

TALWANDI SABO POWER LIMITED
SIX MONTHLY COMPLIANCE REPORT

MoEF Clearance Letter Number & Date: J-13011/24/2008-IA.II (T) Dated 11th July, 2008 & Dated 25.03.2010

Name of the Project: Talwandi Sabo Power Limited 1980 MW (3x660MW).

Period of Compliance Report: April 2011 to September 2011

SPECIFIC CONDITIONS

Sr No	Condition	Compliance Status
(i)	The total land requirement for the project shall be restricted to 2105 acres	Noted and Complied
(ii)	Requisite quantity of coal for the ultimate capacity shall be obtained before commissioning the project	Noted and shall be complied before commissioning
(iii)	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 34% respectively	Noted and shall be complied before during operation phase
(iv)	A Tri-flu stack of 275 m height shall be provided with continuous online monitoring equipments for SO _x , NO _x and particulate. Exit velocity of the flue gases shall not be less than 25m/sec	Noted, Continuous online monitoring equipment shall be installed for monitoring of SO _x , NO _x and Particulate matter. Exit velocity of the flue gases shall not be less than 25m/sec. Taken care in the design
(v)	High efficiency Electrostatic Precipitator(ESP) shall be installed to ensure that particulate emission does not exceed 50mg/Nm ³	High efficiency electrostatic precipitator shall be installed to restrict particulate emission to <50mg/Nm ³ Taken care in the design
(vi)	Space provision shall be kept for retrofitting of FGD, If required at a later date	Space provision has been made in lay out plan. Complied
(vii)	Adequate dust extraction system such as cyclone/bag filters and water spray system in dusty areas such as coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided	Dust extraction system is being incorporated in the design
(viii)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Fly ash shall be used in a phased manner as per provision of the notification on Fly Ash Utilization issued by Ministry in September 1999 and its amendment. By the end of 9 th year	Fly ash shall be collected in dry form and shall be disposed of in phased manner as stipulated. High concentration slurry disposal system shall be installed

	full fly ash utilization should be ensured. Unutilized fly ash shall be disposed off in the ash pond in the form of High Concentration slurry and the bottom ash in conventional slurry mode.	
(ix)	Ash pond shall be lined with HDPE lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached	Ash Dyke shall be lined as stipulated. Adequate safety measures shall be taken for Ash dyke during operational phase of the plant. Taken care in design
(x)	Closed cycle cooling system with cooling towers shall be provided. COC of at least 5 shall be adopted and the effluents shall be treated as per the prescribed norms	Closed circuit cooling system with cooling tower has been included in technical specification. COC of 5 shall be adopted during operational phase of the plant. Effluent shall be treated as per the prescribed norms
(xi)	The treated effluent conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangement shall be made that effluents and storm water do not get mixed.	Noted, Treated effluent conforming to prescribed standard shall be re-circulated and reused. Arrangement shall be made to avoid mixing of effluent and storm water.
(xii)	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation	STP will be installed and treated sewage water shall be used for greenbelt development
(xiii)	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.	A preliminary report prepared and submitted to MoEF vide letter No TSPL/MOEF/111 dt 16 th June,2009
(xiv)	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fire in coal yard especially during summer season. Copy of these measures with full details along with location plant lay out shall be submitted to the ministry as well to the regional office of the ministry at Chandigarh.	As per the Standard Operating Practices the fire fighting system is under design and same shall be implemented during operational phase of Power plant. The desired details and plans shall be submitted accordingly to ministry as well as to regional office of the ministry.
(xv)	Storage facilities for liquid fuel such as LDO and HFO/LSHS shall be made in the plant area where risk in 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, modifications	Storage facilities for LDO&HFO has been designed with minimum risk and included in technical specification. A comprehensive Disaster Management plan has been prepared and incorporated in EIA/EMP

	required, if any shall be incorporated in DMP.	
(xvi)	Regular monitoring of ground water in and around ash pond area shall be carried out, records maintained and six monthly reports shall be furnished to the Regional office of this Ministry	Noted and Agreed. Shall be submitted during operational phase of plant
(xvii)	A green belt of adequate width and density shall be developed around the plant periphery covering about 1/3 of the project area preferably with local species	Green belt plan have been prepared and development work shall start during upcoming winter season and will be completed in phased manner
(xviii)	Activities under CSR shall be enhanced with proper financial allocation. Details of these activities shall be submitted to the Regional office of the Ministry, SPCB and the Ministry	Noted and shall be complied, Regular free Medical Camps including superspecialty are being organized in villages within 15 km radius of the plant boundary wherein the villagers are being checked for general diseases with free distribution of medicines.
(xix)	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase	Noted and same is provided
(xx)	Leq of Noise levels emanating from turbines shall be limited to 75dBA. For people working in the high noise area, requisite personal protective equipment like earplug/ ear muff etc shall be provided .Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.	Noise levels from turbine area shall be limited to 75dB (A). PPEs shall be provided and regular PME shall be carried out for NIHL of the workers working in high noise areas during operational phase of power plant.
(xxi)	Regular monitoring of ground level concentration of SO ₂ , NO _x , SPM, RSPM shall be carried out in the impact zone and record 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 station and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the regional office of this ministry.	Noted and shall be complied
(xxii)	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 locally	Complied with. Copy of Environmental Clearance and Public notices regarding Environmental Clearance has been submitted vide

	concerned within seven days from the date of this clearance letter, informing that the project has been accorded environment clearance and copies of clearance letter are available with State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in	letter no TSPL/MOEF/111 Dt16.06.09.
(xxiii)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	A separate environment cell shall be established.
(xxiv)	Half yearly report on the status of implementation of the stipulated condition and environmental safeguards shall be submitted to this Ministry/Regional Office/CPCB/SPCB	Being Complied
(xxv)	Regional office of the Ministry of Environment & Forest located at Chandigarh will monitor the implementation of the stipulated conditions. A complete set of documents including Environment 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	Copies of DPR, EIA submitted vide letter no TSPL/MOEF/111 Dt 16.06.09.
(xxvi)	Separate funds shall be allocated for implementation of environment protection measures along with item-wise break up. These cost shall be included as part of the project cost. The fund earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Complied Separate fund allocation for environment protection measures have been made in project cost
(xxvii)	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 date of land development work and commissioning of plant	<ol style="list-style-type: none"> 1) Date of Consent to Establish from PPCB -08.09.09 Validity upto 06.09.2012 2) Date of site approval from Govt. of Punjab- 25.08.09 3) Date of commencement of land development work(Leveling and site grading) -27.02.2010
(xxviii)	Full cooperation shall be extended to the Scientist / Officers from the Ministry/Regional Office of the Ministry at Chandigarh/ the CPCB/the SPCB who would be monitoring the compliance of environmental status	Noted and full cooperation shall be extended during the inspections

Additional Conditions vide Office Order No J-13011/24/2008-IA.II(T) Dated 25.03.2010		
(xxix)	The project proponent shall upload the status of compliance of the conditions stipulated in environment clearance issued vide this Ministry's letter of even no dated 11.07.2008, in its website and updated periodically and also simultaneously send the same by e-mail to the Regional Office of the Ministry of Environment and Forests	Noted and uploaded on tsplindia.co.in and updated regularly.
(xxx)	Criteria pollutants levels including NOx, RSPM(PM ₁₀ & PM _{2.5}),SOx(from Stack & ambient air) shall be regularly monitored and results displayed in your website and also at the main gate of the power plant	Noted and shall be monitored during the operational phase of the plant

GENERAL CONDITIONS

4	The Ministry of Environment and Forest reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry, MOEF may impose additional environmental conditions or modify the existing ones, if necessary.	Noted
5	The environmental clearance accorded shall be valid for a period of 5 years to start of production operation by the power plant.	Noted
6	In case any deviation or alteration in the project proposed from those submitted to this Ministry for clearance a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required if any.	Noted

7	The above stipulations would be enforced among others under the Water(Prevention and Control of Pollution)Act1974, the Air(Prevention and Control of Pollution) Act,1981, the Environment (protection)Act,1986 and rules there under, Hazardous Waste(Management and Handling) Rules 1989 and its amendments, The Public Liability Insurance Act,1991 and its amendments	Noted
8	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act,1997	Noted