

**COMPLIANCE TO THE ADDITIONAL CONDITIONS LAID BY MoEF VIDE OFFICE  
MEMORANDUM No.J-11013/41/2006-IA.II(I) dated 06.04.2011**

**Period: January 2016 to June 2016**

Sl.No.	CONDITIONS STIPULATED BY MoEF	COMPLIENCE
1	<p>Continuous monitoring of stack emissions as well as ambient air quality (as per notified standards) shall be carried out and continuous records maintained. Based on the monitored data, necessary corrective measures as may be required from time to time shall be taken to ensure that the levels are within permissible limits. The results of monitoring shall also be submitted to the respective Regional Office of MoEF regularly. Besides, the results of monitoring will also be put on the website of the company in the public domain.</p>	<p>Continuous Stack emission and ambient air quality monitoring are being carried out and records are being maintained.</p> <p>The monitored data for the period of January 2016 to June 2016 is enclosed as Annexure - 1. The results are well within the prescribed norms.</p> <p>The Six months report on Ambient Air Quality monitoring are being submitted to Regional office of MoEF &amp; CC on regular basis and the same is uploaded in the company website. Print Screen of company website is attached as Annexure - 2.</p>
2	<p>The six monthly monitoring report as well as the monitored data on various parameters as stipulated in the environment clearance conditions shall be put on the website of the company and also regularly updated. The monitored data shall also be submitted to respective State Pollution Control Board / UTPCCs and the Regional office of MoEF.</p>	<p>The Six months report on Ambient Air Quality monitoring are being submitted to Regional office of MoEF &amp; CC / TNPCB on regular basis and the same is uploaded in the company website.</p> <p>Print Screen of company website is attached as Annexure - 2.</p>
3	<p>The ambient air quality data as well as the stack emission data will also be displayed in public domain at some prominent place near the main gate of the company and updated in real time.</p>	<p>Complied.</p> <p>Online scrolling Display System provided at the main gate of the company.</p>

**COMPLIANCE TO THE CONDITIONS LAID BY MoEF VIDE ENVIRONMENTAL  
CLEARANCE No.J-13011/41/2008-IA.II(T) dated 05.05.2009**

**Period: January 2016 to June 2016**

Sl.No.	CONDITIONS STIPULATED BY MoEF	COMPLIANCE
1	Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg,Cr,As,Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Complied.  Regular monitoring of ground water in and around the ash bund area is being carried out regularly. Analysis report for the period of January 2016 to June 2016 is attached as Annexure - 3.
2	Regular monitoring of ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> ,Hg, SPM and RSPM 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 so monitored shall also be put on the website of the company.	Complied.  The monitored data for the period January 2016 to June 2016 is enclosed as Annexure - 1 and the same is uploaded in the company website. Print Screen of company website is attached as Annexure - 2.
3	Space for FGD shall be provided at planning stage for the units.	Complied.  Necessary space provision made for FGD Unit.
4	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, is any from 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.	Complied.
5	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied.  The Six months report on Ambient Air Quality monitoring are being submitted to Regional office of MoEF / TNPCB on regular basis and and the same is uploaded in the company website. Print Screen of company website is attached as Annexure - 2.  Online scrolling Display System provided at the main gate of the company.
6	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.  The Six monthly Compliance report are being submitted to Regional office of MoEF & CC /CPCB/ TNPCB on regular basis.

**COMPLIANCE TO THE CONDITIONS LAID BY MoEF VIDE ENVIRONMENTAL  
CLEARANCE No.J-13011/41/2008-IA.II(T) dated 10.12.2008**

**Period: January 2016 to June 2016**

Sl.No.	CONDITIONS STIPULATED BY MoEF	COMPLIANCE
1	Environment clearance is subject to obtaining clearance under the wildlife (protection) Act, 1972 from the competent authority.	As advised by MoEF, we have submitted our Proposal for obtaining the recommendation of the Standing Committee of National Board for Wildlife submitted to Wild Life Warden, Ramanathapuram vide our letter Ref. No. ENERGEN/PCCF&CWLW/2013-14/632 dated 07.05.2014. As communicated by Principal Chief Conservator of Forest & Chief Wild Life Warden vide their Lr. No. Ref. No. WL5/7774/2013 dated 16.04.2016, we have applied online in the MOEF & CC web portal. Copy of the same is enclosed as Annexure - 4.
2	Environment clearance is subject to final order of the hon'ble court of India in the matter of Goa foundation vs union of India in writ petition (civil) no.460 of 2004 as may be applicable to this project.	Noted.
3	The total land acquired shall not be more than 875 acres for all the activities / facilities of the power project put together.	Complied. The total land acquired is 875 acre.
4	Prior CRZ clearance for the activities / facilities to be located in the CRZ area shall be obtained before start of the project.	Complied. CRZ clearance received from MoEF vide No.11-32/2009-IA-III dated 10.08.2009.
5	Ash and sulphur content in the imported coal to be used in the project shall not exceed 12% and 1.5 % respectively.	Complied.
6	A multi-flue stack of 275m height shall be provided with continuous online monitoring equipments for Sox, NOx and particulate (heavy metals like Hg, Cr, As, Pb periodically). Exit velocity of atleast 22 m/s shall be maintained.	Complied. Continuous online monitoring analyzers provided for measuring SO <sub>x</sub> , NO <sub>x</sub> and SPM.
7	High efficiency Electro static precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50mg/Nm <sup>3</sup> .	Complied.
8	CFBC technology with lime injection having efficiency of SO <sub>2</sub> removal atleast 90% shall be installed.	Not applicable MoEF clearance obtained for Sub Critical Pulverized fuel Boilers vide clearance No.J-13011/41/2008-IA.II(T) dated 05.05.2009
9	Space provision shall be made for flue gas desulphurisation (FGD) unit, if required at a later stage.	Complied. Necessary space provision made for FGD Unit.
10	Adequate dust extraction system such as cyclone /bag filters and water spray system in dusty area such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Complied. <ul style="list-style-type: none"> <li>▪ Automatic water sprinklers provided in the coal storage yard.</li> <li>▪ Closed gallery conveyors provided for coal conveying</li> <li>▪ Bag filters/ dust extraction system provided at all transfer points in the junction towers</li> <li>▪ Ventilation system provided in all coal bunkers</li> <li>▪ Bag filters provided in the ash silos</li> <li>▪ Closed conveyors provided for bottom ash conveying</li> </ul>

11	Fly ash shall be collected in dry form and storage facility (silos) shall be provided 100% utilization of fly ash shall be achieved from day one. Unutilized fly ash in emergency and bottom ash shall be disposed off in the ash pond. Supernatant effluent from ash pond and leachates collected will be monitored for heavy metals (Hg, Cr, As, Pb etc.).	Complied.  Fly Ash is collected in dry form and 100% utilization is complied.  Supernatant effluent from ash pond and leachate collected will be monitored for heavy metals
12	Ash pond shall be lined with HDPE lining. Adequate safety measure shall also be implemented to protect the ash dyke from getting breached.	Complied.
13	Closed cycle cooling system with cooling towers as per the recommendations of chief wildlife warden shall be ensured.	Complied.
14	Continuous monitoring of coastal waters as per the recommendations of chief wildlife warden shall be ensured.	Complied.
15	Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with central ground water authority / state ground water and a copy of the same shall be submitted within three months to the ministry.	Storm water drains are already in place. Since, the existing ground water is more saline and not potable; recharging the storm water will not improve the existing ground water quality. Hence, the collected storm water is routed to nearby village pond for their domestic usage.
16	The treated effluents conforming to the prescribed standards only shall be discharged from cold water side in the sea. The temperature of the discharged effluents shall not exceed 5°C over and above the ambient water temperature of sea and it will be reduced to 0.5°C within 50m of the discharge point. The temperature of the discharge water shall be monitored continuously and records maintained.	<ul style="list-style-type: none"> <li>▪ Cooling water blow down discharged from the cold water side of the induced draft cooling system.</li> <li>▪ Dilution of discharge, using fresh sea water to reduce the temperature to 0.5°C within 50 m of the discharge point is being carried out.</li> <li>▪ Temperature of the discharge water is being monitored continuously.</li> </ul>
17	A sewage treatment plant shall be provided and the treated sewage conforming to the standards prescribed by SPCB shall be used for raising green belt/ plantation.	Complied. STP's are functional at site premises. Treated water from STP is being used for gardening and Green belt development only.
18	Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained and 6 monthly reports shall be submitted to the regional office of this ministry.	Complied. Regular monitoring of ground water in and around the ash bund area is being carried out regularly. Copy of the report is enclosed as Annexure - 3.
19	Greenbelt of adequate width shall be developed all around the plant area, other utilities and ash pond covering 270acres of area preferably with local species.	Complied. Greenbelt (Approximately 68,156 trees) of adequate width is developed all around the plant area, other utilities and ash bund covering 300 acres of land preferably with local species. Latest Photos of the developed greenbelt is enclosed as Annexure - 5.
20	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Complied. The following facilities are provided in the labour camp. <ul style="list-style-type: none"> <li>• Residential building with Aerocon Panel with Toilet and bathroom facilities</li> <li>• Permanent Electric supply provision provided to the residential building</li> <li>• Safe drinking water provided through 2 numbers of Drinking water RO plants.</li> <li>• Separate Canteen and cooking facilities provided</li> <li>• First Aid center with ambulance facilities provided.</li> </ul>

21	Noise levels emanating from turbines, air compressors, steam leakage and other moving parts of the machine should be controlled in such a way that the ambient noise levels in the working environment do not exceed 75dBA. For people working in high noise area especially during maintenance phase or due to leakage of steam etc., if it is not possible to control noise by adopting engineering methods including acoustical treatment, noise barriers etc., requisite personal protective equipment like ear plugs/ ear muffs etc., shall be provided. Workers engaged in noisy areas such turbines, air compressors etc shall be periodically examined and their audiometric records maintained and should be treated for any hearing loss including shifting to non noisy/less noisy areas.	Complied.  <ul style="list-style-type: none"> <li>• Turbine &amp; air compressors are provided with acoustic enclosures.</li> <li>• Provided the silencer in safety valve</li> <li>• Provided earplugs and ear muffs to workers</li> <li>• Workers engaged in noisy areas will be periodically examined and their audiometric records will be maintained and also shifted in rotational basis.</li> </ul>
22	Regular monitoring of ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , SPM, RSPM and mercury 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. 6 monthly reports shall be submitted to the regional office of this ministry at Bangalore.	Complied. The monitored data for the period of January 2016 to June 2016 is enclosed as Annexure - 1.  Provision will be made for uploading the monitoring data and environmental conditions on the company website.
23	Adequate funds shall be ear marked for the activities under CSR and details of these activities shall also be submitted to the regional office of the ministry, SPCB and the ministry.	Complied.  Separate funds have been earmarked for implementation of CSR activities.  Details of CSR activities carried out during January 2016 to June 2016 is enclosed as Annexure - 6.
24	Storage facilities for this liquid fuel such as LDO and HFO/LSHS shall be made in the plant area where risk is minimum to the storage facilities. Disaster management plan shall be prepared to meet any eventuality in case of an accident taking place. Mock drills shall be conducted regularly and based on the same, modification required, if any, shall be incorporated in the DMP.	Complied.  HFO/LDO storage tanks are provided with dyke wall, automatic foam and water sprinkler system.  Disaster Management plan is available and regular mock drills are being carried out.
25	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 at bangalore.	Complied.  Automatic water sprinkler system provided in the coal stock yard
26	The project proponent shall advertise in atleast two local news papers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality/ municipal area /gram panchayat concerned and on the company's website 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 control board / committee and may also be seen at website of the ministry of environment and forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	Complied.

27	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied.  The following facilities are provided in the labour camp. <ul style="list-style-type: none"> <li>• Residential building with Aerocon Panel with Toilet and bathroom facilities</li> <li>• Permanent Electric supply provision provided to the residential building</li> <li>• Safe drinking water provided through 2 numbers of Drinking water RO plants.</li> <li>• Separate Canteen and cooking facilities provided</li> <li>• First Aid center with ambulance facilities provided.</li> </ul>
28	A separate environment monitoring cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Complied. Environment Cell with qualified staffs are in place for the Environmental monitoring, Marine monitoring, Green belt development activities, etc.
29	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this ministry, its regional office at Bangalore, CPCB and SPCB.	Complied.
30	Regional office of the ministry of environment & forests located at Bangalore will monitor the implementation of the stipulated conditions. A complete set of documents plan along with the additional information submitted from time to time shall be forwarded to the regional office for their use during monitoring.	Complied.
31	Adequate funds shall be allocated for implementation of environmental protection measures along with item-wise breakup. 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.	Complied.
32	Full cooperation shall be extended to the scientists/officer from the ministry / regional office of ministry at Bangalore/ the CPCB the SPCB who would be monitoring the compliance of environmental status.	Complied.
33	The project authorities shall inform the regional 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.	Complied.
34	Compliance status of the stipulated conditions shall be displayed in website of the industry/company.	The Compliance status of stipulated conditions is uploaded in the company website. Print Screen of company website is attached as Annexure - 2.