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F.No. J-11011/225/2015- 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: 18th December, 2019

To

M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd
Kagal Shrimant Jayshingrao Ghatge Bhavan
Village & Taluka Kagal
District Kolhapur (Maharashtra) - 416 216
Email: enveng@shahusugar.com

Sub: Expansion of Sugar plant from 7,000 TCD to 10,000 TCD, Co-gen plant from 28 MW to 38 MW and Distillery from 60 KLPD to 90 KLPD at Survey Nos. 144/1/B, 144/2, 148-151, 153-157, 159-161, 164-172, 186, 244/B, 247/2/3, 61/32, Village & Taluka Kagal, District Kolhapur (Maharashtra) by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/MH/IND2/30200/2015 dated 6th August 2019, 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 Sugar plant from 7,000 TCD to 10,000 TCD, Co-gen plant from 28 MW to 38 MW and Distillery from 60 KLPD to 90 KLPD by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd in an area of 140 ha located at Survey Nos. 144/1/B, 144/2, 148-151, 153-157, 159-161, 164-172, 186, 244/B, 247/2/3, 61/32, Village & Taluka Kagal, District Kolhapur (Maharashtra).

3. The details of products are as under:

Industrial unit	Product & By-product	Quantity		
		Existing	Expansion	Total
Sugar Factory (MT/ Yr)		7,000 TCD	3,000 TCD	10,000 TCD
	Sugar (13%)	163380	70620	234000
	Molasses (4%)	50400	21600	72000
	Bagasse (30 %)	378000	162000	540000
	Pressmud (4%)	50400	21600	72000
Co-Gen (MW)	Electricity	28 MW	10 MW	38 MW
Distillery (KLPD)		60 KLPD	30 KLPD	90 KLPD
	Rectified Spirit /ENA	60	30	90
	Ethanol	30	30	60
Sugar Refinery (MT/Yr)	Refined Sugar	-	234000	234000

4. Land area available for the project is 140 ha. Industry has developed greenbelt in an area of 37 ha and additional 9.2 ha shall be developed covering 33 % of total land area. The estimated cost for expansion is Rs.110 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 19.45 crores and the recurring cost (O&M) will be about Rs. 5.10 crores per annum. The project will lead to employment for 200 persons after expansion. Industry proposes to allocate Rs.2.75 crores towards Corporate Environmental Responsibility.

5. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km from project site. Dudhganga river flows at a distance of 3 km in West to East direction.

6. Total water requirement estimated for Sugar & Co-gen plant after expansion is 5148 cum/day (Industrial -5055 cum/day, domestic- 73 cum/day & gardening-20 cum/day). Out of total water requirement of 5148 cum/day, 5055 cum/day will be cane condensate to be recycled, 66 cum/day will be recycled treated water from STP and remaining 27 cum/day will fresh water from Dudhganga river.

Total water requirement estimated for distillery unit is 930 cum/day. Out of this, 599 cum/day will be MEE condensate water, 324 cum/day will be fresh water and 7 cum/day will be treated water from STP. For industrial purpose 921 cum/day water will be used and 9 cum/day water will be used for domestic purpose. The permission for lifting of fresh water from the Dudhganga river is granted by Irrigation Department, Government of Maharashtra.

From existing sugar factory & co-gen plant operations, trade effluent to the tune of 628 cum/day is generated which is 89.7 lit per MT of cane crushed against the CREP norm of 200 Lit/MT. Subsequent to implementation of expansion, total effluent generated from sugar factory and co-gen plant will be to the tune of 867 cum/day. Same shall be forwarded to the existing ETP in the premises which shall be duly upgraded. The ETP units comprises of Screen chamber & Oil & Grease trap, Anaerobic Lagoon – I, Anaerobic Lagoon – II, Primary Clarifier, Aeration Tank – I, Secondary Clarifier - I, Aeration Tank – II, Secondary Clarifier– II, treated water Sump, Sludge Drying Beds, Dual Media Filter, Activated Carbon Filter, Treated water Tank. The treated effluent shall be used for gardening and on shareholder's farmland of 60 acres.

The effluent generated from 90 KLPD distillery would be in the form of raw spent wash to the tune of 667 cum/day. Raw spent wash shall be treated in bio-methanation plant followed by concentration in Multiple (Five) Effect Evaporator (MEE). Concentrated spent wash to the tune of 287 cum/day shall be used for bio-composting using press mud and filler material.

Power requirement to the tune of 9.8 MW after expansion of project will be procured from own Co-gen Plant. DG sets (of capacity 500 KVA (2 No) and 300 KVA (2 No) has been installed to be used as standby during power failure. Stack of height 6 M ARL is provided as per CPCB norms to the DG sets.

One boiler of capacity 40 TPH will be installed. Biogas to the tune of 1000 M³/Hr and Bagasse to the tune 15 MT/Hr will be used as fuel for the same. Electrostatic Precipitator (ESP) along with stack of 40 M height will be installed to the same for controlling the particulate emission.

The CO₂ generated to the tune of 75 MT/Day shall be bottled and supplied to manufacturers of beverages.

7. The project/activities are covered under category B of item 5(g) 'Distilleries' and 5(j) 'Sugar industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. However, due to applicability of general condition (Interstate boundary - Karnataka within 5 km from the project site), the proposal requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.

8. Standard Terms of Reference (ToR) for the project was issued on 6th September 2018, followed by amendment in ToR on 6th February 2019 with exemption from public hearing.

9. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 26-27 September 2019 in the Ministry, wherein the project proponent and their accredited consultant M/s Equinox Environments (I) 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 Sugar plant from 7,000 TCD to 10,000 TCD, Co-gen from 28 MW to 38 MW and Distillery from 60 KLPD to 90 KLPD by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd at Survey Nos. 144/1/B, 144/2, 148-151, 153-157, 159-161, 164-172, 186, 244/B, 247/2/3,61/32, Village & Taluka Kagal, District Kolhapur (Maharashtra),** under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) This environmental clearance is subject to outcome of the court case (Crim.Misc.Appln.No.1117) filed by MPCB on 30th December, 2016 against M/s SCSSSKL Industry for increased number of days for distillery operation beyond those stipulated in the EC.
- (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) 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.
- (v) 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.
- (vi) Coal shall not be used as fuel in boiler.

- (vii) Total fresh water requirement shall not exceed 27 cum/day proposed to be met from Dudhganga river. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- (viii) No composting shall be carried out from next season i.e. October, 2020.
- (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) 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.
- (xi) 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.
- (xii) 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.
- (xiii) As proposed, an amount of Rs. 2.75 crores 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.
- (xiv) 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.
- (xv) 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.
- (xvi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xvii) 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.
- (xviii) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xix) 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.

(xx) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.

11. The grant of environmental clearance is further subject to compliance of other terms and conditions mentioned in the Ministry's OM No. 22-34/2018-IA.III dated 9th August, 2018 regarding standardization of environmental clearance conditions related to 'Distilleries and Sugar industry', as applicable to the proposed project.

12. 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.

13. 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 the Environment (Protection) Act, 1986.

14. 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.

15. 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.

16. This issues with approval of the competent authority.

(Dr. R. B. Lal)

Scientist E

(डा. आर. बी. लाल)

(Dr. R. B. LAL)

वैज्ञानिक 'ई' / Scientist 'E'

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
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Copy to: -

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2. The Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 32
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai - 22
5. The District Collector, District Kolhapur (Maharashtra)
6. Guard File/Monitoring File/Website/Record File

(Dr. R. B. Lal)

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