

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) & 5(j) /001/ F-119/2009 / Date: 4.06.2009

To

The Vice President (Projects),
M/s. Bannari Amman Sugars Ltd.,
1212,Trichy Road,
Coimbatore – 641 018.

Sub: SEIAA - M/s. Bannari Amman Sugars Ltd., Establishment of sugar mill of 1,50,000TPA capacity and generation power plant of 28.8 MW capacity at S.No.174, 175, 176, 177, 201, 202, 203, 208, 210, 211, 212 to 219 of Kolundampattu Village, Thandampattu Taluk, Thiruvannamalai District - Environmental Clearance - Reg.

Sir,

This has reference to your application No letter No. BASL/AD/2481/08 dated 24th July 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 16th-17th September 2008 and 19th & 20th 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 that M/s. Bannari Amman Sugars Ltd have proposed to establish a sugar mill of capacity 150000 TPA and co- generation Power plant of 28.8 MW capacity at Kolundampattu Village, Thandampattu Taluk, Thiruvannamalai District in Tamilnadu. No eco-sensitive area is located within the radius of 10 km of the project. River Pennaiyar flows at a distance of 8.5 kms from the proposed unit and Sathanur Dam is located at a distance of 6.5 km from the proposed site. The proposed activity will be carried out in the land area of 75 ha of which 66.06 ha is earmarked for sugar unit 8.94 ha. for co-generation power plant, and 54.38 ha. for green belt development. The sugar unit will operate for 300 days, co-generation power plant for 330 days. The total cost of the project will be Rs. 317.50 crores.

Total water requirement will be 3669 KLD (Sugar unit 2552 KLD, co-generation 1117 KLD and domestic 37 KLD). Source of water will be met from the River Pennaiyaru, at a distance of 150 m from the down stream of pickup dam of Sathanur Dam as per GO Ms No. 88 PWD (T-2) dated 29.5.2009 and 7 number of borewells located in Kolundampattu village, Thiruvannamalai District. Fresh water requirement for sugar plant will be 1925 KLD and 900 KLD for co-generation power plant. The effluent of 657 KLD from sugar unit will be treated in the ETP consisting of screen chamber, oil and grease trap, equalization tank, anaerobic bio-reactor, extended aeration tank, clarifier, sludge drying beds and the treated effluent will be used for irrigation. The effluent of 229 KLD from cogeneration unit will be treated by neutralization and settling and treated effluent will be used for irrigation. Domestic effluent will be treated in septic tank and sent to the sugar plant ETP for further treatment. The total power requirement will be 20,000 MW and will be met from own cogeneration power plant. Fuel requirement will be bagasse (3,15,000 TPA) for the cogeneration power plant. Three DG sets of 500 KVA capacity each are proposed for stand by power supply.

Particulate emissions from the 135 TPH boilers will be controlled by providing wet scrubber/ ESP with stack height of 79 m. Stack height of 24 m above the ground level is proposed for DG set for dispersion of gaseous emissions. Solid waste generation in the form of bottom ash and fly ash from the cogeneration boilers will be sent to Cement kilns. Sludge from ETP will be used as manure after bio-composting.

The project activity is listed at 1 (d) and 5 (j) and falls under B1 category included in the Schedule of EIA Notification, 2006. Public Hearing was conducted on 29.01.2009 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 2.06.2009 and as the public consultation was 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 14th 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 disposed into the ETP of sugar plant for further treatment.
- iii) Trade effluent generated from Boiler Blow down, cooling tower Blow down of cogeneration plant shall be neutralized and shall be used for irrigation 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) The press mud requirement, area for compost yard and storage of finished products shall be as per the CPCB guidelines. The effluent from the sugar unit and from the cogeneration power plant after treatment shall be used for irrigation after conforming to the prescribed standards.
- vii) Incremental pollution loads on the ambient air quality, noise and water quality shall be periodically monitored.
- viii) 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.
- ix) As per the CPCB recommendation, storage for treated effluent from the sugar unit shall not exceed 15 days capacity.
- x) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to TNPCB and this Ministry.

- xi) The DG set shall be provided with acoustic enclosures to mitigate the noise pollution and emissions shall be dispersed through stack of height 24 m above ground level as per CPCB standards.
- xii) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF and the Tamil Nadu Pollution Control Board. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xiii) Fugitive emissions to be properly controlled by adopting suitable extraction arrangements so that entire emissions pass through the APC measures.
- xiv) All the conditions stipulated by the Tamil Nadu Pollution Control Board in their Consent For Establishment shall be strictly implemented.
- xv) Only bagasse should be used as fuel as reported. No other fuels should be used.
- xvi) Water requirement of 1925 KLD for sugar plant and 900 KLD for cogeneration plant should be met from River Pennaiyaru.
- xvii) The Company shall fulfill the conditions imposed by the Government in the G.O.Ms.No. 88 PWD, dated 29.5.09.
- xviii) The Proponent has to enter with an agreement as per Government rules before abstraction of water.
- xix) 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.
- xx) The stack emissions from all the sources shall not exceed 50 mg/Nm³. 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.

- xxi) The gaseous emissions (SO₂, NO_x) and particulate matter from Boilers, DG sets and other processes shall conform to the standards prescribed by the concerned authorities from time to time.
- xxii) 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.
- xxiii) 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.
- xxiv) The unit shall provide on line continuous stack monitoring for SO_x, NO_x, CO, SPM for the 135 TPH boiler.
- xxv) Green belt in 33% of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant and compost yard as per the CPCB guidelines in consultation with the local DFO.
- xxvi) The unit shall provide adequate control measures for the CO emission during start up and shut down operations of the boiler.
- xxvii) For Solid-waste management, composting arrangements shall be provided for biodegradable waste at site.
- xxviii) The Ash, solid waste from the process and from the Air Pollution Control Equipments shall be disposed to Cement & brick manufacturers as committed.
- xxix) The Proponent shall furnish an undertaking that they will abide by the conditions / recommendations mentioned in the EIA/RA report furnished by them.
- xxx) The Environmental Clearance is hereby accorded only for sugar plant 150000 TPA and for the power generation of 28.8 MW.
- xxxi) It is mandatory for the project proponent to furnish to the SEIAA, Half yearly compliance report in hard and soft copies on 1st June and 1st 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, 17th 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, Thandampattu Panchayat Union, Thandampattu Taluk, Thiruvannamalai District.
7. The Superintending Engineer, WRO, Pennaiyaru Division, Thiruvannamalai.
8. Stock File.