

F. No. J-11011/540/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Telefax: 011 – 2436 3973
Dated: December 7, 2009

To,
M/s Empee Sugars and Chemicals Ltd.
Empee Tower, 59, Harris Road,
Pudupet, Chennai-600002

E-mail : empee@satyam.net.in

Sub: Setting up of 100 KLPD distillery & Co-generation Plant in (50 MW) at SF No. 82, 83(part), 84(part), 86(part), 87(part), 113(part), 114(part), 115(part) 116(part), 117(part) and 118(part), Edaikkal Village, Ambasamudram Taluk, Tirunelveli District in Tamilnadu by M/s Empee Sugars and Chemicals Ltd.,– reg EC after TORs

Sir,

This has reference to your letter No. EACL/Edaikal/distillery/2009 dated 7.9.2009 along with EIA/EMP and public hearing reports seeking environmental clearance on the above mentioned subject under the EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Empee Sugars and Chemicals Ltd., (distillery unit) have proposed for 100 KLPD distillery unit based on molasses or grains as raw material & 50 MW/hr Co-generation Plant in District Tirunelveli in Tamilnadu. No wildlife sanctuary/national park/biosphere reserve etc. is located within 10 km radius of the project. No forest land and R&R is involved. Proposed distillery will be located within the sugar unit of 4900 TCD. The unit will manufacture Rectified Spirit (RS)/Extra Neutral Alcohol (ENA)/Anhydrous Alcohol of 100 KLPD capacity. The distillery unit will operate for 330 days and Co-generation unit for 240 days in a year during the summer and for 90 days during the off season. The total land earmarked for the distillery and co-generation unit is 133.41 acres, of which 25 acres has been earmarked for green belt development. Cost of the project is Rs. 323.00 Crores.

3. The total water requirement of 2611 m³/day (Distillery - 1460 m³/day + Cogen - 1151 m³/day) will be met from the ground water source. The effluent from the cogeneration power plant will be treated in ETP of sugar plant. The spent wash (1100 m³/day) will be subjected to evaporation in the Multiple Effect Evaporator (MEE) and concentrated spent wash will be incinerated in the boiler. Condensate from the MEE will be used for cooling tower makeup. Domestic effluent from the distillery unit will be disposed through septic tank and dispersion trench. Power requirement will be met from co-generation power plant. Particulate emissions from the 135 TPH boiler of co-generation power unit will be controlled by ESP and ID fans followed by stack of 90 m height. Bag filter will be installed to control the emissions from the spent wash incineration boiler and emissions will be dispersed through stack of height of 50 m. Emissions from the fermenter will be controlled by 15 m high stack with CO₂ scrubber. DG sets of 2X1250 KVA will be attached with stack of 17 m height along with acoustic enclosure to mitigate the noise pollution.

4. Solid waste generation from the distillery and co-generation power unit will be in the form of coal ash (50 TPD) and will be sent to brick manufacturing units and bagasse ash will be used as manure. Settled yeast sludge (6 T/day) will be used as fuel for the boiler. Potash rich ash from the boiler (25 T/day) will be disposed as fertilizer.

5. All molasses based and Non molasses based distilleries are listed at Sl. No. 5(g) of schedule of EIA notification, 2006. The molasses based distilleries irrespective of capacity and non molasses based distilleries above 30 KLPD are category 'A' projects and appraised at central level.

6. The proposal was considered by the Expert Appraisal Committee-2(I) in its 5th meeting held on 12-13th November, 2009. The Committee noted that method of spent wash treatment is as per the CPCB guidelines and recommended the proposal for grant of environmental clearance. Public hearing of the project was held on 18.8.2009.

7. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS:

- i. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the State Pollution Control Board rules or State Pollution Control Board whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. The particulate emissions from the 135 TPH and incineration boiler shall be controlled by ESP and bag filters and emissions shall disperse through stack height as per the CPCB guidelines. The particulate emissions shall conform to the prescribed standards. The gaseous emissions from the DG sets shall be dispersed through stack of height as per CPCB/State Pollution Control Board standards. Acoustic enclosures shall be provided to mitigate the noise from the DG sets.
- iii. 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, the respective Zonal office of CPCB and the State Pollution Control Board. The levels of SPM, RSPM, SO₂, NO_x (ambient levels), emissions from the stacks and pH, TDS, BOD, COD, Chloride, suspended solids and sulfates in the treated effluent shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- iv. The spent wash generation shall not exceed 1100 m³/d. The spent wash after concentration in the multiple effect evaporator shall be incinerated in the boiler to achieve zero discharge. The zero discharge shall be strictly complied with. The condensate from the boiler shall be used in the cooling tower make up. The domestic effluent shall be disposed through septic tank/soak pit.

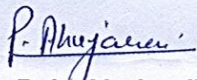
- v. The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation, storage shall not exceed 5 days capacity.
- vi. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry.
- vii. Green belt in 25 acres of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO.
- viii. Permission shall be obtained to draw the water from the State Ground Water Board/ Central Ground water Board as may be applicable to this case.
- ix. Company shall adopt rainwater harvesting measures to recharge the ground water.
- x. Fire Fighting System shall be as per the TAC Norms and cover all areas where alcohol is produced, handled or stored and provision of foam system for fire fighting to control fire from the alcohol storage tank.
- xi. Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry within six months.
- xii. The company shall undertake measures to control overflow of alcohol storage tanks. Further, high level alarms with automatic shut -off should be installed and emergency shut off should be at a distance.
- xiii. Permission to draw ground water from the State Ground Water Board/ Central Ground Water Board shall be obtained as may be applicable to this case.
- xiv. Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employee shall be maintained separately.
- xv. Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

B. GENERAL CONDITIONS:

- i. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- ii. Ambient Air Quality Monitoring Stations shall be set up in the down wind direction as well as where maximum ground level concentration of SPM, SO₂, NO_x, are anticipated in consultation with the State Pollution Control Board.


- iii. Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.
- iv. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- v. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vi. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vii. The project authorities shall provide requisite funds for both recurring and non-recurring expenditure to implement the conditions stipulated by the non-recurring expenditure to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- viii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- ix. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bangalore /State Pollution Control Board/Central Pollution Control Board.
- x. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated E C conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the State Pollution Control Board.
- xi. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

- xii. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.
- xiii. The Project Authorities shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
9. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.
10. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.
11. 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 Trans boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Dr. P. L. Ahujarai)
Director

Copy to:

1. The Secretary (Environment), Govt. of Tamilnadu, Fort. St. George, Chennai-600009.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Tamil Nadu Pollution Control Board, 100, Anna Salai, Guindy, Chennai – 600032.
4. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wings, 7th Main Road, IInd Block, Koramangala, Bangalore-560034.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File/Monitoring File/Record File.


(Dr. P. L. Ahujarai)
Director