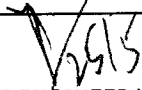


Compliance status on Environmental Clearance K TPP Stage-II	
Conditions and safeguards directed by MOE&F while according environmental clearance to	Present status(March -2017) & Remarks
1	<p>No additional land in excess of 40 Ha for coal conveyor shall be acquired for any activity/ facility relating to this project.</p> <p>The extent of land to be acquired for coal conveyor from Tadicherla to K TPP is yet to be finalized.</p>
2	<p>Ash pond shall be at least 100m away from the Vagu</p> <p>Ash pond is constructed more than 100m away from the Vagu</p>
3	<p>Sulphur and ash content in the coal to be used in the project shall not exceed 0.55% and 28% respectively at any given time.</p> <p>This station is located very near to the M/s SCCL Coal mines i.e about 10 Km, however % of ash shall be maintained as per the MOEF guidelines</p>
4	<p>A stack of 275m height shall be provided with continuous online monitoring equipments for SO_x, NO_x, Hg and particulate. Exit velocity of flue gases shall not be less than 22m/Sec.</p> <p>A Single stack of 275mt height was constructed and continuous online Stack monitoring equipment was installed.</p>
5	<p>High efficiency electrostatic precipitators (ESPs) shall be installed to ensure that particulate matter does not exceed 50 mg/Nm³.</p> <p>High efficiency electrostatic precipitators (ESPs) are installed and particulate matter shall be maintained as per the norms</p>
6	<p>Space provision shall be kept for retrofitting of FGD, if required at a later date.</p> <p>Space provision for FGD is available.</p>
7	<p>Adequate dust extraction systems such as cyclones bag filters water spray systems in dust areas such as in coal handling and ash handling points transfer areas and other vulnerable dust areas shall be provided.</p> <p>Sprinkler arrangement was made in the coal stacker yard and Raw coal yard. Dust extractors and suppressors were installed at Crusher House and also over the Bunkers. four nos water tankers of capacity 4KL each are being engaged for sprinkling of water along Chelpur to Dubbapally in and out side of K TPP.</p>
8	<p>Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% flyash utilisation shall be ensured from day one and utilised bottom ash shall be disposed off in the ash pond in the form of slurry mode.</p> <p>Fly ash is being issued to cement, brick industries, RMC units at free of cost. The fly ash utilization for the period from 2016 -2017 is 12.40%. Efforts were made to utilize bottom ash in coal mines of M/s SCCL; Technical Problem of smaller ash particle size is being resolved for ensuring higher utilization in this area.</p>
9	<p>Closed cycle cooling system with natural draft cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.</p> <p>Natural draft cooling tower was constructed and effluents shall be treated as per the prescribed norms.</p>
10	<p>The treated effluents conforming to the prescribed standards shall be recirculated and reused within the plant. Zero discharge shall be adopted except monsoon. Arrangements shall be made that effluents and storm water do not get mixed.</p> <p>Necessary ETP and ash water recovery system construction was completed. The system shall be kept in service shortly. Storm water drains also are being constructed. The entire effluents are collected in recovery pump house & water is pumped from recovery pump house to treatment plant. The treated water shall be used for ashing, plantation, suppression of dust, cleaning of roads, etc.</p>
11	<p>A sewage treatment plant shall be provided and the treated sewage shall be used for raising green belt/plantation.</p> <p>Work awarded to M/s Fontus Pvt. Ltd. New Delhi, vide LOI No.CC-0037/CE/C/T/K TPP/F.STP/ D.No.317/15,DT.19.06.2015. Most of the civil works were completed and balance works shall be completed shortly. The treated water shall be utilized for raising green belt/plantation.</p>
12	<p>Rain water harvesting should be adopted. 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.</p> <p>Rain water harvesting adopted at K TPP duly providing bores in the main plant & coal handling area. In addition to the above, 10 Nos of rain water harvesting pits were also provided in colony and power house areas.</p>
13	<p>Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of the 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.</p> <p>necessary safety measures provided in the plant</p>

14	Storage facilities for auxiliary 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 including fire and explosives in boiler and turbines reliability analysis of the high pressure instruments/equipment may be periodically carried out and corrective measures taken to avoid any fire and explosive hazards. Location of the turbines may be decided in such a way that the impact of the fire and explosion does not cross the plant boundary. Mock drills shall be conducted regularly and based on the same, modifications required, if any shall be incorporated in the DMP. Sulphur content in the liquid fuel shall not exceed 0.5%	necessary safety measures provided in the plant
15	Regular monitoring of ground water including heavy metals (Arsenic, Mercury, Cr, Pb) in and around ash pond area shall be carried out records maintained and six months reports shall be furnished to the regional office of this ministry. Ground water quality shall also be monitored regularly between the ash pond and the vagu.	Regular monitoring of ground water including heavy metals (Arsenic, Mercury, Cr, Pb) in and around ash pond is being carried out and necessary records are being maintained.
16	A green belt of adequate width and density shall be developed around the plant periphery covering 1/3 of Project area preferably with local species.	Green belt of about 120 Ha (70 ha in the Power House and 16 ha in the Colony and 28 Ha on & around ash pond, brick plant and along the silo roads& 1 ha near temple and 5 Ha of landscaping) was developed.
17	Adequate funds shall be allocated for under taking CSR activities, shall not be less than 1.00 cr per annum.	Adequate funds are being allocated for taking up CSR Works.
18	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Being implemented.
19	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like ear plugs/ear muffs etc. shall be provided. Workers engaged in the noise areas such as turbine area, air compressor etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.	Ear plugs/Ear muffs are provided to the staff working where noise levels are above the limiting standards and enclosures were provided at necessary areas, Noise levels inside the enclosures are with in the the limits.
20	Regular monitoring of ground level concentration of SO ₂ , NO _x , 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 limits shall be provided immediately. The locations of the Monitoring stations and frequency of Monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted Regional office of this Ministry.	Regular monitoring of ground level concentration of SO ₂ , NO _x , PM-10 and PM-2.5 are being carried out in the impact zone and records maintained and necessary measures are being taken up to limit the concentration of SO ₂ , NO _x , PM-10 and PM-2.5 within prescribed norms. two number CAAQMS are installed in the power house premises and the data is being uploaded to the website of TSPCB and one more number CAAQMS is under erection.
21	A detailed plan for health monitoring in the area within the impact zone shall be prepared and implemented along with the local administration. The plan should besides others also provide for monitoring of respiratory disorders. The plan should be submitted within three months to this Ministry and its Regional Office at Bangalore.	Health monitoring in the area within the impact zone is being implemented.
22	Provision shall be made for 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 completion of the project.	Being implemented.

23	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 local 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 Control Board/Committee and may also be seen at website of the the Ministry of Environment and Forest at http://envfor.nic.in .	Advertisement given in "Deccan Chronicle" news paper on 06.07.2008 (English), in "Eenadu" Telugu (Local language) news paper on 06.07.2008
24	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	A separate Environment Division is functioning at K TPP. Executive Engineer/Civil as Head of Department with one number Assistant Executive Engineer/Civil and Assistant Engineer/Civil for Ash utilisation cum Environment Management Group and one number Senior Chemist and Chemist for Environment Monitoring Group.
25	Half yearly report on the status of implementation of the stipulated conditions and environmental safe guards shall be submitted to this ministry/ regional office/ CPCB/SPCB and uploaded in the website of project proponent	The reports are being submitted regularly.
26	Regional office of the Ministry of Environment & Forests located at Bangalore 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 their use during monitoring.Project proponent will upload the compliance status in their website and update the same from time to time.Criteria pollutants level (stack and ambient levels) will be displayed at the main gate or at any convenient location of the power plant.	The conditions will be implemented.
27	Separate funds 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.	Separate funds are allocated for implementation of environment protection measures viz., ESP, Ash Water Recory Pump House, ETP & 2 Nos CAAQMS.
28	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.	necessary information is being sent to all statutory authorities
29	Full cooperation shall be extended to the Scientists/Officers from the ministry/ Regional office of the ministry at Bangalore/the CPCB/ the SPCB who would be monitoring the compliance of environmental status.	Full cooperation is being extedned to the visiting officers/Scientists from MOE&F/ CPCB /TSPCB.
		 CHIEF ENGINEER/O&M/KTPP