F.No. J-11011/341/2012- IA II(I) Government of India Ministry of Environment, Forest and Climate Change (IA-II Section)

Indira Paryavaran Bhawan Jorbagh Road, New Delhi - 3

Dated: 16th October, 2019

To

M/s Satish Sugars Ltd Village Beerangaddi & Hunshyal PG District Belagavi (Karnataka)

Sub: Expansion of Molasses based Distillery, Sugar cane crushing and Cogeneration Power Plant at Villages Beerangaddi and Hunshyal PG, Taluk Gokak, District Belagavi (Karnataka) by M/s Satish Sugars Ltd - Environmental Clearance - reg.

Sir.

This has reference to your proposal No. IA/KA/IND2/32579/2012 dated 5th November 2015, submitting the EIA/EMP report on the above subject matter.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion of molasses based distillery from 60 KLPD to 120KLPD, sugar cane crushing capacity from 10,000 TCD to 15,000 TCD and Co-generation power plant capacity from 45 MW/Hr to 80 MW/Hr by M/s Satish Sugars Ltd in a total area of 64.4 ha located at Villages Beerangaddi and Hunshyal PG, Taluk Gokak, District Belagavi (Karnataka). The project also involves installation of spent wash incineration boiler based power plant of 4 MW/Hr.
- **3.** The details of products are as under:

S.No	Product	Existing	Proposed	Total
1	Distillery	60 KLPD	60 KLPD	120 KLD
	(Ethanol/ ENA/RS)			
2	Sugar cane	10000 TCD	5000 TCD	15000 TCD
	crushing (Sugar)	(1200 TPD)	(600 TPD)	(1800 TPD)
3	Power	45 MW	35 MW + 4 MW	80 MW +4 MW

- **4.** Existing land area is 64.4 ha. No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 20.60 ha, covering 32% of the total project area. The estimated project cost is Rs.691.96 crores including existing investment of Rs.425.96 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.45 crores and the recurring cost (O&M) will be about Rs.1.14 crores per annum. The project will provide employment for 235 persons directly and 1000 persons indirectly after expansion.
- **5.** There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Ghataprabha river flows at 3.1 km (S) and Hire nalla flows at 0.9 km (N).

6. Total water requirement is estimated to be 8541 cum/day, which includes fresh water requirement of 675 cum/day for sugar and cogen, and 600 cum/day for distillery during season, proposed to be met from Ghataprabha River. Necessary permission in this regard has been obtained from Karnataka Niravari Nigam Ltd vide letter dated 27th July 2017. During offseason stored treated effluent of 1778 cum/day from sugar unit shall be utilized.

Effluent of 1299 cum/day during season and 958 cum/day during off season will be treated through Effluent Treatment Plant of capacity 1700 cum/day. The treated process water will be diluted with the treated non process wastewater in polishing pond. The outlet of the polishing pond conforming to the GSR 422 (E) on land discharge standards shall be utilized for greenbelt development and sugarcane cultivation. Also permeate from RO will be utilized in distillery and remaining treated water of 296 cum/day will be stored for offseason usage.

Power requirement shall be met from own co-generation plant. Power requirement during season for co-gen unit is 7 MW/Hr, sugar unit is 13 MW/Hr and during off season sugar & Co-gen unit together is 10 MW/Hr. Power requirement for the distillery is 2 MW/Hr. Surplus power shall be exported. Existing unit has 4 DG sets of 1x40 KVA, 2x250 KVA & 1x 650 KVA capacity, additionally 2x 500 KVA DG sets shall be set up with stack of height 30 m, to be used as standby during power failure.

Existing unit has 90 TPH, 60 TPH bagasse fired boiler, 130 TPH bagasse and biomass fired boiler, 14 TPH coal and biogas fired boiler. Additionally, 2 X 100 TPH bagasse fired boiler, 2X 20TPH slop and bagasse fired boiler will be installed. Electro Static Precipitator with a stack of height of 75m will be installed to control the particulate emissions within the statutory limits. After the installation of new boilers, existing 90 TPH, 60 TPH and 14 TPH boilers will be scrapped.

- 7. The project/activities are covered under category A of item 5 (g) 'Distilleries', 5(j) 'Sugar Industry' and 1 (d) 'Thermal Power Plant' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal/approval at central level in the Ministry.
- **8.** Terms of Reference (ToR) for the project was issued on 30th April, 2013. Public hearing for the project was conducted by the State Pollution Control Board on 24th March, 2015.
- 9. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meetings held on 8-9 December 2016, 29-31 January 2019 and 26-28 June 2019 in the Ministry, wherein the project proponent and their accredited consultant M/s Environmental Health and Safety Consultants Pvt Ltd 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.
- 10. 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 60 KLPD to 120KLPD, Sugar cane crushing capacity from 10,000 TCD to 15,000 TCD and Co-generation power plant from 45 MW/Hr to 80 MW/Hr by M/s Satish Sugars Ltd at Villages Beerangaddi and Hunshyal PG, Taluk Gokak,



District Belagavi (Karnataka), under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.
- (ii) 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, shall be obtained from the State Pollution Control Board as required.
- (iii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iv) Concentrated spent wash shall be incinerated and not to be released in open space.
- (v) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (vi) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vii) 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.
- (viii) Total fresh water requirement shall not exceed 1275 cum/day proposed to be met from surface water/ Ghataprabha river. 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. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (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.

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- (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) All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.
- (xv) At least 3% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvi) 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.
- (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.
- (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) 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.
- (xxii) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.
 - **10.1** The grant of environmental clearance is further subject to compliance of other generic conditions as under:-
 - (i) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and/ or 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, 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.
 - (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 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 complied with.
- (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 the Environment (Protection) Act, 1986 and the Rules made thereunder.
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (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 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 shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) 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.
- (xii) 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 whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) 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.

- (xiv) 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.
- (xv) 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.
- **11.** 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.
- **12.** 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 and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(Sharath Kumar Pallerla) Scientist F

Copy to: -

- 1. The Deputy DGF (C), MoEF&CC Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore 34
- 2. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. Ambedkar Veedhi, Bangalore 1
- 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. The District Collector, District Belagavi (Karnataka)
- 6. Guard File/Monitoring File/Website/Record File

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