

F. No. J-11011/171/2011- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail : aditya.narayan@nic.in
Telefax : 011: 2436 0549
Dated 15th January, 2013

To,

M/s Sudheer Bio Products Pvt. Ltd.
D.No.1-44, Vakamuru, Thotlavaluru Road
Backside of Valluru College, Thotlavalluru Mandal
Krishna District-521165, Andhra Pradesh

E-mail: sudheerbioproducts@gmail.com; Fax No.: 08676 – 234793

Subject: Grain based Distillery Plant (60 KLPD) alongwith Captive Power Plant (2.5 MW) at parts of 526, 532, 534, 536, 538, 556 & 557, Village Peddavaram, Mandal Nandigama, District Krishna, Andhra Pradesh by M/s Sudheer Bio Products Pvt. Ltd. – Environmental Clearance reg.

Ref. : Your letter no. nil dated 24th May, 2012.

Sir,

Kindly refer your letter dated 24th May, 2012 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report alongwith Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that proposal is for setting up of grain based Distillery Plant (60 KLPD) alongwith Captive Power Plant (2.5 MW) at parts of 526, 532, 534, 536, 538, 556 & 557, Village Peddavaram, Mandal Nandigama, District Krishna, Andhra Pradesh by M/s Sudheer Bio Products Pvt. Ltd. Total plot area is 27 acres of which greenbelt will be developed in 9 acres of plant area. No national parks/sanctuaries/biosphere reserves are located within 10 km. Jaggayyapeta RF, Venkataya Palem RF, Gingupalle RF, Kuntimaddi RF and Gudimetla RF are located within 10 radius. River Krishna is flowing at a distance of 1.1 Km. Total cost of the project is Rs. 63.89 Crores. Rs. 18.00 Crores and Rs. 2.00 Crore are earmarked towards capital cost and recurring cost/annum for pollution control measures. No forest land is involved.

3.0 Bag filter alongwith stack of adequate height will be provided to coal/biomass fired boiler to control particulate emissions within 50 mg/Nm³. Total fresh water requirement from ground water source/Krishna River will be 650 m³/day for distillery and cogeneration unit. The Ground Water Department, Govt. of Andhra Pradesh has given permission to draw 120 m³/day of ground water vide their letter no. 421/Hg/SW/2011-12 dated 06.09.2011. While permission for water drawl from River Krishna has been sought from the Irrigation and CAD Department, Govt. of AP. The Irrigation Circle Vijaywada has recommended for drawl of 700 m³/day of water. Spent wash generation will be 360 m³/day. Spent wash will be passed through decanter and concentrated in multi-effect evaporator (MEE). Thick syrup and wet cake will be mixed together to form Distiller's Wet Grains with Soluble (DWGS) to achieve zero discharge. Distiller's Wet Grains with Soluble (DWGS) will be dried to form Distiller's Dry Grains with Soluble (DDGS). Spentlees and utilities wastewater will be treated in effluent treatment plant (ETP). No effluent will be discharged outside the factory premises and 'Zero' effluent discharge concept

will be implemented. Storage capacity for spent wash lagoon will be 5 days. DDGS will be sold as cattle feed. Fly ash will be sold to the brick manufacturers/cement.

4.0 Public hearing/public consultation meeting was conducted on 22nd March, 2012.

5.0 All cane juice/non-molasses based distillery (>30 KLD) are listed at S.N. 5(g) (ii) under category 'A' and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 25th and 2nd meetings held during 28th-30th July, 2011 and 29TH - 31ST October, 2012 respectively. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent and presentation made by them and the EIA Consultant M/s Pioneer Laboratories and Consultant Ltd., Hyderabad, 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 the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- i) Environment clearance accorded is for grain based distillery unit (60 KLPD) only and no molasses based distillery unit shall be operated without prior permission from the Ministry.
- ii) Permission shall be obtained from the State Forest Department regarding the impact of the proposed unit on the surrounding reserve forest viz. Jaggayyapeta RF, Venkataya Palem RF, Gingupalle RF, Kuntimaddi RF and Gudimetla RF.
- iii) Measures shall be taken to mitigate PM₁₀ levels in the ambient air and a time bound action plan shall be submitted. Bagfilter alongwith stack of adequate height shall be provided to coal/biomass fired boiler to control particulate emission within 50 mg/Nm³. At no time, the emission levels should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- iv) In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi-cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records shall be maintained. The emissions shall conform to the limits imposed by A P Pollution Control Board (APPCB).
- v) Pucca approach road to project site shall be constructed prior to commencing construction activity of the main distillery so as to avoid fugitive emissions.
- vi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- vii) 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 APPCB. The levels of PM₁₀, SO₂, NO_x, CO and HC (Methane)

in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.

- viii) Total fresh water requirement from ground water source/Krishna River shall not exceed 10.83 KL/KL of alcohol (i.e. 650 m³/day) for distillery and cogeneration unit (2.5 MW) and prior permission for drawl of water shall be obtained from the concerned authorities. A copy of permission shall be submitted to the Ministry's Regional Office at Bangalore. Explore the possibility for using surface water only.
- ix) Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- x) Spent wash generation shall not exceed 6 KI/KI of alcohol. Spent wash shall be treated through decanter and concentrated in multi-effect evaporator (MEE) followed by dryer to form DDGS. Spentlees, effluent from bottle washing, utilities and cogeneration unit shall be treated in effluent treatment plant (ETP) and water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB and recycle/reuse. No effluent from distillery and co-generation power plant shall be discharged outside the factory premises and 'Zero' effluent discharge concept shall be adopted.
- xi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xii) Spent wash shall be stored in impervious lagoon with HDPE lining as per CPCB guidelines and shall be kept in proper condition to prevent ground water pollution. Storage capacity of spent wash lagoon shall be for 5 days.
- xiii) 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. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office at Bangalore and APPCB.
- xiv) No storage of wet cake shall be done at site to avoid odour problem. An additional dryer shall be installed so that at any time wet cake is not sold then wet cake shall be converted into dry cake by operating additional dryer.
- xv) Biomass/coal storage shall be done in such a way that it does not get air borne or fly around due to wind. For this, it shall be kept in wet form.
- xvi) Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- xvii) As proposed, ash shall be transferred in the covered truck. Ash shall be transferred to the brick manufacturing. A tie-up with brick manufacturers to be made in the form of agreement.
- xviii) Fire fighting system shall be as per norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank.
- xix) Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry and its Regional Office at Bangalore within six months.

- xx) 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 regular medical test records of each employee shall be maintained separately.
- xxi) Dedicated parking facility for loading and unloading of material shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.
- xxii) As proposed, green belt shall be developed in 9 acres out of total land 27 acres and plantation shall be done as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around the proposed distillery to mitigate the odour problem.
- xxiii) All the commitments made during the Public Hearing / Public Consultation meeting held on 22nd March, 2012 shall be satisfactorily implemented and adequate budget provision should be made accordingly.
- xxiv) At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.
- xxv) The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders..
- xxvi) 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:

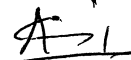
- i. The project authorities shall strictly adhere to the stipulations made by the A P Pollution Control Board.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv. The locations of ambient air quality monitoring stations shall be decided in consultation with the AP Pollution Control Board (APPCB) and it shall be ensured that at least one station is

installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

- 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 shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vi. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vii. The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and its amendment time to time and prior permission from APPCB shall be obtained for disposal of solid / hazardous waste including boiler ash.
- viii. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
- ix. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- x. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- xi. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
- xii. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xiii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xiv. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xv. The company shall earmark sufficient funds for capital cost and recurring cost per annum 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 earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- xvi. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xvii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance 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 A P Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

- xviii. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the A P 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 Bangalore Regional Offices of MoEF by e-mail.
- xix. 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 SPCB/Committee and may also be seen at Website of the Ministry 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 concerned Regional Office of the Ministry.
- xx. 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 the project.
- 8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.




(A.N. Singh)

Dy. Director (S)

Copy to :-

1. The Principal Secretary, Department of Environment, Forest, Science & Technology, Government of Andhra Pradesh, Hyderabad, A.P.
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad - A.P.
5. Adviser, IA II(I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.



(A.N. Singh)

Dy. Director (S)