

Environmental Clearance No: J-13012/111/2009-IA.II (T)

A- Specific Condition :

1	Vision document specifying prospective plan for the site shall be formulated and submitted to the Ministry within six month	Vision document specifying prospective plant for the site is prepared and attached as "Annexure 1"
2	The project proponent shall take up the matter for transportation of coal by rail with the Railways. Progress made in this regard shall be submitted to the Registration Office of the Ministry from time to time.	Covering letter is attached as "Annexure 2"
3	High Efficiency Electrostatic Precipitators (ESPS) Shall be installed to ensure that particulate emission does not exceed 50 mg/Nm ³ . Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	<ol style="list-style-type: none"> 1. 99.9% Efficiency ESP has been installed to ensure the PM level below 50mg/Nm³. 2. Bag filters are installed in all the transfer towers 3. Online data for SO_x/No_x/SPM is being streamed to SPCB
4	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.8% and 25% 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 amendments to environmental clearance condition wherever necessary.	<ol style="list-style-type: none"> 1. We are importing coal from Indonesia which has the maximum sulphur % of 0.15 and indigenous coal is having the maximum sulphur % of 0.4. 2. We are ensuring that both the Sulphur and Ash content shall not exceed the prescribed norms 3. Third party certificate for last imported vessels are attached as "Annexure 3"
5	Stacks of 100 m and 120 m height respectively shall be installed and provided with continuous online monitoring equipment for SO _x , NO _x and PM _{2.5} and PM ₁₀ . Exit velocity of flue gases shall not be less than 22 M/sec. Mercury emissions from stack may also monitored on periodic basis.	<ol style="list-style-type: none"> 1. Stacks of 100m, 120m height respectively has been installed. 2. Continuous online monitoring equipment for 1x80 MW was installed. The same will be installed to 1x160MW when it comes into service. 3. Exit velocity is being ensured >22 m/s
6	Existing de-generated water bodies (if any) in the study area shall be regenerated at the	It is planning to conduct a Hydrogeological study with a

	project proponents expenses in consultation with the state Govt.	third party. The report will be furnished to the board upon submission of report from the third party. Quote received from the third party is attached as "Annexure 4"
7	Water requirement for running the plant to begin with shall be met from ground water after obtaining approval of the competent authority. However, the project proponent shall use harvested rain water in the long run. Air cooled condenser shall be installed for condensate cooling.	<ol style="list-style-type: none"> 1. Ground water approval has been obtained from SGWB for quantum of 540 KLD 2. Annexure 4 is applicable to this compliance
8	Hydro-geological status (quality and quantity) of ground water shall be reviewed annually from and institute / organization of repute to assess impact of surface water and ground regime (especially around ash dyke). In case and deterioration is observed specific mitigation measures shall be undertaken and reports / data of water quality monitored regulation and maintained shall be submitted to the Regional Office of the ministry.	Please refer "Annexure 4"
9	Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional office of the ministry within three months.	Please refer "Annexure 4"
10	No water bodies (including natural drainage system in the area shall be disturbed due to activates associated with the setting up / operation of the power plant.	<ol style="list-style-type: none"> 1. The natural drain of the plant is from south to north. 2. Storm water drains with infiltration wells have been made in the natural drain to make sure that natural drain shall not get disturbed
11	A well designed rainwater harvesting shall be put in place before commissioning of the plant. Central Groundwater Authority / Boards shall be consulted for finalization of appropriate rainwater harvesting technology / design within a period of three months from the date of this clearance and details shall be furnished.	Please refer "Annexure 4"
12	The treated effluents conforming to the prescribed standards only shall be re circulated and reused within the plant. Arrangement shall be made that effluents and storm water do not get mixed. A sewage treatment plant shall be provided (as applicable) and the treated sewage treatment plant shall be provided (as	<ol style="list-style-type: none"> 1. A clear demarcation has been made to ensure non mixing of effluent water with storm water 2. Routine analysis by the board is being

	applicable) and the treated sewage shall be used for raising greenbelt / plantation	done with effluent water for confirming the standards
13	Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	This is being followed already
14	Utilisation of 100% Fly ash generated shall be made from day one of commissioning of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	<ol style="list-style-type: none"> 1. Additional vendors have been finalised to make sure the 100% disposal of fly ash from day 1 2. List of vendors attached as "Annexure 5"
15	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	<ol style="list-style-type: none"> 1. Fly ash is being collected in dry form and the same is being disposed instantaneously. 2. No ash is dumped in the entire plant.
16	Ash pond (if any) shall be lined with HDP / LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Ash pond with proper 3 layer HDPE/LDPE lining has already been made to ensure no leachate.
17	Green Belt consisting of 3 tiers of plantations of native species around plant and at least 30 m width shall be raised. Tree density shall not less than 2500 per ha with survival rate not less than 80%.	<ol style="list-style-type: none"> 1. Around 35% of the area has been covered with green belt. The trees planted are Neem, Punga, Plintoform, Causarina. 2. District Forest Officers have been approached for the enhancing and maintaining of the Green belt
18	The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for providing fluoride free potable drinking water supplying the nearby village and schools shall be undertaken in a time bound manner.	The amount spent on CSR is attached as "Annexure 6"
19	An amount of Rs. 4.8 Crores shall be earmarked as one time capital cost for CSR Programme. Subsequently a recurring expenditure of Rs. 0.96 Crores per annum till the operation of the	The amount spend on CSR is attached as "Annexure 6"

	plant shall be activities to be undertaken shall be submitted within one month along with road map for implementation.	
20	While identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted 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 shall be undertaken. 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 generating programmes. Vocational training programme for possible self-employment and jobs shall be imparted to identify villagers free of cost.	<ol style="list-style-type: none"> 1. Rotary club has been invited to study the need base assessment for the nearby community. 2. Amount spent details are attached as "Annexure 6"
21	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.	A committee has been formed for CSR activities and the latest Minutes of Meeting of the committee is attached as " Annexure 6 a"