

F. No. J-11011/57/2012- IA II (I)
Government of India
Ministry of Environment, Forests and Climate Change
(I.A. Division)

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Dated 27th August, 2014

To: **Shri V Shivram (Senior General Manager)**
Shree Basaveshwar Sugar Ltd
"Sugar Krishna" Mudholbagalkot
District Bagalkot ,
Karnataka – 587 313

E-mail : ykv_sarma@hotmail.com Fax: 08352-267077

Subject: Sugar (3500 TCD), Distillery (50 KLPD) & Cogeneration Plant (26 MW) at Sy. No.9/1, 9/3, 18/3, 19, 20, 22, 33, 34, 35, 36, 37/1, 37/2, 38 & 39 at Village Karjol, Taluka & District Bijapur, Karnataka by M/s. Shree Basaveshwar Sugars Ltd. – Environmental Clearance reg.

Ref.: Your letter no. nil dated 27th July, 2013.

Sir,

This has reference to your letter dated 27th July, 2013 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report alongwith Public Hearing Report and subsequent communication vide your letter dated 26th December, 2013 (received in the Ministry on 24th January, 2014) on the above mentioned subject.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that proposal is for setting up of Sugar (3500 TCD), Distillery (50 KLD) & Cogeneration Plant (26 MW) at Sy. No.9/1, 9/3, 18/3, 19, 20, 22, 33, 34, 35, 36, 37/1, 37/2, 38 & 39 at Village Karjol, Taluka & District Bijapur, Karnataka by M/s. Shree Basaveshwar Sugars Ltd. Total plot area is 122 ha. No forest land is involved. Total cost of project is Rs. 406.00 Crore. Rs. 20 crores is earmarked toward pollution control measures. Sugar plant will be operated for 240 days and Power plant and Distillery will be operated for 330 days. Nearest water bodies are Almatti dam (17.5 km), River Krishna (14 Km), Don River (10 Km), KallariHalla (5.5 Km), Hire Halla (4 Km), MalganKere (5.0 Km) and Kun Don Halla (8.5 Km). No ecological sensitive area such as national parks and wildlife sanctuaries are located within 25 Km distance.

3.0 During season, the boiler will be operated mainly on bagasses available from captive source. During offseason the boilers will be operated on coal or agro-waste biomass such as sugarcane (35000 TPA) will be transported from Goa/Karwar Ports through covered truck. ESP along with stack of adequate height will be provided to bagasse/agro waste/coal fired boiler (130TPH) to control particulate emissions within 50 mg/Nm³. Bagfilter will be provided to biomass/concentrated spent wash fired boiler (18 TPH). Total fresh water requirement from Krishna River/Almatti reservoir will be 1650 m³/day. The spent wash from molasses based distillery will be treated in bio-methanation followed by evaporation. Treated concentrated spent wash will be mixed with bagasse/biomass and then burnt as fuel in incineration boiler. The plant effluents consisting of washings, lees water and cooling water purge will be treated in effluent treatment plant (ETP). No effluent from distillery & cogeneration power plant will be discharged outside the factory premises. Effluent generation from Sugar plant will be 350 m³/day and treated in the ETP.

Fly ash from bagasse as a fuel will be disposed to the farmer for soil conditioning. Fly ash from coal will be sent to brick manufacturing unit. Spent oil will be sold to authorized recyclers/re-processors.

4.0 Public Hearing / Public Consultation meeting was conducted on 25th May, 2013.

5.0 All molasses based distilleries are listed at S.N. 5(g) (i) under category 'A' and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its meetings held during 11th-12th May, 2012, 18th-20th November, 2013 and 20th-21st February 2014 respectively. Project Proponent and the EIA Consultant namely M/s Ultra-Tech Environmental Consultancy & Laboratory, have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, 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 molasses based distillery unit (50 KLPD) only and no grain based distillery unit shall be operated without prior permission from the Ministry.
- ii) ESP along with stack of adequate height should be provided to bagasse/agro waste/coal fired boiler (130TPH) to control particulate emissions within 50 mg/Nm³. Bagfilter should be provided to biomass/concentrated spent wash fired boiler (18 TPH). 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 should not be restarted until the control measures are rectified to achieve the desired efficiency.
- iii) 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 prescribed by Karnataka State Pollution Control Board (KSPCB).
- iv) 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.
- v) 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 KSPCB. The levels of PM₁₀, PM_{2.5}, 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.

- vi) Company shall follow good management practices viz. collection of waste yeast sludge from fermentation section in a closed system and proper disposal, reduced volume of effluent by adopting strategic approaches, closed drains carrying spent wash to the treatment units; minimization of fugitive emissions from anaerobic treatment; proper collection & handling of excess sludge generated from the anaerobic & aerobic treatment units; minimum retention of treated & untreated spent wash in the lagoons; and green belt development with suitable plantation in and around the treatment units to mitigate odour from the distillery unit.
- vii) Pucca approach road to project site shall be constructed prior to commencing construction activity of the main distillery to avoid fugitive emissions.
- viii) Total fresh water requirement from Krishna River/Almatti reservoir for distillery and sugar along with cogeneration should not exceed 500m³/day and 1150 m³/day respectively. Prior permission for the drawl of 1650 m³/day water should be obtained from the concerned authority. Water consumption should be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- ix) The spent wash from molasses based distillery should be treated in bio-methanation followed by evaporation. Concentrated spent wash should be mixed with bagasse/biomass and then burnt as fuel in boiler to achieve 'Zero' discharge. Multi-effect evaporator should be installed. The plant effluents consisting of washings, lees water and cooling water purge shall be treated in ETP. No effluent shall be discharged outside the plant premises and 'Zero' effluent discharge condition shall be maintained. Spent wash shall be stored in impervious pucca lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 5 days capacity.
- x) Wastewater generation from the sugar unit shall not exceed 100 litres per tonne of cane crushed i.e. 350 m³/day. Effluent from sugar unit shall be treated in the effluent treatment plant (ETP). Water quality of treated effluent shall be monitored regularly. In any case, no wastewater/treated effluent shall be discharged into river/natural stream. Domestic effluent shall be treated in treatment plant.
- xi) 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 dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Bangalore and KSPCB.
- xii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xiii) **Baggase storage** shall be done in such a way that it does not get air borne or fly around due to wind. 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.
- xiv) Boiler 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. Baggase ash and coal ash shall be stored separately.

- xv) Fire fighting system shall be as per the 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.
- xvi) Risk Assessment should 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.
- xvii) Occupational health surveillance programme should be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre should be strengthened and the regular medical test records of each employee should be maintained separately.
- xviii) 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.
- xix) As proposed, green belt over 33 % of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xx) All the commitments made during the Public Hearing / Public Consultation meeting held on 25th May, 2013 should be satisfactorily implemented and adequate budget provision should be made accordingly.
- xxi) As proposed, an amount of Rs. 20 crores should be earmarked towards the Enterprise Social Commitment (ESC) for the initial 5 years and thereafter 2% of the retain profits spent on CSR activities based on local needs and action plan with financial and physical breakup/details 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.
- xxii) 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 must strictly adhere to the stipulations made by the Karnataka State Pollution Control Board (KSPCB), State Government and any other statutory authority.
- 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 locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one

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

- iv. 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.
- 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. 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.
- viii. The company shall also comply with all the environmental protection measures and safeguards proposed in the documents 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.
- ix. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
- x. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xii. The company shall earmark sufficient funds towards 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.
- xiii. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParasad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- xiv. 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 KSPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xv. 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.

- xvi. 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://moef.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.
- xvii. 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.


(Lalit Bokolia)
Additional Director

Copy to:-

1. The Secretary, Department of Environment & Ecology, Govt. of Karnataka, Room No. 708, Gate 2, Multi Storied Building, Dr. AmbedkarVeedhi, Bangalore - 560 001 secyenv-fee@karnataka.gov.in
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore)KendriyaSadana, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board PariveshBhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Karnataka State Pollution Control Board, #49, ParisaraBhavana, Church Street, Bangalore-01 (Karnataka).
5. The District Collector, District Mandya, Karnataka.
6. Monitoring Cell, Ministry of Environment and Forests, ParyavaranBhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.


(Lalit Bokolia)
Additional Director