



**File No. J-11011/93/2012-IA II(I)**  
Government of India  
Ministry of Environment, Forest & Climate Change  
Impact Assessment Division  
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Indira Paryavaran Bhawan,  
Jal Wing, 3<sup>rd</sup> Floor, Aliganj,  
Jor Bagh Road, New Delhi-110 003

Dated:01<sup>st</sup> March,2021

To,

**Sh. Marimuthu K,**  
Executive Vice President,  
M/s Gem Sugars Limited,  
No. 120 Hoodi Apartment Cunningham Road,  
Bangalore Urban,  
Karnataka-560001

**Sub: Expansion of distillery from 60 KPLD RS/ENA/Ethanol to 120 KLPD Ethanol or 60 KLPD RS/ENA + 60 KLPD Ethanol with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) and co-generation plant from 2 MW to 4 MW by M/s Gem Sugars Limited located at Sy. Nos. 125 to 134, 325 to 328 Kundargi Village, Bilagi Taluk, Bagalkot District, Karnataka - Consideration of Environment Clearance regarding.**

Sir,

This has reference to your online proposal No. IA/KA/IND2/188125/2020, dated 30<sup>th</sup> December, 2020 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion of distillery from 60 KPLD RS/ENA/Ethanol to 120 KLPD Ethanol or 60 KLPD RS/ENA + 60 KLPD Ethanol with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) and co-generation plant from 2 MW to 4 MW by M/s Gem Sugars Limited located at Sy. Nos. 125 to 134, 325 to 328 Kundargi Village, Bilagi Taluk, Bagalkot District.

3. The details of products and capacity are as under: -

Sl No	Products manufactured	Existing production	Proposed expansion	Scenario after expansion
1	Sugar	6500 TCD of sugar cane crushing	Nil	6500 TCD of sugar cane crushing
2	Co-generation	22.5 MW	Nil	22.5 MW
3	Distillery (Any one scenario at a time)			
3.1	Ethanol using C Heavy Molasses	60 KLPD	60 KLPD	120 KLPD
3.2	Ethanol using B Heavy Molasses/Syrup or juice	0	120 KLPD	120 KLPD
3.3	RS/ENA	60 KLPD	0	60 KLPD

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4	Captive Co-Generation of distillery	2 MW	4 MW	4 MW
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4. Existing land area is 979946.28 m<sup>2</sup> out of which distillery land is 53418.5 m<sup>2</sup> and no additional land will be used for proposed expansion. The proposed activities will be within the existing land area. Industry proposes to develop greenbelt in an area of 33% i.e 323382.18 m<sup>2</sup> out of total area of the project within 6 months. The estimated project cost is Rs. 191.32 crores including existing investment Rs. 106.32 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 31.632 crores and the recurring cost (operation and maintenance) will be Rs. 3.37 crores per annum. Total employment will be 124 persons as direct & 26 persons indirect after expansion.

5. Total water requirement is as under and fresh water shall be met from Ghataprabha River:

Sl. No.	Particulars	Distillery capacity 120 KLD		
		C Heavy	B Heavy	Cane syrup
	<b>Feed stock (any one of the raw materials will be used at given time)</b>			
1	Fresh water (KLD)	948	724	652
2	Reuse from distillery CPU (KLD)	926	566	742
3	Total water requirement (KLD)	1874	1290	1394

Effluent of 960 m<sup>3</sup>/day spent wash & 1062 m<sup>3</sup>/day other effluents (condensate, spent lees, cooling tower blowdown, lab washings & RO reject) is generated. Spent wash is concentrated in MEE and concentrated spent wash of 324 KLD is used as fuel for incineration Boiler. Condensate and other utility effluents are treated in CPU and 3 stage RO process and is used in process and cooling tower makeup. The plant will be based on Zero Liquid discharge system.

6. Power requirement after expansion will be 3400 kW including existing 1800 kW and will be met from Captive power plant. Existing unit has 2 DG sets of 1450 kVA & 160 kVA capacity are used as standby during power failure, there is no additional DG set proposed in expansion proposal. Stack of height 30 m AGL is provided as per CPCB norms to the existing DG sets. Existing unit has 22 TPH incinerator boiler for using concentrated spent wash & Coal. Additionally, one 22 TPH incinerator boiler will be installed. Bag Filter and a stack of height of 70 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers.

7. All the project proposals are listed at S.N. 5(g) 'Distilleries' of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

8. Public Hearing is exempted in para 7(ii) of EIA Notification, 2006. It was informed that no litigation is pending against the proposal.

9. The Ministry had issued EC earlier vide letter No. F. No. J-11011/93/2012-IA II(I) dated 14.02.2015 to the existing molasses-based Distillery Plant (60 KLPD) along with Captive Power Plant (2 MW) in the existing Sugar Plant 6500 TCD, Co-generation plant 22.5 MW in favour of M/s. Gem Sugars Limited.

10. The proposal was considered by the EAC in its 28<sup>th</sup> meeting held on 18<sup>th</sup> January, 2021 in the Ministry, wherein the project proponent and their consultant M/s

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Samrakshan Center presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

**11.** The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

**12.** The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The committee directed PP to ensure that waste water generated from Sugar and distillery complex shall be treated and re-used within the plant and no treated or untreated waste water shall be left out from the premises of Sugar and distillery complex. Ethanol produced will be used for blending bio-ethanol with petrol under EBP programme for additional proposed capacity. Coal and ash from the incineration boiler shall be handled in a closed system. The committee directed PP to develop at least 33% of the entire area including sugar and distillery as green belt within 6 months. PP has submitted the undertaking in compliance of the above. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

**13.** The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

**14.** Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby **accords environmental clearance** to the project for expansion expansion of distillery from 60 KPLD RS/ENA/Ethanol to 120 KLPD Ethanol or 60 KLPD RS/ENA + 60 KLPD Ethanol with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) and co-generation plant from 2 MW to 4 MW by M/s Gem Sugars Limited located at Sy. Nos. 125 to 134, 325 to 328 Kundargi Village, Bilagi Taluk, Bagalkot District, Karnataka, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under: -



**A. Specific Condition:**

- (i). The company shall 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, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total fresh water requirement shall not exceed 948 m<sup>3</sup>/day and it will be met from River Krishna. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.
- (iv). Spent wash shall be treated using concentration and drying to form potash rich manure.
- (v). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

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- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xiii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

### **12.1 General Condition:**

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

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- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change 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.
- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (vii) 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&CC, 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.
- (viii) 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&CC by e-mail.
- (ix) 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 and at <https://parivesh.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.

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- (x) 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.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

**15.** The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

**16.** Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

**17.** Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**18.** The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

**19.** This issues with the approval of the competent authority.

*31.03.2021*

**(Ashok Kumar Pateshwary)**  
**Director**

**Copy to: -**

1. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. Ambedkar Veedhi, Bangalore - 1
2. The Deputy DGF (C), MoEF&CC Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore - 34
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 32
4. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, #49, 4th& 5th Floor, Church Street, Bangalore -1

5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. The District Collector, District Bagalkot, Karnataka
7. Guard File/Monitoring File/Parivesh portal/Record File

31-1-2021  
01.03.2021

**(Ashok Kumar Pateshwary)**  
**Director**  
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