## F. No. J-11011/280/2010- 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: vp.upadhyay@nic.in Telefax:011: 2436 2875

Dated 13<sup>th</sup> May, 2013

To.

Shri Prakash Khandre, Chaiman & Managing Director M/s Shri Bhalkeshwar Sugars Ltd. C/o Prakash Khandre, Ex MLA Channa Saraswati Nilaya Basveshwar Chowk, Bhalki Taluk District Bidar- 585328, Karnataka

E - mail: sriguruindustries@gmail.com; bhalkeshwarsugars@gmail.com;

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Subject: Sugar Complex (Sugar Plant 5,000 TCD; Co-generation Plant, 30 MW; Molasses

based Distillery Plant, 60 KLPD) at Village Bajolga, Tehsil Bhalki, District Bidar, Karnataka by M/s Shri Bhalkeshwar Sugars Ltd. – Environmental Clearance reg.

Ref.: Your letter no. nil dated 18<sup>th</sup> July, 2011

Sir,

Kindly refer to your letter dated 18<sup>th</sup> July, 2011 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report alongwith Public Hearing Report and subsequent communications vide your letters dated 2<sup>nd</sup> November, 2011, 26<sup>th</sup> November, 2011 and 8<sup>th</sup> March, 2012 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 Complex (Sugar Plant 5,000 TCD; Co-generation Plant, 30 MW; Molasses based Distillery Plant, 60 KLPD) at Sy. Nos. 85 (6 B), 85 (3/A), 84 (5), 85 (2), 85 (4), 85 (3/B), 85 (6 A), 84 (6), 84 (1/A), 82 (1), 84 (3), 85 (1), 84 (2/1), 84 (2), 84 (5), 83 (c), 84 (4), 85 (5), 84 (1/AP), 82 (2), 84 (2/2), 84 (3) Village Bajolga, Tehsil Bhalki, District Bidar, Karnataka by M/s Shri Bhalkeshwar Sugars Ltd. Total plant area is 100 acres. River Karanja is flowing at a distance of 4.0 Km. No national park/wildlife sanctuary/reserved forests are located within a distance of 10 km from the project site. Proposal does not involve R & R. Total cost of project is Rs. 300.00 Crores. Sugar plant, CPP and Distillery Unit will be operated for 180 days, 300days and 270 days respectively.
- 3.0 Bagfilter alongwith stack of adequate height will be provided to bagasse fired boiler (1x130 TPH) and coal fired boiler (35 TPH) to control particulate emission within 50 mg/Nm³. Total fresh water requirement from Karanja River will be 600 m³/day for distillery (Molasses), 3148 m³/day for sugar unit and 700 m³/day for cogeneration unit respectively. The total spent wash generation from molasses based distillery will be 480 m³/day and concentrated in MEE to 60 % solids and sent to an incinerator boiler for incineration to achieve zero discharge. No effluent from distillery will be discharged outside the factory premises. Effluent generation from Sugar mill will be 500 m³/day and treated in the effluent treatment plant (ETP). Fly ash will be

sold to the brick/cement manufacturers or used for land application. Spent oil will be sold to authorized recyclers/re-processors.

- 4.0 Public Hearing / Public Consultation meeting was conducted on 27<sup>th</sup> April, 2011.
- 5.0 All molasses based distilleries and cane juice/non-molasses based distillery (>30 KLD) are listed at S.N. 5(g) (i) & (ii) respectively under category 'A' and appraised at Central level.
- 6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its  $14^{th}$ ,  $30^{th}$  &  $36^{th}$  meetings held during  $16^{th}$  &  $17^{th}$  September, 2010,  $15^{th}$ – $16^{th}$  December, 2011 and  $11^{th}$   $12^{th}$  June, 2012 respectively. 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 14<sup>th</sup> 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 (60 KLPD) only and no grain based distillery unit shall be operated without prior permission from the Ministry.
- ii) Bagfilter alongwith stack of adequate height shall be provided to bagasse fired boiler (130 TPH) and coal fired boiler (35 TPH) to control particulate emissions within 50 mg/Nm³. At no time, the emission levels shall 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. Efficiency of pollution control device shall be monitored regularly. Stack monitoring report shall be submitted to the Ministry's Regional Office at Bangalore.
- 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 imposed 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 PM<sub>10</sub>,

PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, 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 Karanja River shall not exceed 600 m³/day for distillery (Molasses), 3148 m³/day for sugar unit and 700 m³/day for cogeneration unit and prior permission for drawl of water shall be obtained from the Competent Authorities. No ground water shall be used.
- ix) Spent wash generation from molasses shall not exceed 10 KI/KI. Spent wash from molasses based distillery shall be concentrated in MEE to 60 % solids and sent to an incinerator boiler (35 TPH) for incineration to achieve zero discharge. Spentlees, effluent from utilities and cogeneration power plant shall be treated in effluent treatment plant (ETP) and water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB and recycled/reused. Water quality of treated effluent shall be monitored regularly.
- wastewater generation from the sugar unit shall not exceed 100 litres per tonne of cane crushed i.e. 500 m³/day. Effluent from sugar unit shall be treated in the effluent treatment plant comprising neutralization tank followed by two stage aeration system. 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) 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 30 days.
- xii) 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.

- xiii) As proposed, no effluent from sugar, distillery and co-generation power plant shall be discharged outside the premises and Zero effluent discharge concept shall be adopted.
- xiv) Baggase storage should 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.
- xv) Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and as amended time to time. All the fly ash shall be provided to cement and brick manufacturers for further utilization.
- xvi) 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.
- xvii) 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.
- xviii) 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.
- xix) 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.
- xx) Green belt shall be developed in 33 % of plot area to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO. Thick green belt with suitable plant species shall be developed around the proposed distillery to mitigate the odour problem.
- xxi) All the commitments made during the Public Hearing / Public Consultation meeting held on 27<sup>th</sup> April, 2011 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- 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 shall strictly adhere to the stipulations made by the Karnataka State 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 locations of ambient air quality monitoring stations shall be decided in consultation with the Karnataka State Pollution Control Board (KSPCB) 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.
- iv. 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).
- v. 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.
- vi. The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and its amendment time to time and prior permission from SPCB shall be obtained for disposal of solid / hazardous waste including boiler ash.
- vii. 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.
- viii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- ix. 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.
- x. 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.

- xi. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xiii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiv. The company shall earmark sufficient funds 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.
- xv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xvi. 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 Karnataka State Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xvii. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the Karnataka 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 Bangalore Regional Offices of MoEF by e-mail.
- xviii. 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.

- xix. 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.

(V P Upadhyay) Director

## Copy to:-

- 1. The Secretary, Department of Environment & Ecology, Govt. of Karnataka, Room No. 708, Gate 2, Multi Storied Building, Dr. Ambedkar Veedhi, Bangalore 560 001secyenv-fee@karnataka.gov.in
- 2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore)KendriyaSadan, 4th Floor, E&F Wing, II Block Koramangala, Banglore-560034.
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, 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. Joint Secretary, 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.

(V P Upadhyay) Director