <b>Being Complied.</b>
viii	Controlled blasting should be practiced with the use of delay detonators.	Currently no blasting is in use, coal extraction is being done with the help of Continuous Miner only. <b>Not Applicable.</b>
ix	Afforestation shall cover a total of 20.60 ha] along the ML boundary, roads, etc. In addition, area within township outside the lease area shall be covered under greenbelt. Plantation shall be taken up 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.	PP has taken up Plantation of 5000 Nos.in 2.0Ha.area the Balance will be planted as the mines progresses. PP informed that some area other than mine lease area been planted with 52000 plants in Amarkantak. PP has been advised to take up plantation by planting native plant species in consultation with the local DFO/Agriculture Department. <b>Agreed to comply with.</b>
x	Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new peizometers. The Monitoring for quantity should be done for minimum four times a year in pre-monsoon, monsoon, post-monsoon and winter seasons and for quality in may. Data thus collected should be submitted to the MoEF and the CGWB, Regional Office quarterly within one month of monitoring.	PP informed that the Ground water level is being monitored with the help of existing tube wells in the mine premise and nearby area, and the records are being maintained. The ground water monitoring report/ data for 4 villages wells from May 2012 to Dec.2017 has been submitted by PP. <b>Being Complied.</b>
xi	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 de-watering of the mine.	PP submitted that ground water recharge is being done by Rain Water harvesting system. The PP informed that as per CMO, Shahdol Nagar Palika direction the water is being discharged into Sarpha Nallah goes to Sarpha dam for domestic use of Shahdol town. Also the nearby villagers are using mine water for agricultural use. The ground water monitoring report/ data for 4 villages wells from May 2012 to Dec.2017 has been submitted by PP. As per record no village well has been dried up. <b>Being Complied.</b>
xii	Sewage treatment plant should be installed in the existing colony.	As there is no residential colony in Khairaha UG. <b>Not Applicable.</b>
xiii	Digital processing of the lease area using remote sensing techniques should be done regularly once in 3 years for monitoring land use pattern and report submitted to MoEF and its Regional Office at Bhopal.	PP submitted that the mine is in developmental stage and no subsidence has occurred till date. PP submitted proposal for Land Use Monitoring by Remote Sensing technology/ digital processing and report will be submitted shortly. <b>Agreed to comply with.</b>
xiv	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	The mine is in development stage and the expected age of mine is up to 2041. PA assured that Final Mine Closure Plan will be submitted to the MoEF& CC, 5 year advance of final mine closure. <b>Agreed to comply with</b>

xv	Consent to operate should be obtained from the SPCB before expansion in production.	At present mine is operating within the permitted capacity and consent has been accorded from MPPCB valid up to 28.2.2019.  <b>Being complied</b>
xvi	Necessary approval from State Land Use Board shall be obtained for diversion of agricultural land.	PP submitted that Acquisition of Land is under Coal bearing areas (acquisition and development) Act, 1957. However, there is no proposal for diversion of agricultural land.  <b>Agreed to comply with.</b>

### **B. General Conditions:**

S. No.	Condition	Compliance
I	No change in mining technology and scopes of working should be made without prior approval of the Ministry of Environment and Forests.	<b>Agreed to comply with</b>
Ii	No change in the calendar plan including excavation, quantum of mineral coal and waste should be made.	The mine is in operation as per given capacity. The production detail for last three years are as under:- <ul style="list-style-type: none"> <li>• 2015-16- 170300 T</li> <li>• 2016-17- 245670 T</li> <li>• 2017-18 (target)- 500000 T</li> </ul> <b>Agreed to comply with</b>
Iii	Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO <sub>2</sub> , NO <sub>x</sub> , 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 Board.	As per direction of the MPPCB 4 Monitoring stations are in function in core zone and 4 ambient air quality station in buffer zone as well. Monitoring of Air, Water, & Noise are being done fortnightly and Heavy metals are once in six month and reports are submitted. Random verification of samples is done by MPPCB, Shahdol.  <b>Being complied</b>
Iv	Data on ambient air quality (RPM, SPM, SO <sub>2</sub> , NO <sub>x</sub> ) should be regularly submitted to the Ministry including its Regional Office at Bhopal and the State Pollution Control Board and the Central Pollution Control Board once in six months.	The AAQ monitoring is done on intervals and data submitted along with six monthly reports. PA has been advised for regular submission of six monthly reports and it's uploading on the website.  <b>Being complied</b>
V	Fugitive dust emissions from all the sources should be controlled regularly monitored and data recorded properly, water spraying arrangement on haul roads, wagon loading, dump trucks (loading & unloading) points should be provided and properly maintained.	Fugitive dust emissions are controlled by road swiping machine, water spraying through mobile water tanker(2) and manually by flexible pipe. Monitoring of Air quality is being done fortnightly, and Heavy metals are done once in six month.  <b>Being complied.</b>



vi	Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc., should be provided with ear plugs/muffs.	PP has monitored the noise level which is under permitted limits. Ear muffs/plugs (In 2016-17-25 nos.) are provided to the blasting crew and to the machine operators (pumps, conveyor belt, SDL, etc.). Also green belt developed around the mine premises, fan house using native species of plants to control the noise level. The data of noise monitoring is submitted along with six monthly reports.  <b>Being complied</b>
vii	Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dtd. 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents.	The waste water from mine is being settled in underground sump. Thereafter settled mine water discharged to surface settling tanks and clear mine water is discharged into Baisha nallah/Sarpha Nallah. The water quality is being monitored fortnightly & quality is within permissible limit. No workshop effluent is generated. <b>Being complied</b>
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.	It is noted that 10-15 dumper/ trucks are used every day. PP keeps the record of PUC certificate. The coal is being transported in optimally loaded covered truck.  <b>Being complied</b>
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	The SECL has its lab established under CMPDIL. The environmental monitoring is being done by the NABL accredited CMPDIL lab.  <b>Agreed to comply with</b>
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 and contractions due to exposure to dust and take corrective measures, if needed.	In dusty areas Water spraying is provided, in the working areas Dust mask provided to persons are engaged in active mining operation (In 2016-17-50 nos.), 33% workforce goes under PME every year (In 2016-17- 175 employee). Regular training and information on safety and health aspects is conducted for workers as per DGMS norms.  <b>Being complied</b>
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 Company.	The environmental management cell has been established as under: Gm (Envt), Chief manager (Envt), Sr. Manager (Envt.) Asst. manager (Envt). <b>At project level –</b> Project officer (Dy. GM, Mining), Manager (Khairaha), Sr. Manager (Civil), Sr Subordinate Engineer (Civil)+ 2 satff. <b>Being complied</b>

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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 located at Bhopal.	Budgeted fund Rs. 50 Lakhs has been provided for environmental protection measures. Expenditure details are (In 2016-17): 1. Monitoring by CMPDI: 13.66 Lakhs 2. Monitoring by MPPCB: 0.87 Lakhs 3. Water cess-2.17 Lakhs 4. Consent (hazardous waste) - 0.5 Lakhs etc. 5. Construction of Road from PWD Junction to Khairaha UG mine- 639.00 lakhs 6. Construction of village Road- 8.5 Lakhs. 7. Water spraying by water tanker- 1.76 Lakhs 8. Pressure filter installation (2 No)-7 Lakhs. 9. O & M of settling tank- 0.25 Lakhs 10. Rain water harvesting – 2.2 lakhs Approx. Expenditure- 676 Lakhs.  <b>Being complied</b>
xiii	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The projects authorities should extend full co operation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	<b>Agreed.</b>
xiv	A copy of the clearance letter will be marked to concerned Panchayat /local Ngo, if any from whom and suggestion/representation has been received while processing the proposal.	The copy of the clearance letter is marked to concerned Panchayat- Khannat Village panchayat on 01.09.2005. <b>Complied.</b>
xv	State Pollution Control Board should display a copy of the EC at the RO, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.	<b>Compiled by MPPCB.</b>
xvi	The PA 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 issue of the clearance letter informing that the project has been accorded EC and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment & Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	EC Letter has been circulated through local newspaper and advertisement published+ in local news paper Vindhyanchal, Jabalpur and Samay on 03.09.2005. <b>Complied.</b>
3.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	<b>Agreed Upon.</b>
4.	Concealing factual data or submission of false/fabricated data and 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 (P) Act, 1986.	<b>Agreed Upon.</b>



5.	The above condition will be in forced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act 1974 and the Air (Prevention & Control of Pollution) Act 1981, the E (P) Act 1986 and the Public Liability Insurance Act 1991 along with their Amendment and Rules made their under and also any order passed by Hon'ble Supreme Court India/High Court of M.P and any other Court of Law Relating to the subject matter.	Agreed Upon.
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#### **SUMMARY NOTE:**

- 1. Implementation of Conditions:** It is inferred from the above that the implementations of environmental safeguards are found satisfactory and some compliance needs improvements which are in progress, PA has been advised for compliances is to be taken care peri-pasu with mine development and attention is to be given to the vital conditions like environmental management, green belt development, Control of fugitive dust and also the submission of six monthly compliance reports as per stipulations.
- 2. Review w.r.f to MOEFs letter dated 30.05.2012:** The above mentioned report is prepared after site visit on 09-05.2018 for the proposed expansion in production from 0.585 to 0.819 MTPA at Khairaha UG mine, Rajendra sub area, village. Khairaha, Shahdol, (M.P.) PP has applied for expansion for which TOR has been issued and the expansion is proposed within the existing lease area.
- 3. Court Cases and show cause/closure notices:** PP vide certificate submitted that there is no court case against the project and no show cause/closure notice issued by the SPCB/CPCB during last 3 years.

  
(Dr. S.K.Lal)  
Scientist-C