

**Dr. R.ANNAMALAI,I.F.S.,**  
DIRECTOR OF ENVIRONMENT AND  
MEMBER SECRETARY



**STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT AUTHORITY,  
TAMILNADU,**  
Tamilnadu Pollution Control Board Premises,  
76, Mount Salai, Guindy,  
Chennai- 600 032.

**Lr. No.SEIAA/TN/EC/1(d)/006/F-120/2009      Date: 11.05.2009**

To

The Director,  
M/s.Global Power Tech Equipments,  
3<sup>rd</sup> Floor, Egmore Benefit Society Building,  
25, Flowers Road,  
Chennai-600 084.

Sub: SEIAA-M/s.Global Power Tech Equipments Limited, S.No.12/1, 13/2B,  
11/1, Ayalavadi Village, Vandavasi Taluk, Thiruvannamalai District -  
Bio-mass Power Plant - Environmental Clearance - Regarding.

Sir,

This has reference to your application No. GPEL/TN/V/2008/dated 25.07.2008 submitted to the State Level Environment Impact Assessment Authority, Tamil Nadu seeking Environmental Clearance under the Environment Impact Assessment Notification, 2006. The proposal has been appraised by the State Level Expert Appraisal Committee in its meetings held on 16<sup>th</sup>-17<sup>th</sup> September 2008 and 19<sup>th</sup> & 20<sup>th</sup> March 2009 as per the 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 Application Form-I, TORs, REIA-EMP report and other details furnished by the project proponent.

It is noted, interalia that the project proposal involves construction of Bio-mass based power plant of 7.5 MW using 35 TPH Boiler. No ecologically sensitive area exists within 10 km periphery of the project site. The project does not involve any Rehabilitation & Resettlement.

It is proposed to utilize Bio-mass(such as ground nut shell, sugar cane trash, paddy straw, rice husk, cotton stalk, juli flora, country wood) – 80,000 TPA as raw material. The total water requirement will be 75 KLD with fresh water in take of 67 KLD, which will be met through private water suppliers & Bore well. 12 KLD of trade effluent will be generated comprising Boiler blow-down, RO reject, Softener regeneration & DM plant and cooling tower blow down and 6.0 KLD of sewage will be generated during operation. Sewage will be treated in a sewage treatment plant of 10 KLD capacity along with canteen waste water and used for gardening. Trade

effluent generated from softener plant, cooling tower, raw water R.O. plant and boiler will be treated through ETP & RO Plant. RO permeate will be used for boiler make up & RO rejects will be utilized for ash quenching (2 KLD) and 2 KLD will be disposed into solar evaporation pan. Electrostatic Precipitator with stack of height 50m will be provided to control particulate matter emission. Air cooled condenser will be provided to reduce the water consumption as proposed. The solid waste generation (ash) has been projected as 14 T/day. The Ash, Solid waste from the process & from the Air Pollution Control Measures will be supplied to Cement & Brick manufacturing unit. The cost of the project is Rs.36.35 Crores.

The project activity is listed at 1 (d) and falls under B1 category included in the Schedule of EIA Notification, 2006. Public Hearing was conducted on 24.02.2009 at District Collector's Office, Thiruvannamalai as required for the project.

Based on the information submitted by you, the SEAC after due consideration of the relevant documents and additional particulars submitted by the Project Proponent has recommended to the SEIAA, Tamil Nadu to grant Environmental Clearance to this project. The proposal was considered by SEIAA, Tamil Nadu in its meeting held on 28.04.2009 and the public consultation also carried out as required for the project, the SEIAA hereby accords Environmental Clearance to the above project under the provisions of the EIA Notification dated 14<sup>th</sup> September, 2006 based on the recommendations of the SEAC, subject to the strict compliance of the terms and conditions stipulated below:

**PART A- SPECIFIC CONDITIONS: Environment Management Measures**

- i) "Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be furnished to the SEIAA, Tamil Nadu before taking up of any construction activity at the site.
- ii) Sewage shall be treated in a Sewage Treatment plant consisting of screen chamber, Aeration tank, Clari-settler, Pressure Sand Filter, Activated Carbon Filter, UV disinfection and Mechanical dewatering system.
- iii) Trade effluent generated from Softener regeneration & DM plant, Filter backwash, Boiler Blow down, cooling tower Blow down shall be treated through ETP consisting of bar screen, oil skimmer tank, oil collection tank, dozing tank, flash mixer, clarisettler, dual media filter, Mechanical dewatering of sludge, RO plant and cartridge filter and the treated effluent shall be used for ash quenching and solar evaporation as committed.

- iv) For disinfection of waste-water, system using ultra violet radiation shall be adopted.
- v) Mechanical dewatering arrangements to be provided for sludge drying.
- vi) Incremental pollution loads on the ambient air quality, noise and water quality shall be periodically monitored.
- vii) Suitable Air Pollution Control System (ESP) and stacks of appropriate height as per the CPCB guidelines shall be provided to control emissions from various sources and emissions levels shall be below the standards prescribed by the Tamil Nadu Pollution Control Board. Separate electric meters should be provided to the Air Pollution Control System and a separate log book maintained for the daily meter readings and monthly report submitted to Tamil Nadu Pollution Control Board.
- viii) Fugitive emissions to be properly controlled by adopting suitable extraction arrangements so that entire emission pass through the APC measures.
- ix) All the conditions stipulated by the Tamil Nadu Pollution Control Board in their consent for establishment shall be strictly implemented.
- x) Only Biomass should be used as fuel. No other fuels should be used.
- xi) (a) Water requirement of 67 KLD should be met from bore wells.  
(b) Permission from appropriate Ground Water Authority shall be obtained for drawal of water. No excess ground water shall be drawn for the power plant without previous approval of the Competent Authority.
- xii) Noise level shall be limited to 55 dBA. For people working in high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
- xiii) The stack emissions from all the sources shall not exceed 50 mg/Nm<sup>3</sup>. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
- xiv) The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>) and particulate matter from Boilers, DG sets and other processes shall conform to the standards prescribed by the concerned authorities from time to time.

- xv) Regular monitoring of the air and water quality should be carried out in and around the power plant and records must be maintained. Six monthly reports shall be submitted to the Tamil Nadu Pollution Control Board and MOEF Regional Office, Bangalore.
- xvi) A separate environment and safety management cell with qualified staff shall be set up before commission of construction activities and shall be maintained through out the lifetime of the industry, for implementation of the stipulated environmental safeguards.
- xvii) The unit shall provide on line continuous stack monitoring for SO<sub>x</sub>, NO<sub>x</sub>, CO, SPM for the 35 TPH boiler.
- xviii) The unit shall provide adequate control measures for the CO emission during start up and shut down operations of the boiler.
- xix) For Solid-waste management, composting arrangements shall be provided for biodegradable waste at site.
- xx) The Ash, solid waste from the process and from the Air Pollution Control Equipments shall be disposed to Cement & brick manufacturers as committed.
- xxi) The Proponent shall furnish an undertaking that they will abide by the conditions / recommendations mentioned in the EIA/RA report furnished by them.
- xxii) The Environmental Clearance is hereby accorded only for the power generation of 7.5 MW.
- xxiii) It is mandatory for the project proponent to furnish to the SEIAA, Half yearly compliance report in hard and soft copies on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year in respect of the conditions stipulated in the prior Environmental clearance.

**B. GENERAL CONDITIONS:**

- i) The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearance from other statutory and administrative authorities.
- ii) No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA. In case of deviations or alterations in the project proposal from those submitted for clearance, a fresh reference

shall be made to the SEIAA to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

- iii) Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act,1948.
- iv) Proper House keeping programmes shall be taken up.
- v) Usage of Personal Protective Equipments (PPEs) by all employees/ workers shall be ensured.
- vi) The Proponent shall provide adequate width of Green belt to control fugitive emission & noise and greenbelt shall be developed in 33 % area as per the CPCB guidelines in a time bound manner.
- vii) A stack of adequate height based on the capacity of the DG set shall be provided for control and dispersion of pollutants from the DG set.
- viii) The project proponent shall harvest surface as well as rainwater from the roof tops of the buildings proposed and storm water drains to recharge the ground water.
- ix) The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the EMP report.
- x) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xi) The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing the public that
  - i) The project has been accorded Environmental Clearance.
  - ii) Copies of clearance letters are available with the Tamil Nadu Pollution Control Board.
  - iii) Environmental Clearance may also be seen on the website of the SEIAA.

The advertisement should be issued within 7 days from the date of issue of the clearance letter and a copy of the same shall be forwarded to the SEIAA.

- xii) The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

- xiii) The SEIAA reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- xiv) The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

**Member Secretary,  
State Level Environment Impact  
Assessment Authority,  
Tamil Nadu.**

Copy to:-

1. The Principal Secretary to Government, Environment & Forests Dept,  
Govt.of Tamil Nadu, Fort St.George, Chennai-9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan,  
CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board,  
76, Mount Salai, Guindy, Chennai - 600 032.
4. The CCF, Regional Office, Ministry of Environment & Forest (SZ),  
Kendriya Sadan, IV floor, E&F wings, 17<sup>th</sup> Main Road,  
Koramangala II Block, Bangalore - 560034.
5. Monitoring Cell, I A Division, Ministry of Environment & Forests,  
Paryavaran Bhavan, CGO Complex, New Delhi 110003.
6. The Commissioner, Paranamallur Panchayat Union, Vandavasi Taluk,  
Thiruvannamalai District
7. Stock File.