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F.No. J-11011/314/2012- 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: 14th July, 2020

To

M/s Jakraya Sugar Limited (JSL)
A/P: Watwate, Taluka Mohol
District Solapur, Maharashtra

Sub: Expansion of Sugar factory from 4900 TCD to 7500 TCD, Co-gen plant from 11 MW to 30 MW, and Molasses/Sugarcane Juice based Distillery from 30 KLPD to 200 KLPD at Gat No. 61-A, 70, 71, 72, 73, 74, A/P: Watwate, Taluka Mohol, District Solapur, Maharashtra by M/s Jakraya Sugar Limited (JSL)- Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/MH/IND2/118448/2012 dated 20th September 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 factory from 4900 TCD to 7500 TCD, Co-gen plant from 11 MW to 30 MW, and Molasses/Sugarcane Juice based Distillery from 30 KLPD to 200 KLPD by M/s Jakraya Sugar Limited in an area of 22.51 ha located at Gat No. 61-A, 70, 71, 72, 73, 74, A/P: Watwate, Taluka Mohol, District Solapur, Maharashtra.

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

| Industrial unit | Product & By-product | Quantity | | |
|-----------------|-----------------------|---------------------------|-----------------------------|-------------------------|
| | | Existing (4900 TCD) | Expansion (2600 TCD) | Total (7500 TCD) |
| Sugar Factory | White Sugar | 17,640 MT/M | 9,360 MT/M | 27,000 MT/M |
| | By-product | | | |
| | Molasses | 5,880 MT/M | 3,120 MT/M | 9,000 MT/M |
| | Bagasse | 44,100 MT/M | 23,400 MT/M | 67,500 MT/M |
| | Press mud | 5,880 MT/M | 3,120 MT/M | 9,000 MT/M |
| Co-Gen | Product | Existing | Expansion | Total |
| | Electricity | 11 MW | 19 MW | 30 MW |
| Distillery | Product | Existing (30 KLPD) | Expansion (170 KLPD) | Total (200 KLPD) |
| | Rectified Spirit /ENA | 900 KL/M | 5,100 KL/M | 6,000 KL/M |
| | By-product | | | |
| | CO ₂ Gas | 22 MT/D | 128 MT/D | 150 MT/D |
| | Potash Rich Powder | -- | 4020 MT/M | 4020 MT/M |

4. The existing land area is 22.51 ha, which will cater the proposed expansion. Industry has already developed an area of 7.32 ha (32 % of total plot area) and additional green belt area of 0.19 Ha. (0.84% of total plot area) will be developed. After expansion the total green belt area would be 7.51 Ha which accounts for 33.36 % of

total plot area. The estimated project cost is Rs.302.52 crores including existing investment of Rs. 161.52 crores. Total capital cost earmarked towards environmental pollution control measures under expansion is Rs. 24.25 crores and the recurring cost (O&M) will be about Rs. 2.08 crores per annum. The project will provide employment for 506 persons after expansion. Industry proposes to allocate Rs.4.54 crores (@ of 3.2%) towards Corporate Environmental Responsibility.

5. The Great Indian Bustard(GIB) Sanctuary is located 4.10 km from project site. The Eco Sensitive Zone (ESZ) for the GIB Sanctuary has been notified vide S.O. 654 (E) dated 11th February, 2020. As per said notification, the site is located at 3.6 km away from the boundary of the ESZ. Bhima river flows at 3.14 km (WS) from the project site.

6. Total water requirement for Sugar Factory & Co-gen plant after expansion will be 3961 cum/day. Out of which,15 cum/day will be fresh water from Bhima river while 3886 cum/day will be cane condensate to be recycled, 60 cum/day will be recycled treated water from Sewage Treatment Plant (STP). Total water requirement for Distillery unit after expansion will be 2197 cum/day. Out of which 537 cum/day will be fresh water, 1655 cum/day will be recycled water from distillery CPU, and 5 cum/day will be treated water from STP. The permission for lifting fresh water from the Bhima river has been obtained from the Irrigation Department; Government of Maharashtra.

Effluent of 788.5 cum/day after expansion of sugar factory & co-gen plant operations will be treated in existing ETP in the premises after upgradation. The ETP units comprises of namely Screen chamber & Oil & Grease trap, Anaerobic Lagoon - I, Aeration Tank - I, Primary Clarifier Tank, Secondary Clarifier Tank, treated water Sump, Dual Media Filter, Treated water Tank. The treated effluent shall be used for gardening and on share holders farmland. As per CREP norms, 15 days storage capacity tank for treated water shall be provided on site. The effluent generated from the distillery would be in the form of raw spent wash to the tune of 1600 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 320 cum/day (1.6 KL/KL of alcohol against norm of 8 KL/KL of alcohol) shall be dried for powder and shall be used as manure.

Power requirement to the tune of 9.5 MW after expansion of project will be procured from the Co-gen Plant. Two DG set of capacity 625 KVA each has already been installed. DG sets will be used as standby during turbine tripping. Stack of height 5 M ARL is provided as per CPCB norms to the DG sets. Existing sugar & cogen plant & distillery unit has 70 TPH & 8 TPH bagasse and biogas fired boilers. Additionally, 90 TPH bagasse (39MT/Hr) fired boiler will be installed with Electrostatic Precipitator (ESP) for controlling the particulate emission within the statutory limit of 115 mg/Nm³. The CO₂ generated (~150 MT/Day) shall be bottled and supplied to manufacturers of beverages.

7. The project/activities are covered under category A of item 5 (g) 'Distilleries', 5 (j) 'Sugar' and 1(d) 'Thermal Power Plant' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

8. The Standard terms of reference (ToR) has been issued by Ministry vide letter dated 9th August, 2019. Public hearing for the project was conducted by the State Pollution Control Board on 16th July, 2019 which was presided over by the District Magistrate. Issues raised during public hearing are related to effluent generation its disposal, electricity generation, benefits to farmers, APC installation, employment generation etc.

9. The Ministry has earlier issued environmental clearance vide letter dated 28th October, 2015 to the existing Distillery unit of 30 KLRD capacity in favour of M/s Jakraya Sugar Limited (JSL). The compliance report on the existing EC conditions has been

forwarded by the Ministry's the Regional Office at Nagpur vide letter dated 18th June, 2019 after conducting site visit on 4th May, 2019.

10. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meetings held on 20-22 November, 2019 and 11-13 May, 2020 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.

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.

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. The certified compliance report also found to be satisfactory.

Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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.

12. 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 factory from 4900 TCD to 7500 TCD, Co-gen plant from 11 MW to 30 MW, and Molasses/Sugarcane Juice based Distillery from 30 KLPD to 200 KLPD at Gat No. 61-A, 70, 71, 72, 73, 74, A/P: Watwate, Taluka Mohol, District Solapur, Maharashtra by M/s Jakraya Sugar Limited**, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) 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.

- (iv) 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.
- (v) Total fresh water requirement shall not exceed 552 cum/day proposed to be met from Bhima river. Prior permission shall be obtained from the concerned regulatory authority in this regard.
- (vi) As proposed, raw spent wash shall be treated in bio-methanation plant followed by concentration in Multiple Effect Evaporator (MEE). Concentrated spent wash shall be dried for powder and used as manure/by-product.
- (vii) 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.
- (viii) 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.
- (ix) 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.
- (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.
- (xi) 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.
- (xii) All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.
- (xiii) The project proponent shall provide employment to the villagers residing in the local area.
- (xiv) As proposed Rs. 4.54 crores shall be allocated for Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues like non-conventional energy promotions, water supply

infrastructure, public health infrastructure and for issued raised during public consultation/hearing.

- (xv) The project proponent shall develop solar power facilities and majority of the lighting facility in the unit shall be met from solar.
- (xvi) The project proponent shall ensure rain water harvesting system in the project area and reduce dependency on ground water.
- (xvii) As proposed Rs 50 lakhs shall be allocated for the wildlife conservation plan. The project proponent shall implement the GIB conservation plan with consultation from the State Forest/Wildlife Department.
- (xviii) 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.
- (xix) 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.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) 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.
- (xxii) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxiii) 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.
- (xxiv) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.

12.1 The grant of environmental clearance is further subject to compliance of other general conditions as under:-

- (i) The EC granted to the project 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 under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project.
- (ii) The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (iii) 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.

- (iv) The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (v) 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.
- (vi) 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).
- (vii) 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.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.

- (xv) 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.
- (xvi) 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.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.

13. 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.

14. 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.

15. 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.

16. The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

17. This issues with approval of the competent authority.

(डा. आर. बी. लाल) (Dr. R. B. Lal)
(Dr. R. B. Lal)
Scientist E / Additional Director
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Copy to: -

1. The Deputy DGF (C), MoEF&CC Regional Office(WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur - 1
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 Solapur (Maharashtra)
6. Guard File/Monitoring File/Website/Record File

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