

**COMPLIANCE STATUS OF CONDITIONS MENTIONED IN ENVIRONMENT CLEARANCE LETTER NO. J-13012/99/2008/IA.II (T) GOI, MOEF, DATED MAY 28, 2010 AND CORRIGENDUM DATED 01.09.2010**

**A. Specific Conditions:**

<b>S.NO</b>	<b>EC Condition</b>	<b>Status as on 31<sup>st</sup> March' 2014</b>
i	<p>Environment clearance is subject to the condition that no forest land involved in the thermal power project area as well as in the coal mine from which coal is to be sourced.</p> <p><b><u>As per corrigendum dated 01.09.2010, above condition (i) shall now be replaced by the following:</u></b></p> <p>"Environmental clearance is subject to obtaining clearance under Forest (Conservation) Act, 1980 for diversion of 93.6 acres of forest land."</p>	<p>Clearance under Forest (Conservation) Act, 1980 for diversion of 93.6 acres (37.875 Ha) of forest land stands obtained from MoEF vide letter no-6-MPC051/2009-BHO/3598 dated 17/08/2011 " attached as <b>Annexure-II</b></p>
ii	<p>Company shall pay compensation for acquisition of private land and displacement of homestead as per the Central/State Government norms. The compensation to be paid to the land loser and displacement of the families shall not be less than norms/package as per the policy on National Resettlement &amp; Rehabilitation Rules, 2007. <i>Action Plan for R &amp; R with package for the project affected shall be submitted within three month from the date of issue of this letter.</i></p>	<p>Compensation is being paid as per the R&amp;R package approved by State govt. in March 2010.</p> <p>Action plan for R&amp;R with package was submitted to MOEF on 1st June 2011 vide letter no MBPMPL/ENV/APR/2011-12/14.</p>
iii	<p>Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 34 % respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made to MoEF for suitable amendment to Environmental clearance condition wherever necessary.</p>	<p>Vide letter no. SECL/BSP/ GN/ MB Power/ 13/781 dated 06/06/2013/ SECL has confirmed that ash and sulphur content in the coal supplied by them will be of less than 34% and 0.5% respectively as stipulated in environment clearance.</p> <p>The copy of letter is attached as <b>Annexure-III</b>.</p>
iv	<p>A bi-flue stack of 275 m height shall be provided with continuous online monitoring equipment for SO<sub>x</sub>, NO<sub>x</sub> and particulate matter, exit velocity of flues gases shall not be less then 22 m/sec. Mercury emission from stack may also monitored on periodic basis.</p>	<p>Stack of 275 mtr height has been constructed. Installation of Online monitoring equipments for Sox, NOx, and Particulate Matter is under progress. Exit velocity will be complied with during O&amp;M</p> <p>Mercury monitoring will be done periodically during operation phase.</p>

v	Provision of installation of FGD shall be provided for future use. High efficiency electrostatic precipitator(ESP) shall be installed to ensure that the particulate emission does not exceed 50 mg/Nm <sup>3</sup> . Adequate dust extraction system such as cyclone/Bag filter and water spray system in dusty area such as in a coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	FGD and ESP with 99.9% efficiency to ensure PM emission < 50mg/Nm <sup>3</sup> have been installed.  All the dust extraction system is considered in our design and being provided
vi	<b><i>The proponent shall upload the status of compliance of the stipulated EC conditions, including results of the monitored data on there website and shall upload the same periodically.</i></b> It shall simultaneously be sent to the regional office of MOEF, the respective Zonal Office of the CPCB And the SPCB. The criteria pollutant level namely; SPM, RSPM, (PM <sub>2.5</sub> , PM <sub>10</sub> ), SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as Stack emission) shall be displayed at a convenient location near the main gate of the company in the public domain.	Status of compliance of the stipulated environment clearance conditions and results of the monitored data are uploaded on companies' website on six monthly basis.  Data on SPM, RSPM, (PM <sub>2.5</sub> , PM <sub>10</sub> ), SO <sub>2</sub> , Nox parameters observed during construction phase are being sent to respective offices. (Refer <b>Annexure-XV</b> ).  Ambient levels as well as stack emission shall be displayed at main gate during operational phase.
vii	<b><i>Detailed hydro-geological study shall be conducted and submitted within six months</i></b> from an institute/organization of repute to assess impact on surface water regime. Specific mitigation measure shall be spelt out and action plan for implementation of the same shall be provided .It shall be ensured that the area drainage is not disturbed due to the proposed power plant. <b><i>Hydro-geological study of the area shall be also reviewed annually and result submitted to the ministry and concerned agency in the state Govt.</i></b> in case adverse impact on ground water quantity and quality is observed at any stage, immediate mitigating steps to contain any adverse impact on ground water shall be under taken.	Area drainage report has already been submitted to MoEF in Nov, 2009. The detailed hydro-geological study report has already been submitted vide letter no. MBPMPL/ENV/APR/2011-12/138 dated 01/12/2011.  The Hydro-geological study is being reviewed annually and submitted to MoEF and State Govt regularly. No adverse impact on ground water quality has been observed. Result of last review report (may -2013) is attached as <b>Annexure- IV</b> .
viii	Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional Office of the Ministry within the three months.	Government of Madhya Pradesh has allocated 75.6 MAF of water from river Sone for feeding water to Thermal Power Plant. In terms of the direction of State Government, a barrage is under construction across River Sone to store water during monsoon for meeting water during lean season. Besides, a Raw Water Reservoir of appropriate capacity has also been built at plant end. Consent to Establishment for construction of barrage at River Sone has already been received by State Pollution Control Board dated 28th July 2011 vide letter no. 7021/TS/MPPCB/2011. Further the DPR & Construction design for barrage has been approved by WRD vide letter no.Ganga/Karya/Anuppur/22-448 Ka 08, dated 08.12.2011.

		Lean season flow measurement carried out by M/s Sigma and report submitted to MOEF, PCB and WRD on 17th Feb'2012 vide letter no. MBPMPL/APR/ENV/ 2012/32. From Nov 2012, river flow measurement is being done in -house duly verified and approved by WRD. Lean flow measurement data has been submitted to WRD Anuppur in June 2013 attached as <b>Annexure-V.</b>
ix	No ground water shall be extracted for use in operation in the power plant even in lean season.	No ground water is being extracted and shall be complied during operation also.
x	COC of 5.0 shall be adopted. The treated effluent conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the company boundary except during monsoon. Arrangement shall be made that the effluent and storm water do not do get mixed. A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising green belt/plantation.	COC 5.0 has been incorporated in design.  Zero discharge has been considered in the design.  STP has been incorporated in design and treated sewage water will be used for raising green belt/plantation.
xi	Regular monitoring of ground water level shall be carried out by establishing a network of existing well and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and record maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	08 Nos piezometers have been constructed. Regular monitoring of ground water level is being carried out in existing wells in nearby villages and piezometers located inside the plant.  Baseline data for ground water quality near ash pound location carried out and test results has been submitted in the month of Feb 2011 vide letter no 153/MBPMPL/ENV/2011 dated 07.02.2011.  In addition six monthly test being carried out and test results being submitted to Regional office of MOEF, Zonal Office of the CPCB and the SPCB.
xii	Monitoring of surface water quantity shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	Lean season flow measurement carried out by M/s Sigma and report submitted to MOEF, PCB and WRD on 17th Feb'2012 vide letter no. MBPMPL/APR/ENV/ 2012/32. From Nov 2012 river flow measurement is being done in -house duly verified and approved by WRD. Lean flow measurement data has been submitted to WRD Anuppur in June 2013 attached as <b>Annexure-V</b>  Baseline data for surface & ground water quality has been submitted to regulatory authorities in the month of Feb 2011.

xiii	Measures for rain water harvesting shall be undertaken. Central Ground water Authority/Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance and details shall be furnished.	CGWA has approved project report for rain water harvesting vide letter no. 1-8/CGWB/NCR/TS/(CGWA)-270 dated 29 <sup>th</sup> Feb' 2012, and subsequently rain water harvesting system is incorporated in plant design and part of EPC.
xiv	Additional soil for leveling of the proposed site shall be generated within the site (to the extent possible) so that natural drainage system of the area is protected and improved.	Being complied with the requirement.
xv	Utilization of 100% Fly ash generated shall be made from 4 <sup>th</sup> Year of operation of the plant. Implementation of status shall be reported to the Regional office of this ministry from time to time.	Shall be complied. MOU with Cement manufacturers have been executed to dispose of 100% fly ash.
xvi	Fly ash shall be collected in dry form and storage facilities (silo) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metal (As, Hg, Cr, Pb, etc) shall be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in the low lying area.	Dry fly ash collection system has been incorporated in the design of the plant.  Unutilized fly ash shall be disposed off in the ash pond through lean slurry disposal system has been incorporated in design. Heavy metals shall be monitored in bottom ash.
xvii	Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media so that no leachate takes place at any point of time. Adequate safety measure shall also be implemented to protect the ash dyke from getting breached.	Ash pond has been lined with HDP/LDP lining.
xviii	For disposal of bottom ash in abandoned mines (if proposed to be under taken), it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom ash is filled up. The proposed proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	Shall be complied with the subject depending upon the availability of the abandoned mines within reasonable distance.
xix	Green Belt consisting of 3 tiers of plantation of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 75%.	190 Acres of land in plant area has been marked for green belt development and 3 tiers plantation is being done with stated density with survival rate of 77%.
xx	Two nearest villages shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre, primary school, etc. shall be developed in co-ordination with the district administration.	Villages Laharpur (Murra) & Guwari has been adopted. Details are attached as <b>Annexure-VI</b> for basic amenities for two adopted villages and <b>Annexure -VII</b> for details of CSR activities.
xxi	For tribal families affected directly or indirectly by the proposed project, specific scheme for up-liftment of their sustainable livelihood shall be prepared with time bound implementation and in-built monitoring program. This shall be submitted within the six months to the ministry.	TDP Scheme has already been submitted to MoEF, vide letter no MBPMPL/ENV/APR/2011-12/dated 30.11.12. Some amendment was suggested by D.M., which has been already incorporated in our TDP and final plan has been submitted and

		is being followed as attached as <b>Annexure –VIII.</b>
xxii	The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for providing fluoride free potable drinking water supply in the near by villages and schools shall be undertaken in a time bound manner.	17 Nos. hand pumps are installed in project affected villages. Drinking water sample being tested six monthly by Govt. Lab. All parameters are under norms as per IS 10500. Drinking water test report is attached as <b>Annexure –IX.</b>
xxiii	An amount of Rs. 5.0 Crores shall be specially earmarked for development activities for tribal of the nearby villages. Specific scheme for upliftment of tribal families mentioning sustainable livelihood schemes shall be submitted to the ministry within three months with time bound implementation and in-built monitoring programme. The above amount shall be over and above the fund earmarked for CSR activities.	Specific scheme for up-liftment of tribal families and there sustainable livelihood and income generating activities is already prepared and given in <b>Annexure VIII.</b> Budget for livelihood families schemes for tribal is also mentioned in last page of <b>Annexure-VIII.</b>
xxiv	Further an amount of Rs. 22.80 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent vide its letter dated 23.03.2010. Subsequently a recurring expenditure of Rs. 4.6 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.	Details of CSR activities submitted vide letter no MBPMPL/MP/ECC/MoEF/2010-11/1034 dated 22.12.2010. Progress report up to 31 <sup>st</sup> Mar 2014 is attached as <b>Annexure-X</b>
xxv	While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generation programmes. This will be in addition to vocational training for individuals to take up self employment and jobs.	Social Impact Assessment study is completed. Based on the recommendations company designed, planned and approved budget for sustainable livelihood and income generating activities.
xxvi	Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Dept. concerned from time to time.	Details report is attached for ready reference as <b>Annexure – XI</b>
xxvii	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.	Social Audit has been carried out on 5/10/2013 from Social Science Department, Government PG College Burhar, Dist-Shahdol (MP). Audit report is attached for ready reference as <b>Annexure–XII.</b>

<b>B. General Conditions</b>		
i	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	<p>Considering the construction site risk associated, we have prepared on site and off site emergency plan and copy of the same has been submitted to the office of Dist. Collector and Director Health and Safety. Receiving copy of same is attached as <b>Annexure- XIII</b>.</p> <p>Before commissioning the same document will be reviewed in perspective of O&amp;M phase and same will be intimated to all concerned authorities.</p>
ii	Storage facilities for auxiliary liquid fuel such as LDO and / HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur, Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of and accident taking place due to storage or oil.	License obtained vide letter no.P/HQ/MP/2891(P291333) dated 1/05/2014 from COE Nagpur for storage of auxiliary liquid fuel i.e LDO/HFO. The copy of same is attached as <b>Annexure-XIV</b> for ready reference. Disaster Management Plan prepared dated 31st March 2011 and risk and its consequences has been considered in our plan.
iii	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Two First Aid centers with 2 Ambulances are available at site with qualified doctors and staff for all drivers and contract workers.
iv	Noise levels emanation from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dB(A) for people working in the high noise area, requisite personal protective equipment like earplugs/earmuffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric records and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.	Included in project design and shall be complied
v	Regular monitoring of ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>2.5</sub> & PM <sub>10</sub> and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	<p>M/s EMTRC Consultants Private Limited New Delhi (NABL &amp; MoEF Accredited Laboratory) has been engaged for regular environmental monitoring. Location of monitoring station has been accepted by SPCB vide letter No MBMPL//Env/2011/169 dated 17th Feb 2011. Latest monitoring report is attached as <b>Annexure-XV</b>.</p> <p>Monitoring data April 2014 are updated on the MBPMPL web site..</p>
vi	Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water,	Labour colony with drinking water and toilets are provided near to project site.

	medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	
vii	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution of Environment and Forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Have already been complied in Sep 2010. Advertised in the Hitwada and Maklanchal news papers. Copy of local news paper was submitted vide letter no MBPMPL/MP/ECC 2010-11/1034 dated 22.12.2010
viii	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any form whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Have been complied. NOC obtained for following villages on mentioned dates. 1. Amganwa- 1/11/2010 2. Gunwari-7/01/2011 3. Jaithari-20/08/2008 4. Belia (Chhulha)-20/08/2009 5. Laharpur-01/11/2010.
ix	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environment safeguards.	Environment Management Cell with qualified staff has already been set up for implementation of the stipulated environment safeguards. Monthly EHS&S review meeting conducted at site..
x	The environment statement for each financial year ending 31 <sup>st</sup> March in Form-V as in mandated to be submitted by the project proponent to the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	The environment statement being submitted every year and for the FY 2012- 13 already has been submitted vide letter no. MBPMPL/ENV/APR/2013-14/366, Dated 17/09/2013, and Shall be followed in future also.
xi	<p>The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board.</p> <p>The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and forests.</p>	<p>Six monthly compliance report submitted to Regional office MOEF, SPPCB and MOEF on 30th November' 2013 vide letter no. 477 MBPMPL/ENV/APR/2013</p> <p>Compliance status uploaded in company's website copies of six monthly report submitted to Regional office MOEF and SPCB on 30th Nov 2013.</p>
xii	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for	<p>Latest environmental monitoring report submitted to Regional Office MOEF vide letter no, no. 477 MBPMPL/ENV/APR/2013/dated 30.11.2013.</p> <p>Six monthly compliance status report uploaded in company's website.</p>

	<p>their use during monitoring.</p> <p>Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly bases.</p>	
xiii	<p>Separate fund shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.</p>	<p>A separate fund for environmental protection measures has already been earmarked &amp; will not be diverted for other purpose.</p>
xiv	<p>The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.</p>	<p>Permission to establish the Thermal Power Plant (2X600 MW) and for construction of Water Barrage received from MBPCB on 04/11/2010, vide letter no.10211/TS/MBPCB/2010 and on 28/07/2011, vide letter no 7021/TS/MBPCB/2011 respectively.</p>
xv	<p>Full cooperation shall be extended to the Scientists/ Officers from the Ministry / Regional Office of the Ministry at <b>Bangalore</b> /CPCB/ SPCB who would be monitoring the compliance of environmental status.  <u>As per corrigendum dated 01.09.2010</u>, the word '<b>Bangalore</b>' shall be replaced by '<b>Bhopal</b>'.</p>	<p>Shall be followed.</p>