

F. No.J-11011/366/2007-IA-II (I) Government of India Ministry of Environment, Forest & Climate Change

Impact Assessment Division

Indira Paryavaran Bhavan, Vayu Wing, 3rd Floor, Aliganj, Jor Bagh Road, New Delhi-110 003

Dated: 30th July, 2020

To,

M/s Vijaynagar Sugar Pvt. Ltd, Village Gangapur, Taluk Mundargi, District **Gadag** (Karnataka)

Sub: Expansion of molasses based distillery from 120 KLPD to 300 KLPD and Cogeneration plant from 3.5MW to 12 MW by M/s Vijaynagar Sugar Pvt. Ltd., located at village Gangapur and Shiranahalli, Taluk Mundargi, District Gadag (Karnataka) - Environmental Clearance - regarding

Sir,

This has reference to your online proposal No.IA/KA/IND2/137096/2020 dated 24th April, 2020 for environmental clearance to the above project.

- 2. The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the project for expansion of molasses based distillery from 120 KLPD to 300 KLPD and Co-generation plant from 3.5 MW to 12 MW by M/s. Vijayanagar Sugar Pvt. Ltd. in an area of 538232 sq. m. at Survey No. 32, 33, 34 of village Gangapur and Survey No.13, 14, 19, 20,21,22,23 of village Shiranahalli, Taluka Mundargi, District Gadag (Karnataka).
- **3.** The details of products and capacity as under:

S. No	Products manufactured	Existing	Proposed	Total
1	Sugar	5000 TCD of sugar cane crushing	Nil	5000 TCD of sugar cane crushing
2	Distillery	120 KLPD	180 KLPD	300 KLPD
	Co-Generation	3.5 MW	8.5 MW	12 MW

- 4. Existing land area is 538232 sq m (133 Acres), out of which distillery land is 25 acres. Proposed expansion will be carried out within the existing premises. Industry has already developed greenbelt in an area of 36 % i.e., 36,421.7 sq m (9 Acres) out of total area of the project. The estimated project cost for expansion is Rs.225 Crores. Existing investment is Rs.172 Crores. Additional capital cost earmarked towards environmental pollution control measures is Rs. 975 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 318 Lakhs per annum. Total Employment will be 151 persons, direct 100 and indirect 51 persons after expansion.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Reserved forests viz., Kappatagudda Reserve Forest 3 km towards West and Koyilargatti Reserve EC for M/s Vijaynagar Sugar Pvt. Ltd

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Forest - 5 km towards East is present within 10 Km radius of the project site. River/ water body is River Tungabhadra at 2 km towards North East of the industry.

6. Total fresh water requirement is as given in table below for different raw material mix. The water requirement will be met from Tungabhadra River reservoir located at about 2 km towards North East of the project site.

S. No.	Total fresh water requirement	KLD
1	Existing 120 KLPD molasses based unit	931
2	150 KLPD B Heavy + 150 KLPD B Heavy	1505
3	150 KLPD B Heavy + 150 KLPD S. Cane Juice	1308
4	150 KLPD B Heavy + 150 KLPD Grain	2278
5	150 KLPD S. Cane Juice + 150 KLPD S. Cane Juice	600
6	150 KLPD Grain + 150 KLPD S. Cane Juice	1576
7	150 KLPD Grain+ 150 KLPD Grain	2541

7. PP reported that spent wash will be treated in Multi Effect Evaporator (MEE) to concentrate the spent wash. Concentrated spent wash will be incinerated in incineration Boiler. The utility effluents such as spent lees, condensate from MEE, boiler blow down and cooling tower bleed will be treated in condensate polishing unit. RO is proposed in the expansion phase. RO permeate will be reused for cooling tower water makeup and molasses dilution to achieve Zero Liquid discharge. Part of the concentrated spent wash will also be used for composting.

Power requirement after expansion will be 2500 kW including existing 2100 kW. It will be met from Co-gen and captive power plant. 2 DG sets of 1250 KVA and 1 DG set of 250 kVA capacities are present in the industry and power will be drawn in case of power failure. No additional DG sets are proposed in the expansion programme. Stack of height 30 m is provided for the existing DG Sets, as per CPCB norms.

Existing sugar plant has 120 TPH Boiler and existing distillery has 32 TPH Incineration Boiler fired by Bagasse, slop and coal. In proposed expansion of distillery 1 x 20 TPH, 1 x 60 TPH boiler and modification of incineration boiler from 32 TPH to 40 TPH is proposed. These boilers will use coal/bagasse/slop as fuel for working. ESP/Bag filter with stack of height of 30 m, 60 m and 45 m will be installed respectively for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the proposed boilers. Process emissions are mainly CO2 from fermentation it will be scrubbed, recovered and bottled.

- **8.** The project/activity is covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.
- **9.** The Ministry has issued earlier EC on 15th April, 2008 to the existing project of Integrated Sugar complex of 5000 TCD Sugar Plant, 33.5 MW Cogeneration plant and 130 KLPD of rectified spirit or 120 KLPD Ethyl Alcohol (RS/ENA/Ethanol). The certified compliance report dated 2nd March, 2020 was forwarded by the Ministry's Regional office at Bangalore, after conducting site on 23rd January, 2020. The Committee deliberated the compliance status of earlier EC and found the same to be satisfactory. PP reported that there is no

litigation pending against the project. The Committee also deliberated the show cause notice issued by SPCB.

- 10. The proposal has been submitted for grant of environmental clearance under B2 category of EIA Notification, 2006. The Ministry vide Notification No. S.O. 345(E) dated 17th January 2019, which was extended for another year, published certain relaxation in procedure for grant of environmental clearance for such units propose to produce ethanol under EBP program. One of the provision is to consider the applications seeking prior environmental clearance for production of ethanol as B2 project for appraisal under the EIA notification, 2006. The project proponent has submitted affidavit on 16th June, 2020 wherein it is mentioned that they have applied to the Ministry of Petroleum and Natural gas for issuing certificate that proposed product of ethanol from 120 to 300 KLD is for the purpose of blending bioethanol with petrol. M/s IOCL, HPCL and BPCl have been procuring ethanol from this unit for blending with petrol.
- **11.** The proposal was considered by the Expert Appraisal Committee (Industry-2) in it meeting held on 15-17 June, 2020, wherein the Committee **recommended** the project for grant of environmental clearance under category B2 providing exemption from public hearing and preparation of EIA report as per provisions of the Notification dated 17.01.2019, subject to compliance of terms and conditions.
- 12. 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. 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 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. 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 (EC).
- 13. The recommendation of the Expert Appraisal Committee has been examined in the Ministry. 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 of molasses based distillery from 120 KLPD to 300 KLPD and Co-generation plant from 3.5 MW to 12 MW by M/s. Vijayanagar Sugar Pvt. Ltd. at village Gangapur and village Shiranahalli, Taluka Mundargi, District Gadag 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 EC granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. 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.
- (ii) This EC is subject to obtaining certificate from the Ministry of Petroleum and Natural Gas.

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- (iii) Grain unfit for human consumption shall only be used for industrial operations.
- (iv) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. The reuse of treated effluent in gardening/ horticulture shall not be considered as ZLD.
- (v) Concentrated spent wash shall be incinerated and not to be released in open space.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (viii) Total fresh water requirement shall not exceed 1800 cum/day (@6kl/kl of production of ethanol) proposed to be met from River Tungabhadra reservoir. Prior permission shall be obtained from the concerned regulatory authority.
- (ix) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (x) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xi) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time.
- (xii) 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.
- (xiii) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xiv) As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be Rs. 3 crore and the same will be used for education of nearby area. Item-wise details along with time bound action plan shall be implemented and submitted to the Ministry's Regional Office.
- (xv) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xvi) Solar Power shall be generated within the premises @30% of the total power requirement
- (xvii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

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- (xviii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - (xix) 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.
 - (xx) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxi) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.
- (xxii) 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. For continuous discharge the unit shall install pH, TSS, BOD,COD and flow meter at the ETP outlet.

B. General Conditions:

- (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. 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.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (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 station each 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 to utilize the same for process requirements.
- (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, and risk mitigation measures 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. CER activities shall be undertaken by involving local villages and administration and shall be implemented.
- (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 (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.
- (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, 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.
- (xiii) 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.
- (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&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.
- (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&CC 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 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.
- (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.
- (xviii) 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.

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- **14.** 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.
- 15. 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.
- **16.** 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.
- 17. 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.
- **18.** This issues with the approval of the competent authority.

(Dr. R. B. Lal) Scientist 'E'/Additional Director

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Copy to: -

- 1. The Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi 110 001
- 2. The Deputy DGF (C), MoEF&CC Regional Office (SZ), KendriyaSadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, **Bangalore** 34
- 3. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. AmbedkarVeedhi, **Bangalore** 1
- The Member Secretary, Central Pollution Control Board, PariveshBhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 32
- 5. The Member Secretary, Karnataka State Pollution Control Board, ParisaraBhavan, #49, 4th& 5th Floor, Church Street, **Bangalore** -1
- 6. The District Collector, District **Gadag** (Karnataka)
- 7. Guard File/Monitoring File/Parivesh Portal/Website/Record File

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