

SPECTRUM POWER GENERATION LIMITED

Plant :Beach Road, Uppada – 533448, Near Kakinada, East Godavari District, Andhra Pradesh
Tel : (08869) – 245 237 Fax : (08869) – 245 284

SPGL /A-05/13/ DM MOEF SIX MONTHLY /275 – dt 18-11-13

TO
The Director,
Ministry of Environment and Forests.
Govt. of India,
Regional Office (Southern Zone)
Kendriya Sadan, 4th Floor,
E&F Wings, 17th Main Road.
Bangalore – 560 034.

Dear Sir/Madam,

Sub: - Godavari Gas Based Combined Cycle Power Plant in A.P (208 MW)-reg.
Six monthly report. ie from April-2013 to September-2013.

Ref: 1) MoE&F Lr J-13011/6/90-1A. II Dtd: 30.04.1993.

Ref: 2) EP/12.1/2010-11/6/AP/184 dt 12-9-12

With reference to the above letter dated 12/9/2012, we hereby submit the environment report for the period from October-2012-to March-2013.

i) Stack height for gas Turbines and steam Turbines will be less than 35 and 75 meters respectively.

There are 3 main stacks of 75 meters each and 3 by-pass stacks of 37 meters height.

ii) Continuous stack monitoring of NOx should be done and the emissions of NOx should not exceed 50 ppm. Inter-locking system should be provided so that if the NOx emissions exceed 50 ppm, the generating units would automatically by shut down. Adequate number of ambient air quality monitoring stations may be provided

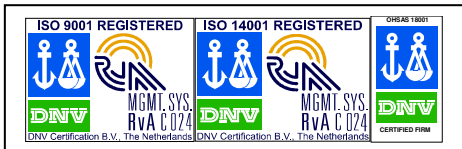
Corporate Office :

7th Floor, Corporate Tower,

Ambience Mall,
Road No.36,

NH-8,Gurgaon -122001
500033.

Phone: 0124-2719 000, Fax:0124 - 2719185
26 / 28/29



Registered Office :

8-2-293/82/A/241/A,SSC-3

Rajala Centre, 4th Floor,

Jubilee Hills, Hyderabad –

Phone No. 040-2355 5725 /

Fax No. 040 - 2355 5730

for measurement of NOx in consultation with the state Pollution Control Board and statistically analysed data sent to the State Pollution Control Board every three months and to the Ministry of Environment & Forest every six months:

The NOx emissions from the stack are controlled by injecting steam in the gas pipe lines of Gas turbines and is maintained below 50 ppm as prescribed by the MoE&F. The gas turbines are having inter-lock arrangement to automatically unload gas Turbine when ever NOx limit crosses 45 ppm, and to shut down if NOx level crosses 50 ppm.

- iii) **A study should be carried out two or three locations in and around Coringa Sanctuary to find out the exact ground concentration of NOx in the ambient air as the earlier data submitted needs clarification, and the report submitted within six months.**

Study has been carried out between October 1993 and February 1994 and reports were submitted. Three ambient air quality Stations in and around were monitored on 1-4-13 through S.V. Enviro Labs/Vizag. As per the reports, the GLC of NOx in the ambient air at Coringa sanctuary is lesser than $7\mu\text{g}/\text{m}^3$.

- iv) **The fuel-wood requirement of the construction laborers should be arranged by the Project Authorities so as to prevent the felling of mangroves and other trees in the area.**

The Project was completed and commissioned in 1998. Reportedly, fuel arrangements were made for the labour during the period of construction 1995-98.

- v) **Closed cooling system should be adopted. The liquid effluent monitoring from D.M.Plant, boiler blow-down etc., should be treated to confirm to the standards and recycled/reused to the extent possible including for green-belt. The unutilized portion of treated liquid effluent during monsoon season may be discharged at a point at least 10 kms away from the periphery of Coringa Sanctuary. The point of actual discharge in sea should be decided in consultation with the Andhra Pradesh pollution Control Board.**

We do adopt closed cooling water system with COC of 9. Effluents after treatment (neutralized and dilution), are used for green belt. During rainy season, treated water is carried over to the sea to the point about 25KM away from Coringa Sanctuary and disposed as per PCB norms.

- vi) **As a part of the social responsibility, the project proponent and the State Government should jointly work out such programmes involving the local population for protection of environment and conservation and regeneration of mangroves in the area.**

Mangroves in the area are in good condition. Additional mangroves were planted in the past 10 years. 16 acres of the area is planted and survival rate is good.

- vii) **The committee noted the findings at para 1.3.11(extracted below) page 1.4 of the consultants report regarding the controlled growth of the city and recommends that the State Government should take effective steps to implement the same.**

“The direction of growth of the city needs to be steered towards the Samalkota road and rail ling (Fig.8.1), and maintain a 2 k.m wide exclusive zone between the industrial sites and settlements to avoid interfacial conflict between malfunctioning of industry and settlements. This is possible as most of this 2 k.m. wide belt is either under afforestation programme or marshy land”

The above suggestion is made by the consultant and it is not applicable to SPGL. We have developed green belt in an area of about 250 acres which is more than six times the built-up area of the Plant. The green belt development is further progress by planting trees in other vacant areas also around the Plant site.

- viii) **The state Government should ensure that further growth of industries should be so controlled so as to ensure that the ambient levels of NOx do not exceed the limit of 30 micrograms per cubic meter including the emissions from the proposed gas-based power station as also from the future expansion, if any.**

Not applicable. The emissions of the Nox by SPGL plant are within limits of 50 µg/m³.

- ix) **Effective arrangements, to avoid any adverse impact on marine life due to discharge of liquid effluents in to the Coringa Sanctuary should be**

provided in consultation with the Chief Wildlife warden who should send report to this Ministry on the arrangements made in this regard.

Neutralized effluents are being utilized for green belt and the excess water during rainy season is discharged into sea at a distance of more than 25 km from the Coringa Sanctuary. No negative impact was reported nor have the project authorities received any complaints from the Wildlife Warden. Earlier the study was made by the CWPRI in this regard and was submitted to MOEF.

3. **The conditions stipulated may be varied or new conditions be added or the clearance revoked, if necessary in the interest of environmental protection if there is any change in the project profile, dissatisfactory implementation of the stipulated conditions, etc.**

Agreed to comply.

4. **The stipulation will be implemented among others, under the Water (Prevention & Control of Pollution) Act, 1974; the Air (Prevention & Control of Pollution) Act, 1981 and the Environmental (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.**

Agreed to comply.

5. **Necessary cost estimate may be provided in the project Report for the implementation of the above mentioned conditions and environmental safeguards. The funds earmarked for the environmental protection measure should not be diverted for other purposes and year wise expenditure should be reported to this ministry.**

The fund flow earmarked for the environmental safeguarding by SPGL is as follows.

Expenditure on the Pollution control measures

NOX control- 2007- Rs 20 lakh, 2008- 1.5 lakh Rs, 2009- 1.5 lakh Rs, 2010- 1.5 lakh Rs, 2011- 1.5 lakh Rs, 2012- 1.5 lakh Rs, 2013- 1.5 lakh Rs.

Ambient air quality monitoring- 4 lakh Rs per year.

Green belt development & maintenance - 60 lakh Rs per annum.

Effluent treatment Plant- Rs 50 lakh per year

Sludge disposal- 50000 Rs per annum

Saplings giving to villagers-50000 Rs per annum

Thanking you,

Yours faithfully,

For **SPECTRUM POWER GENERATION LIMITED.**

S.Vairamani.

General Manager (Operations & Maintenance).

Encl: six monthly data sheets.

CC:

1. The Chief Conservator of Forests, Regional Office (SZ) Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, 1st Block, Koramangala, Bangalore-560 074.
2. The Environmental engineer, Regional office, APPCB, Kakinada.
3. Joint director (S), MoE&F, GOI, Regional office (Southern Zone), Kendriya Sadan, Koramangala, Bangalore 560 074.