



File No. J-11011/359/2018-IA-II(I)

Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

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

Dated: 12th March, 2021

To,

M/s Tirupati Sugars Limited,
Village Naraipur, Bagaha
Dist. West Champaran, Bihar

Sub: Expansion of Sugar Mill from 7000 TCD to 15000 TCD, Cogeneration Plant from 18 MW to 88 MW & Installation of New Molasses Based Distillery of 200 KLD Capacity by M/s Tirupati Sugars Ltd. located at Village Naraipur, Bagaha Dist. West Champaran, Bihar - Consideration of Environment Clearance regarding.

Sir,

This has reference to your online proposal No. IA/BR/IND2/141466/2012, dated 31th August, 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 Sugar Mill from 7000 TCD to 15000 TCD, Cogeneration Plant from 18 MW to 88 MW & Installation of New Molasses Based Distillery of 200 KLD Capacity by M/s Tirupati Sugars Ltd. located at Village Naraipur, Bagaha Dist. West Champaran, Bihar.

3. All Molasses based Distillery having > 100 KLD Capacity is listed at 5(g) as Category 'A' Project & Sugar Industry is listed at 5(j) as Category 'B' Project of Schedule of Environment Impact Assessment (EIA) Notification and are appraised at Central Level by Expert Appraisal Committee (EAC).

4. SEIAA, Bihar had issued EC earlier vide letter Ref. no. 59: dated 16.04.2015 to the existing Sugar Mill project of 7000 TCD in favour of M/s. Tirupati Sugars Ltd.

5. The ToR has been issued by Ministry vide letter No. IA-J-11011/359/2018-IA-II(I), dated 03.12.2018. Public Hearing for the proposed project has been conducted by the Bihar State Pollution Control Board on 29th June, 2019. Public Hearing was presided over by District Magistrate, West Champaran. The main issues raised during the public hearing are related to benefits to local farmers, water, air and noise pollution, ground water withdrawal and exploitation mitigation, local people benefits due to power generation by the unit. It was informed that no Litigation Pending is pending against the proposal.

3-1

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

Manufacturing Facilities	Product	Existing	Proposed Addition	Total Final Capacity
Sugar Mill	Sugar	7000 TCD	8000 TCD	15000 TCD
Distillery	Ethanol/RS/ENA	-	200 KLPD	200 KLPD
Captive Power generation	Power	18 MW	70MW	88MW

7. Total existing land area is 50.58 Ha, no additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 33 % i.e., 16.69 Ha out of total area of sugar mill and 2.6 Ha out of total area of the distillery. The estimated project cost is Rs 307.50 Crores for proposed expansion project. Total capital cost earmarked towards environmental pollution control measures is Rs. 40 Crore and the Recurring cost (operation and maintenance) will be about Rs. 5 Crore per annum. Total Employment will be 75 persons as direct & 25 persons indirect after expansion. Industry proposes to allocate Rs. 4.61 Crore towards social and economic development i.e. Rs. 2.0 Crores in education facilities in consultation with District Magistrate and Principal of schools in study area and Rs. 2.61 Crores in health care facilities by establishment of a hospital and all its facilities.

8. There is Valmiki Tiger Reserve (5 Km. NW) wildlife sanctuary, within 10 km distance from the project site. PP has submitted copy of NBWL application to Ministry. Gandak River is flowing at a distance of 1.75 Km. in West direction.

9. Ambient air quality monitoring was carried out at 8 locations during Nov. 18 – Jan. 2019 and the baseline data indicates the ranges of concentrations as: PM10 (31.6 – 79.3 $\mu\text{g}/\text{m}^3$), PM2.5 (18.9 – 47.3 $\mu\text{g}/\text{m}^3$), SO2 (5.9-19.5 $\mu\text{g}/\text{m}^3$) and NO2 (10.1 – 40.1 $\mu\text{g}/\text{m}^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3 $\mu\text{g}/\text{m}^3$ with respect to PM. Bagasse will be used as Fuel, Emission of SO2 and NOX will be negligible so they are not considered for modeling. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

10. Total water requirement is 4000 m³/day of which fresh ground water requirement of 3300 m³/day will be met from existing sugar mill borewell & proposed distillery borewells. Effluent (Spent Wash) of Distillery Project of 700 m³/day will be treated through Multi-Effect Evaporators (MEE) followed by incineration in boiler and other waste streams will be treated in CPU followed by RO system & 972 m³/day effluent of Sugar Mill will be treated in existing 1400 KLD ETP. The plant will be based on Zero Liquid discharge system.

11. Power requirement after expansion will be 88 MW including existing 18 MW and will be met from Own Captive Power Generation Plant. Existing unit has 2 nos. of 40 TPH and 1 nos. of 80 TPH Bagasse fired boiler. Additionally, new 2 nos. of 175 TPH High Pressure Bagasse fired boiler will be installed for Cogeneration Project and 2 nos. of 40 TPH Incineration Boiler for Distillery Project. Wet Scrubber

81-2

with a stack of height of 76 m. & 40 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM³ from the proposed boilers of Cogeneration & Distillery Project respectively.

12. Details of Process emissions generation and its management:

Process Emission due to new Bagasse fired 2 Nos. Boiler of 175 TPH & 2 nos. of 40 TPH Incineration Boiler will be controlled through Wet Scrubber system

13. Details of Solid waste/Hazardous waste generation and its management:

Solid Wastes	Total Generation		Management
	Ton Day	Ton Annum	
Molasses	654	117720	Molasses will be utilized as raw material in own distillery.
Bagasse	4294	772920	Bagasse will be used as fuel in Boiler.
Press mud	438	78840	Sold to farmers
Boiler Ash	193	34740	Ash is being utilized for bio composting and excess ash will be sold to Brick Manufacturer.

14. Certified compliance report has been issued by Regional Office, MoEFCC, Ranchi vide Letter No. 113-67/ROR/2019/3500 Dt: 09.10.2019. Site visit was conducted on 22nd Aug., 2019. TSL has submitted action taken report on partially complied conditions as stated in the certified compliance report. Based on submitted Action Taken Report RO, MoEFCC, Govt. of India issued a letter vide No. 113-67/ROR/2019/4348 Dt: 11.11.2020 with their latest observation stating all conditions as complied.

15. The proposal was considered by the EAC in its 29th meeting held on 03rd February, 2021 in the Ministry, wherein the project proponent and their consultant M/s. Paramarsh (Servicing Environment & Development), 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.

16. 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

37-✓

project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

17. 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 found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. EAC desired additional information/commitments to be submitted regarding two activities to be conducted related to socio-economic development of the area based on public hearing issues and the budget allotted shall be spent before commencement of commercial activities, PP shall not discharge effluent from distillery and sugar premises, carbon dioxide management, ash management, manure handling and ESP shall be installed as APCE in both distillery and sugar unit instead of wet scrubber. PP has submitted the desired information and agreed for the same. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. 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.

18. 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.

19. 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 Mill from 7000 TCD to 15000 TCD, Cogeneration Plant from 18 MW to 88 MW & Installation of New Molasses Based Distillery of 200 KLD Capacity by M/s Tirupati Sugars Ltd. located at Village Naraipur, Bagaha Dist. West Champaran, Bihar**, 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 environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the

3-2-2

National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken.

- (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). 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.
- (iv). 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.
- (v). Total fresh water requirement shall not exceed 3300 m³/day and it will be met from ground water. 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.
- (vi). The spent wash/other concentrates shall be incinerated.
- (vii). Briquetting plant shall be installed within plant premises for ash management. Manure shall be packed in 25 kg bags and transported via covered trolleys.
- (viii). Electrostatic precipitator shall be installed as air pollution control equipment in both distillery and sugar mill instead of wet scrubbers.
- (ix). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (x). 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.



- (xi). 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.
- (xii). 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.
- (xiii). 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.
- (xiv). 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.
- (xv). 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.
- (xvi). 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 be completed within time as proposed.
- (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

874L

with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xx). 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.

B. 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.
- (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 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.
- (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.
- (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.

20. 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.

21. 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.

22. 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.

23. The above conditions will be enforced, inter-alia under the provisions of the

3m2

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.

24. This issues with the approval of the competent authority.

8/12/2021
(Ashok Kr. Pateshwary)
Director

Copy to: -

1. The Secretary, Forests & Environment Department, Government of Bihar, 1st Floor, N.H Bhawan, Vishweshwaraiya Complex, Bailey Road, **Patna** -1 (Bihar)
2. Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office, Ranchi Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, **Ranchi** - 834002 (Jharkhand)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
4. The Member Secretary, Bihar State Pollution Control Board, Beltron Bhawan, 2nd Floor, Lal Bahadur Shastri Nagar, **Patna** - 800 023 (Bihar)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, **New Delhi**
6. District Collector, West Champaran, Bihar
7. Guard File/Monitoring File/ Parivesh Portal /Record File

8/12/2021
(Ashok Kr. Pateshwary)
Director
E-mail: ak.pateshwary@gov.in
Tel. No. 24695290