

F. No. J-11011/02/2009- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
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New Delhi – 110 003
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Telefax: 011 – 2436 3973
Dated: August 24, 2009

To,
The Managing Director
M/s Shasta Bio-fuels Pvt. Ltd.
Plat no. 17, Women's Cooperative Society
Venkatagiri, Hyderabad-500073
Andhra Pradesh

E-mail : bharath@shastabiofuels.com

Sub: Proposed 150 KLPD grain based distillery and 6.5 MW power plant at Rangapuram village, Pebberu Mandal in Mahaboobnagar Dist. In Andhra Pradesh by M/s Shasta Bio-fuels Pvt. Ltd.- reg EC after TORs

Sir,

This has reference to your letter No. nil dated 1st July, 2009 along with a copies of 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 Shasta Bio-fuels Pvt. Ltd. have proposed for 150 KLPD grain based distillery to manufacture RS/ENA/Ethanol and 6.5 MW power plant in District Mahaboobnagar in Andhra Pradesh. No Wild life sanctuary/National park/biosphere reserve etc. is located within 10 km radius of the project site. River Krishna flows at a distance of 1km from the proposed unit. The total land acquired for the project is 30 acres, of which green belt will be developed in 10 acres of plant area. The raw material requirement will be grains (maize, jowar and broken rice etc.). Cost of the project will be Rs. 150.00 Crores.

3. The water requirement of 3510 m³/day will be met from the River Krishna. The spent wash generation will be 900 m³/day. The spent wash will be concentrated in Multiple Effect Evaporator to concentrate the solids to 30% and then taken to the drier along with the wet cake from dewatering to concentrate solids to 90% solids and will be sold as cake. Domestic effluent will be disposed through soil tank. Cooling water will be blow down and DM (dissolved mineral) generation water (20 m³/day) will be treated in neutralization tank and treated effluent after mixing with cooling tower blow down will be used for dust suppression/ash conditioning and on-land for irrigation within the plant premises. The spent wash storage will be restricted to three days capacity. Scrubbed water from CO₂ recovery plant will be utilized in the fermentation section. Power requirement will be met through the co-generation power plant. Fuel for 50 TPH boiler will be coal (200 TPD) or rice husk (228 TPD)

4. To control particulate emissions from the boiler, bag filters will be installed and emissions will disperse through stack of 53m height. CO₂ produced during fermentation will be recovered by scrubbers. Solid waste generation will be in the form of DDGS (91.7 TPD) and will be sold as cattle feed. Boiler ash (70 TPD, when coal is used or 41 TPD when rice husk is used) will be provided to brick manufacturers. It is proposed to construct 6 nos. of rainwater harvesting pits to harvest the runoff water from the roof top by laying a separate storm water drainage system for recharging the ground water.

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

6. The proposal was considered by the Expert Appraisal Committee-2 (Industry) in its 1st meeting held on 24-25th July, 2009. The EAC (I) recommended the proposal for grant of environmental clearance. Public hearing of the project was held on 27th June, 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:

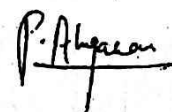
- i. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. The particulate emissions from the 50 TPH boiler shall be controlled by installation of bag filter and emissions shall be dispersed through stack height as per the CPCB guidelines. The particulate emissions shall conform to the prescribed standards.
- 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 sulphates 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 900 m³/d. The spent wash shall be centrifuged in the decanter and after decantation, the slop shall be concentrated to 30% solids in the multiple effect evaporator. The concentrated thin slop after mixing with either wet cake or sent to dryer directly for concentration upto 90% solids and shall be sold as cattle feed. The zero discharge shall be strictly complied with. The condensate from the evaporator shall be recycled. The boiler blow down and DM plant and softener regeneration water (231m³/d) shall be treated in a neutralization tank and after treatment shall be mixed with Cooling tower blow down. The treated effluent shall be used for dust suppression /ash conditioning and onland for irrigation within the plant premises after complying with the CPCB/State Pollution Control Board standards.
- 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 33% 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 Irrigation Department as may be applicable to this case.
- ix. Company shall adopt rainwater harvesting measures to recharge the ground water.
- x. 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.
- xi. 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. 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.
- vii. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- viii. 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.
- ix. 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.

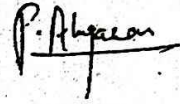
- x. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bangalore /State Pollution Control Board/Central Pollution Control Board.
 - xi. The project proponent shall also submit six monthly reports on the status of compliance of the 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.
 - xii. 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.
 - xiii. 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.
 - xiv. 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, State Deptt. of Environment, Government of Andhra Pradesh, Mantralaya, Hyderabad.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Andhra Pradesh State Pollution Control Board, 2nd Floor, HUDA Complex, Maitrivaram, S.R.Nagar, Hyderabad- 500 038.
4. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wing, 17th Main Road, Koramangala, Bangalore-560034.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
6. Guard file./Record file/Monitoring file.



(Dr. P. L. Ahujarai)
Director