

# State Level Environment Impact Assessment Authority, Rajasthan

4, Institutional Area, Jhalana Doongri, Jaipur-302004

Phone: 0141-2705633, 2711329 Ext. 361

No: F 1(4)SEIAA/SEAC\_Raj/Sectt./Project/Cat1(d)B1(106)/08-09

Jaipur, Dated:

11 6 APR 2009

## CORRIGENDUM

Attention is invited to this Authority's letter of even number dated 30 March 2009 regarding Environmental Clearance for proposed 10 MW Biomass based power plant by Sathyam Power Pvt. Ltd.. The following corrections are made in the above mentioned letter :-

1. In the Heading "Subject" words "at Village Punjiyas and Jaroda kala at Merta Road, Tehsil Merta City, District Nagaur (Raj.)" are added after the words "Sathyam Power Pvt. Ltd."
2. The figure "55 Crores" occurring in the last sentence of point 2 may be read as "50 Crores".
3. All other items remain unchanged.

*sd-*  
(Sankatha Prasad)  
Member Secretary  
SEIAA Rajasthan

Copy to :

1. Sathyam Power Pvt. Ltd., Village Rangpur, Distt. Kota-324 002, Rajasthan.
2. Secretary, Ministry of Environment and Forest, Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi.
3. Principal Secretary Environment Department, Rajasthan, Jaipur.
4. Shri S.C. Derashri, Chairman, SEIAA Rajasthan, 90, Geejgarh Vihar, Hawa Sarak, Jaipur.
5. Shri R.S. Bhandari, Member, SEIAA Rajasthan, 2- Museum Road, Ram Niwas Bagh, Jaipur.
6. Member Secretary, Rajasthan State Pollution Control Board, Jaipur.
- ✓ 7. Member Secretary, SEAC Rajasthan.
8. The CCF, Regional Office, Ministry of Environment & Forests, RO(CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector 'H', Aliganj, Lucknow-226 020.
9. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.

*ts*  
M.S. SEIAA (Rajasthan)

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Phone: 0141-2705633, 2711329 Ext. 361

No: F 1(4)SEIAA/SEAC\_Raj/Secc./Project/Cat1(d)B1(106)/08-09

Jaipur, Dated:

30 MAR 2009

To,  
Sathyam Power Pvt. Ltd.  
Village Rangpur  
Distt. Kota-324 002  
Rajasthan

Sub: EC for proposed 10 MW Biomass based power plant by Sathyam Power Pvt. Ltd.

Sir,

This has reference to your application No Nil dated 7-11-08 seeking environmental clearances for the above project under EIA Notification 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification 2006 on the basis of the mandatory documents enclosed with the application viz. the questionnaire, EIA, EMP and additional clarifications furnished in response to the observation of the State Level Expert Committee Rajasthan, in its meeting held 26-27 Dec.2008 and information submitted vide your letter dated 1-12-08.

2. It is interalia noted that the project is located in an area bound between "Latitude - 26°45'25" and Longitud-73°56'42" and its land conversion is due. The land requirement is 10.4 ha (1,04,000.00 M<sup>2</sup>). Biomass i.e. mustard husk and corncob waste (314 TPD) will be the main fuel and coal/lignite (up to 15%) will be the supportive fuel. Water cooled condensers will be provided. Water requirement is estimated to be 177 M<sup>3</sup>/day (fresh water 141 M<sup>3</sup> only), which will be obtained from bore well and CGWA clearance No. 21-4(213)/WR/CGWA/2007-99 dated 10.07.08 has been issued for abstraction of ground water @185 M<sup>3</sup>/day. In the study area, there is no scheduled flora or fauna. The boiler will be of "Travelling Gate Type" and high pressure steam will drive turbo generator. Fuel analyses results reveal that, in bio-mass to be used, nitrogen is 0.67%; total moisture 9.1% & 30.64%; sulphur 0.6%; ash content 6.7% & 1.55% and carbon is 39.88% & 30.33% in Mustard Husk & Corncobs respectively. Analyses of supportive fuels to be used depict carbon to be 41% & 22%; ash 0.35% & 25%; sulphur 0.6% & 5% and GCV (Kcal/kg) 4000 & 3000 in Coal and Lignite respectively. No forest land, ecologically sensitive area and R&R are involved. The project cost is Rs.55.00 crores, whereas the cost of implementation of the EMP will be Rs.10.0 crores.

3. The SEAC Rajasthan after due considerations of the relevant documents submitted by the project proponent and additional clarifications/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The SEIAA Rajasthan after considering the proposal and recommendations of the SEAC Rajasthan hereby accord Environmental Clearance to the project as per the provisions of Environmental Impact Assessment Notification 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:



### SPECIFIC CONDITIONS:


- i. Management will obtain prior Consents to Establish under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.
- ii. A conical stack of 65 meters height with exit velocity at 6.8 m/sec of gases shall be provided with continuous on-line monitoring system. Data collected shall be analyzed and submitted regularly to RPCB and the Regional office of MoEF at Lucknow.
- iii. Water requirement shall not exceed 177 M<sup>3</sup>/day out of which fresh water abstracted from under ground reserves shall be limited to 134 M<sup>3</sup>/day only and the balance 36 M<sup>3</sup>/day will be the treated water.
- iv. Industrial waste water generated to the tune of 56 M<sup>3</sup>/day will be treated in ETP, whereas the domestic waste water (4.9 M<sup>3</sup>/day) will be treated in STP. Out of total volume of treated effluents, 36 M<sup>3</sup>/day will be used to meet daily needs and the balance volume shall be used for dust suppression, sprinkling in ash handling and green belt development. No discharge of effluents directly or indirectly shall be done outside the plant boundary.
- v. As proposed, an ESP shall be installed connected with the ash handling system.
- vi. Only one DG set of capacity 250 KVA (with stack height as per the standards put in force by RPCB) will be installed to take care of power failure and other emergencies.
- vii. Closed circuit cooling with cooling towers shall be provided.
- viii. The PP will ensure one-year storage of biomass at/around the site. At bio-mass storage yard, adequate and effective arrangements will be made for the proper circulation of air to prevent "Methane Generation", which would otherwise result into any fire/other hazard.
- ix. Ash generated @ 19.8 TPD (from boiler, economizer, air pre-heater and ESP) shall be collected in dry form, handled as proposed and disposed in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry in September, 1999 (amendment till date) or in other environment-friendly manner such as use as fertilizer, compost supply to farmers or fuel/filler by brick manufacturers.
- x. Electrostatic Precipitators (ESP) with 99.9% efficiency shall be installed to limit particulate emission up to 100 mg/Nm<sup>3</sup>. In the event of non-functioning of ESP, the power plant should be shut down.
- xi. The power shall be generated at 11 KV level and stepped up to 33 KV. The synchronization will be done with 132 KV bus bar systems available at 132/33/11 KV sub station at Merta City, however, ensuring minimum losses.
- xii. The hazardous waste generated will be spent oil of the DG set, which will be disposed in accordance with provisions under the "Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2008.
- xiii. The power purchase agreement to be signed between the PP and any other larger group(second party) shall incorporate the condition that, the second party will sell the power, purchased from the first party, within Rajasthan only.
- xiv. Plantation will be carried out on an area of 36,000 M<sup>2</sup> (about 33% of plot area). The peripheral plantation will have a width measuring 20 meters. Total number of trees grown in 5 years will be at least 3600.
- xv. The management will provide an effective rain water harvesting system and optimise the cost of conservation. Central Groundwater Authority/Board shall be consulted for finalization of appropriate water harvesting scheme/structures within a period of three months from the date of clearance.
- xvi. Infrastructure facilities including sewage treatment and its sanitary disposal, first aid and shall be made for the project personnel/contract labour and drivers during construction phase.
- xvii. Regular monitoring of ground water in and around the ash disposal area shall be carried out, records maintained and six monthly reports shall be submitted to RPCB and the Regional Office of this Ministry at Lucknow.
- xviii. Leq of Noise level shall be limited to 75 dBA and regular maintenance of equipment is undertaken. For people working in the high noise area, earplug shall be provided.



- xix. Regular monitoring of the air quality shall be carried out in and around the power plant and records be maintained. Six monthly reports shall be submitted to the RPCB and the Regional Office of this Ministry at Lucknow.
  - xx. For controlling fugitive dust, regular sprinkling of water in lignite storage area and other vulnerable areas of the plant should be ensured.
  - xxi. Effective fire fighting system should be provided and mock drills be carried out as per fire & safety rules.
  - xxii. The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the SEIAA, Rajasthan and RPCB.
  - xxiii. A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.
  - xxiv. Educational and Skill mapping will be carried out by the PP on the basis of secondary data.
  - xxv. Post project monitoring will be carried out as proposed and half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to the RPCB/CPCB and the Regional Office of the MoEF at Lucknow.
  - xxvi. RPCB and the Regional Office of the Ministry of Environment & Forests located at Lucknow will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact assessment. Report and Management Plan shall be forwarded to the Member Secretary, RPCB and Regional Officer of the MoEF at Lucknow for use during monitoring.
  - xxvii. Full cooperation should be extended to the Scientists/Officers of RPCB and Regional Office of the MoEF at Lucknow/the CPCB who would be monitoring the compliance of environmental status.
  - xxviii. The environmental clearance is subject to any litigation pending before any courts of law in the State/Country, if any.
  - xxix. The project proponent is to give justifiable reasons why they do not have intent to go for CDM?
- 4. The SEIAA, Rajasthan reserves the right to revoke the clearance if conditions stipulated are not implemented to its satisfaction.
  - 5. The SEIAA, Rajasthan reserves the right to add new, annul/modify existing, if felt necessary, in the interest of environment protection.
  - 6. The environmental clearance accorded shall be valid for a period of 5 years to the start of production operation by the power plant.
  - 7. In case of any deviation or alteration in the proposed project from that submitted for clearance, a fresh reference shall be made to the SEIAA, Rajasthan to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
  - 8. Necessary permission should be obtained from the Chief Controller of Explosives and Factory Inspectorate for the Storage of lignite.

The above stipulations shall be enforced along with others as under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, Hazardous Wastes (Management and Handling) Rules, 2008, the Public Liability Insurance Act, 1991 and rules there under.

Yours faithfully,

  
(Sankatha Prasad)  
Member Secretary  
SEIAA Rajasthan

**Copy to following for information and necessary action:**

1. Secretary, Ministry of Environment and Forest, Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi .
2. Principal Secretary Environment Department, Rajasthan, Jaipur .
3. Shri S.C. Derashri, Chairman, SEIAA Rajasthan, 90, Geejgarh Vihar, Hawa Sarak, Jaipur.
4. Shri R.S. Bhandari, Member, SEIAA Rajasthan, 2- Museum Road, Ram Niwas Bagh, Jaipur.
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**M.S. SEIAA (Rajasthan)**