



**Yogendra Pal Singh**  
**Scientist 'D'**

Government of India  
Ministry of Environment, Forest and Climate Change  
(IA Division)

Indira Paryavaran Bhawan  
Aliganj, Jor Bagh Road  
New Delhi - 110 003

F. No. J-11011/94/2015-IA-II (I)

Telefax: 91-11-24695365  
E-mail : [yogendra78@nic.in](mailto:yogendra78@nic.in)

Dated: 07<sup>th</sup> April, 2017

To,

The Sr. Vice President  
M/s NSL Sugars Ltd.  
Hurugalawadi & Chikkonahalli,  
Koppa Hobli, Maddur,  
Mandya - 571 425, Karnataka

**Sub: Expansion of Sugar plant (from 5000 TCD to 7500 TCD) and molasses based Distillery Plant (from 60 KLPD to 75 KLPD) at Villages Chikkonahalli & Hurugalawadi, Koppa Hobli, District Mandya, Karnataka by M/s NSL Sugar Limited - Environmental Clearance - reg.**

**Ref.: Your online proposal no. IA/KA/IND2/27470/2015; dated 3<sup>rd</sup> May, 2016.**

Sir,

This has reference to your online proposal no. IA/KA/IND2/27470/2015; dated 3<sup>rd</sup> May, 2016 along with project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report along with Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for Expansion of Sugar plant (from 5000 TCD to 7500 TCD) and molasses based Distillery Plant (from 60 KLPD to 75 KLPD) at Villages Chikkonahalli & Hurugalawadi, Koppa Hobli, District Mandya, Karnataka by M/s NSL Sugar Limited. The Integrated Sugar Complex is being operated with the following capacity

- a) Sugar Plant : 5000 TCD
- b) Co-generation Power plant : 26 MW
- c) Distillery plant : 60 KLPD Molasses Based

3.0 The Plot area is 110 acres. No additional land will be acquired. The cost of the project is ₹ 45.00 Crore. Shimsha River is flowing at a distance of 2.2 km from the site. It is reported that there is no National Park, Wildlife Sanctuary within the distance the distance of 10 km form the site. Sugar Factory/Unit will be operated for 240 days.

Following are the existing and proposed products to be manufactured:-

*G. I. A.*  
*C/C*  
*10/04/17*

S. No.	Unit	Product	Existing Capacity	In Operation	Proposed Additional	Total after expansion
1	Sugar	White Crystal Suagr	5000 TCD	5000 TCD	2500 TCD	7500 TCD
2	Co-gen	Power	26 MW	26 MW	--	26 MW
3	Distillery	RS/ENA/Ethanol	60 KLPD Molasses/cane juice based 60 KLPD grain based Total capacity:120 KLPD	60 KLPD	15 KLPD Molasses based	75 KLPD Molasses/Cane juice based 60 KLPD grain based Total capacity:135 KLPD

4.0 In the sugar unit, the existing 100 TPH co-gen boiler will be upgraded to 110 TPH with minor modifications. A stack height of 83 m already been provided for the existing co-gen boiler and same is adequate after up gradation to 110 TPH. High efficiency Electrostatic Precipitator already has been provided for bringing down PM emission to less than 50 mg/Nm<sup>3</sup>. The Existing boiler 25 TPH Boiler is sufficient for the proposed expansion of distillery plant. Stack height of 55 m already has been provided to 25 TPH Boiler. Electro Static Precipitator already has been provided for bringing down PM emission to less than 50 mg/Nm<sup>3</sup>.

Fresh water requirement of sugar unit will be reduced from 1385 m<sup>3</sup>/day to 750 m<sup>3</sup>/day; Water requirement for Cogeneration Power Plant (1413 m<sup>3</sup>/day) will remain same. Water requirement for distillery will be 750 m<sup>3</sup>/day for molasses otherwise 600 m<sup>3</sup>/day for grain/ cane juice based. Spentwash will be treated in bio-digester. Treated spentwash will be concentrated in MEE. Concentrated treated spent wash (72 KLPD; 25 Brix) will be sent for bio-composting. Remaining concentrated spent wash (40 KLPD; 40 Brix) will be sent to Rotary Dryer/spray dryer, which will be mixed with bagasse and dried in rotary drier to use as fuel in the existing incineration boiler.

5.0 Public Hearing/Public Consultation is exempted under para 7 (ii) of EIA Notification, 2006 as public hearing was conducted on 30<sup>th</sup> August, 2012.

6.0 All non molasses based distilleries ( $\geq 60$  KLD) are listed at Sl.No. 5(g) (ii) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

7.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its 9<sup>th</sup> and 13<sup>th</sup> EAC meeting held during 27<sup>th</sup>-28<sup>th</sup> June, 2016 and 26<sup>th</sup>-27<sup>th</sup> September, 2016 respectively. Project Proponent and the EIA Consultant namely M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd., 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.


8.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project

*G. J. Pr.*

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. Distillery Unit shall be based on (Molasses/cane Juice 75 KLPD) and Grain based (60 KLPD) and production of the plant shall not exceed the maximum capacity defined i.e. never exceed 135 KLPD.
- ii. As proposed, the existing 100 TPH co-gen boiler will be upgraded to 110 TPH. High efficiency Electrostatic Precipitator will be provided for bringing down PM emission to less than 50 mg/Nm<sup>3</sup>.
- iii. Pucca approach road to project site should be constructed prior to commencing construction activity of the main distillery to avoid fugitive emissions.
- iv. Total fresh water requirement from Shimsha River shall not exceed 750 m<sup>3</sup>/day for sugar unit, 1413 m<sup>3</sup>/day for Co-generation power plant and 1080 m<sup>3</sup>/day for Distillery units after expansion. No ground water shall be used without permission. Effort shall be made to use recycled water from sugar and condensate of MEE for the co-generation power unit.
- v. Spent wash generation from molasses based distillery shall not exceed 8 Kl/Kl of alcohol. As proposed, spentwash of molasses will be treated in bio-digester. Treated spentwash will be concentrated in MEE. Concentrated treated spent wash (72 KLPD; 25 Brix) will be sent for bio-composting. Remaining concentrated spent wash (40 KLPD; 40 Brix) will be sent to Rotary Dryer/spray dryer, which will be mixed with bagasse and dried in rotary drier to use as fuel in the existing incineration boiler to achieve 'Zero' discharge. Effluent from sugar, spentlees, utilities effluent and evaporator Condensate shall be treated in effluent treatment plant and recycled/reused in process. Sewage shall be treated in the STP. No effluent shall be discharged outside the premises and 'Zero' discharge shall be maintained.
- vi. Spent wash generation from grain based distillery shall not exceed 6 Kl/Kl of alcohol. Spent wash shall be treated through decanter and concentrated in multi-effect evaporator (MEE) to form DWGS. DWGS will be sent to dryer to form DDGS. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment. Treated effluent will be used for make up water of cooling towers and water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB and recycle/reuse.
- vii. Spent wash shall be stored in impervious RCC lagoon with HDPE lining as per CPCB guidelines and should be kept in proper condition to prevent ground water pollution. Storage capacity of spent wash lagoon should be for 5 days. Company shall switchover from existing spent wash lagoon to impervious RCC lagoon with HDPE lining within one year of grant of EC.
- viii. Effluent from sugar unit should be treated in the effluent treatment plant with adequate treatment with standard of 30 mg/l of BOD. Existing ETP shall be upgraded to achieve the standard of BOD 30 mg/l.
- ix. Water consumption also to be restricted to 100 liters/ton initially and further to 50 Liters/ton cane crushed in a time bound manner as per the CPCB guidelines.
- x. As proposed, no effluent from sugar, distillery and co-generation power plant should be discharged outside the premises and Zero discharge shall be achieved.



- xi. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and bio-compost yard should 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 should be monitored.
- xii. Bagasse/coal storage should be done in such a way that it does not get air borne or fly around due to wind.
- xiii. Boiler ash should be stored separately as per CPCB guidelines so that it should 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 should be avoided. Bagasse ash and coal ash should be stored separately.
- xiv. 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.
- xv. Dedicated parking facility for loading and unloading of material should be provided in the factory premises. Unit should develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.
- xvi. All the issues raised during the public hearing/consultation meeting should be satisfactorily implemented.
- xvii. As proposed, green belt over 33% of plot area shall 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.
- xviii. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) 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.

**B. GENERAL CONDITIONS:**

- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), 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 16<sup>th</sup> 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, ZilaParisad/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 SPCB. 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 31<sup>st</sup> 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



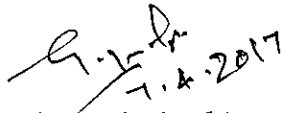
conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

- 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.

9.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

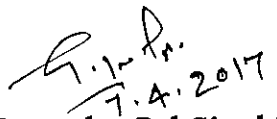
10.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

11.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of 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.

  
(Yogendra Pal Singh)  
Scientist 'D'

**Copy to:-**

1. The Secretary, Department of Environment & Ecology, Govt. of Karnataka, Room No. 708, Gate 2, Multi Storied Building, Dr. Ambedkar Veedhi, Bangalore - 560 001
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wing, 17<sup>th</sup> Main Road, Koramangala II Block, Bangalore - 560 034.
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, Parisara Bhavana, Church Street, Bangalore-01 (Karnataka).
5. Monitoring Cell, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhawan, Aliganj, Jor Bagh Road, New Delhi.
6. Guard File/Monitoring File/Record File.

  
(Yogendra Pal Singh)  
Scientist 'D'