



**Annexure - A**

**Compliance Report on conditions of Environment Clearance for Gare-Palma IV/5 coal mining project Transfer by Ministry of Environment & Forests vide letter no. J-11015/ 8/1998-IA.II (M) Dated: - 16<sup>th</sup> April 2015 for Under Ground Mining 1.0 Million Ton/Annum Production Capacity**

SI No	Conditions	Status
1	Any change in scope of work will attract the provisions of Environment Protection Act (EPA), 1986 and Environment Impact Assessment Notification, 2006 in conjunction with the subsequent amendments/circulars.	Noted please.
2	All conditions stipulated in the EC letter No.J-11015/8/1998-IA.II (M) dated 31 <sup>st</sup> August, 2000 shall remain unchanged.	Noted please.
3	The successful bidder shall be liable, if any, for any act of violation of the EPA 1986/EIA Notification 2006/subsequent amendments and circulars which it has inherited during the transfer.	Noted please.
4	Successful bidder shall be liable for compliance of all court directions, if any.	Noted please.

**Compliance Report on conditions of Environment Clearance for Gare-Palma IV/5 coal mining project given by Ministry of Environment & Forests vide letter no. J-11015/ 8/1998-IA.II (M) Dated: - 31<sup>st</sup> August 2000 for Under Ground Mining 1.0 Million Ton/Annum Production Capacity**

SI no	Specific Conditions	Status
i	Regular Monitoring of subsidence movement on the surface over working areas and impact on water bodies/ vegetation/ structures/ surroundings should be continued till movement ceases completely. In case of observation of any high rates of subsidence movement, appropriate measures should be taken to avoid loss of life and materials. Cracks should be effectively plugged with ballast and clayey soil/ suitable material.	The method of mining at Gare Palma IV/5 coal mine is Bord & Pillar. Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural pattern, water bodies, vegetation, structure, roads and surroundings is being done by internal expert. During the observation no subsidence movement has been observed. In future, if any subsidence movement is found, appropriate effective corrective measures will be taken to avoid loss of life and material. Cracks will be effectively plugged with ballast and clayey soil/suitable material if observed.
ii	Adequate underground barrier should be left in consultation with the Director General of Mines & Safety (DGMS). Depillaring should also be carried out after taking approval from DGMS.	Adequate underground barrier as required are being maintained between the working face and the river in consultation with DGMS and also at other places whenever required. Depillaring is being carried out after taking prior approval of the DGMS.
iii	Garland drains should be constructed around the waste rock and ore stockpiles to prevent surface run-off.	Garland drain have been constructed around the coal stock yard to prevent the surface run-off.
iv	A Green Belt of adequate width should be raised by planting the local species along the mine	Planation in mines area is being done. At present around 42000 nos. of trees have been planted



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	boundary, Waste rock dumps, ore stockpile, ventilation fan road and selected open areas in consultation with local DFO/ Agriculture Department. Density of tree should be at least 2500 plants per ha.	including the Mine boundary and other places. Trees species planted are Gulmohar, Ashoka Aam, Imli, Shisam, Eucalyptus, Neem, Jamun, Accassia spp. etc. in consultation with DFO. Plantation has been carried out @2500 per hectare and will also be ensure in future. Plantation details enclosed as <b>Annexure –I.</b>
v	Compensation to the 14 land losers from whom private land will be acquired should be paid as per the state government norms.	Compensation to the 14 land losers has been paid by the company.
vi	The project authority should conduct a subsidence estimation study and submit the report to the Ministry within six months.	Subsidence estimation study report has been submitted to the Ministry by Prior allottee.
vii	The project proponent will construct "Check dams "at the sites proposed by the State Ground water Department in their report. While undertaking the proposed mining, the construction of the check dams should be carried out in with Ground water survey department, Government of MP (presently Chhattisgarh) and should have necessary financial provision and technical expertise. This should be communicated to the MoEF and CGWB.	As per requirement the check dams at the site will be constructed in consultation with state forest department and Ground water survey department, Government of Chhattisgarh and will be communicated to MOEF& CC and CGWB.
viii	Regular monitoring of the Ground water level and quality should be carried out by establishing a network of existing wells and constructing new Piezometer during the mining operations. The interval of monitoring should be four times a year- Pre monsoon (April to May), Monsoon (August), Post Monsoon (November) and winter (January). The data thus collected may be sent regularly to MoEF and CGWB for information.	Regular monitoring of groundwater level and quality is being carried out by establishing a network of existing wells. Report on ground water level monitoring and quality is enclosed as <b>Annexure-II.</b>
ix	Digital processing of the entire lease using remote sensing technique should be regularly once in three years for monitoring land use pattern and report submitted to MoEF and its regional officer.	Study report on digital processing of entire mine lease area has been submitted.
x	A detailed mine decommissioning plan should be submitted to the MoEF, five years in advance for approval.	Detailed mine decommissioning plan will be submitted to the Ministry of Environment and forests, five years in advance for approval.
<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 MoEF.	Noted and is being complied..
ii	No change in the calendar plan including excavation quantum of mineral coal and waste should be made.	Noted. Coal production restricted within EC limit.
iii	Four ambient air quality stations should be established in the core zone as well as the buffer zone for RPM, SPM, SO <sub>2</sub> , NO <sub>x</sub> & CO Monitoring. Location of stations should be decided based on	Four ambient air quality monitoring stations have been established in consultation with the State Pollution Control Board and regular monitoring is



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	the meteorology data, topographical features and environmental and ecologically sensitive targets in consultation with the State Pollution Control Board.	being carried out. Monitoring Report is enclosed as <b>Annexure -III</b> .
iv	Data of ambient air quality (RPM, SPM, SO <sub>2</sub> , NO <sub>x</sub> & CO) should be regularly submitted to the Ministry including its Regional Officer at Bhopal (Currently Raipur) and the State Pollution Control Board & Central Pollution Control Board (Currently Raipur).	Ambient air quality monitoring report is enclosed as Annexure -III.
v	Drill should be wet operated.	Wet drilling is under practice.
vi	Fugitive dust emission from all the sources should be controlled, regularly monitored and the data recorded properly. Water spraying arrangement on haul roads, Wagons, loading dump trucks (loading and unloading) should be provided and properly maintained.	Fixed type water sprinkler has been provided at all along the roads, and loading points etc. to control the fugitive dust emission.
vii	Adequate measures should be taken for control of noise level below 80db in the work environment. Workers engaged in blasting and drilling operation, operations of HEMM etc. should be provided with ear plugs/ muffs	Ear muffs/plugs has been provided to the all workers engaged in blasting and drilling operations, operations of HEMM etc. The Noise monitoring report is enclosed as <b>Annexure-IV</b> .
viii	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform on the standards prescribed under GSR 422 dated 19.05.1993 and 31.12.1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents in to the pond.	06 nos. Settling ponds with two numbers of Lamella clarifier (ETP-2 x200 m <sup>3</sup> per hour) plant has been installed for treatment of mine water. Report on water quality is enclosed as <b>Annexure-V</b> .
ix	Acid mine water if any has to be treated and disposed off after conforming to the standards prescribed by the competent authority.	There is no acid mine water. Lamella clarifier (ETP) plant has been installed for treatment of mine water. Report on water quality is enclosed as <b>Annexure-V</b> .
x	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 with adequate number and type of pollution monitoring and analysis equipment in consultation with the state pollution control Board. However we have engaged NABL laboratory for environmental quality monitoring of the mines area.
xi	Personnel working in dust area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance 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 dusty areas are wearing protective respiratory devices and they have also been provided with adequate training and information on safety and health aspect. Occupational health surveillance programme of the workers is being undertaken periodically to observe any contraction due to exposure to coal dust and corrective measures will be taken accordingly.
xii	A separate environmental management cell with suitable qualified personnel should be set up under	Submitted.



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	the control of a senior executive who will report directly to the Head of the Organization.	
xiii	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 Ministry.	The funds earmarked for environmental protection measures has been budgeted separately and not been diverted for other purposes. <b>Annexure-VI.</b>
xiv	The Regional Officer of the ministry located at Bhopal (currently Raipur) shall monitor compliance of the stipulated conditions. The project authorities should extent full co-operation to the officer (s) of the Regional Officer by furnishing requisite data information / monitoring reports	Agreed and cooperation will be extended on time to time.
xv	A copy of the clearance letter will be marked to concerned Panchayat/ local NGO if any from whom suggestion / representation has been received while processing the proposal	Complied by Prior Allottee.
xvi	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/ Tehsildar's office for 30 days	Complied by Prior Allottee.
xvii	The project authorities should advertise at least two local newspapers widely circulated around the project one of which shall be in vernacular language of the locality concerned informing that the project has been accorded environmental clearance and the copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the MoEF at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Complied by Prior Allottee.