



सत्यमेव जयते

File No: IA-J-11011/244/2023-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 08/12/2023



To,

Mr Bharat Kundal
M/s. OLAM GLOBAL AGRI COMMODITIES INDIA PRIVATE LIMITED
Gut No. 76, Channehatti, Post: Rajgoli (Kh), Tal.: Chandgad, dist.: Kolhapur, Maharashtra,
Channehatti, Post: Rajgoli (Kh), KOLHAPUR, MAHARASHTRA, 416508
bharat.kundal@olamnet.com

Subject: Establishment of 300 KLPD Grain based distillery in the existing premises of 4,960 TCD Sugar Factory & 25 MW Co-generation Plant located at: Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State by M/s. Olam Global Agri Commodities India Pvt. Ltd. – Consideration of Environment Clearance reg.

Sir/Madam,

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project Establishment of 300 KLPD Grain based Distillery by Olam Global Agri Commodities India Pvt. Ltd (OGACIPL), At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State submitted to Ministry vide proposal number IA/MH/IND2/434419/2023 dated 26th September, 2023 .

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23C2505MH5700867N
(ii) File No.	IA-J-11011/244/2023-IA-II(I)
(iii) Clearance Type	EC
(iv) Category	B2
(v) Project/Activity Included Schedule No.	5(g) Distilleries
(vi) Sector	Industrial Projects - 2 Establishment of 300 KLPD Grain based Distillery by Olam Global Agri Commodities India Pvt. Ltd (OGACIPL), At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State
(vii) Name of Project	OLAM GLOBAL AGRI COMMODITIES INDIA PRIVATE LIMITED
(viii) Name of Company/Organization	

(ix) Location of Project (District, State)	KOLHAPUR, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	yes
(xiii) Applicability of Specific Conditions	no

3.The Ministry of Environment, Forest and Climate Change has examined the proposal seeking environmental clearance for establishment of 300 KLPD Grain based distillery in the existing premises of 4,960 TCD Sugar Factory & 25 MW Co-generation Plant located at: Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State by M/s. Olam Global Agri Commodities India Pvt. Ltd.

4. As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

5.The details of products and capacity are placed at **Annexure-II**.

6. Ministry has issued Environmental Clearance for 50 KLPD Molasses Distillery Unit and 25 MW Cogeneration Plant vide File No. F. No. J-11011/412/2006-IA-II (I) dated 06.07.2007. But 50 KLPD Distillery Unit is not implemented on site and same is certified by IRO; Nagpur. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File No- EC-2195/RON/2023-NGP/12182 dated 15.09.2023.

There is a non-compliance regarding submission of six monthly compliance report, partial compliance related to spent wash generation and advertisement of existing EC granted in 2007. Further, there is a general observation regarding implementation of green belt development plan & CSR/CER/EMP works with 30% funds. PP has submitted Action Taken report to IRO, MoEFCC; Nagpur on 16.09.2023 through email informing that industry uploaded six monthly compliances, monitoring reports, on Industry website and copy of advertisements done in 2007 were not traceable. Industry has not complied with spent wash generation and it's disposal practice as distillery unit was not established on site. Further, Industry has submitted action plan for densification of greenbelt by February, 2024. EAC found the compliance status satisfactory but warned PP that Industry should ensure that six monthly compliance reports are submitted regularly.

Existing 4,960 TCD Sugar Factory is operational on the basis of Consent to Operate as Environmental Clearance is not applicable since threshold limit for applicability of EC is 5000 TCD. Latest CTO (Air and Water) has been issued on 02.02.2023 and is valid till 31.07.2024. Certified CTO compliance report has been issued dated 12.07.2023 from MPCB; Kolhapur.

7.Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation pending against the project.

8.Total land area required is 55 hectares. Greenbelt will be developed in total area of 25.77 hectares i.e., 47% of total project area. The estimated project cost is Rs. 299.10 Crores. Capital cost of EMP would be Rs. 37.05 Crores and recurring cost for EMP would be Rs. 3.82 Crores per annum. Industry proposes to allocate Rs. 4.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 478 persons as direct & indirect.

9.There is no presence of National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Suthgatti Reserved Forest is at 0.5 Km; East, Daddi Reserved Forest is at 1.6 Km; North, Chinchani Reserved Forest is at 4.7 Km; East, Managutti Reserved forest is at 5.36 Km; NE, Kataballi Reserved forest is at 5.7 Km; NE, Benkanholli Reserved Forest is at 7.3 Km; NE from project site. Water bodies: Ghatprabha River is at a distance of 1.6 Km from site flows in North direction and Tamraparni River is at a distance of 3.5 Km from site flows in West direction of project site.

10.AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.011 µg/m³, 0.003 µg/m³, 0.92 µg/m³ and 0.055 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x.

The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

11.Total fresh water requirement will be 831 m³ /day which will be met from Tamraparni River. NOC has been obtained by Kolhapur Irrigation division (South) vide letter no. KOPAVI(D)/Prasha-4/bisin/4758/2018 dated 20.11.2018 and valid for next 6 years. Effluent (Condensate/spent lees/blowdown etc.) of 1882 m³ /day quantity will be treated through Condensate Polishing Unit of capacity 2300 m³ /day. Raw stillage (1545 T/D: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 70 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

12.Power requirement will be 6 MW and will be met from existing 25 MW Cogeneration Plant. 60 TPH Bagasse fired boiler will be installed. APCE ESP with a stack height of 75 M will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³ or 30 mg/Nm³ for the proposed boiler. Existing 725 kVA (2 Nos.) & 320 KVA DG sets are used as standby during power failure and stack height (14 m) will be provided as per CPCB norms to the proposed DG set.

13.Details of Process emissions generation and its management:

- APCE ESP with a stack height of 75 meters will be installed with the 60TPH boiler for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (225 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be collected in bottling plant.

14.Details of solid waste/Hazardous waste generation and its management:

- DDGS (Distilled Dried Grains Stillage) (250 TPD) will be sold as cattle feed.
- Boiler ash (22 TPD) will be used for proposed brick manufacturing unit.
- CPU sludge (1.8 TPD) and STP sludge (0.06 TPD) will be used as manure.

15. As per Notification S.O 2339(E), dated 16th June,2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 300 KLPD will be used for manufacturing fuel ethanol only.

16.Total land of 98 Hectares (area in 2007 EC is 98 Ha) is under possession of the company and land use conversion has been completed vide letter no. Binseti/SR/13/2011 dated 01.12.2011. EAC found the information satisfactory.

17.The proposal was considered by the EAC (Meeting ID: EC/AGENDA/EAC/886758/10/2023) held on 30th October, 2023 in the Ministry, wherein the project proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/SA 0177 and validity 10.10.2024), presented the case. The Committee **recommended** the project for grant of environmental clearance.

18.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 the 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 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.

19.The Committee noted that the EMP report is in compliance of the PFR. The Committee 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.

20.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.

21.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 for **establishment of 300 KLPD Grain based distillery in the existing premises of 4,960 TCD Sugar Factory & 25 MW Co-generation Plant located at: Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State by M/s. Olam Global Agri Commodities India Pvt. Ltd**, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions.

22.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.

23.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.

24.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.

25.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.

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

Copy To

1. The Secretary, Department of Environment, Government of Maharashtra, Mumbai 400 032
2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001 Maharashtra
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, 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. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

6. The District Collector, District Kolhapur, Maharashtra
7. Guard File/Monitoring File/Parivesh portal/Record File

Annexure 1

Specific EC Conditions for (Distilleries)

1. Specific Condition

S. No	EC Conditions
1.1	<p>1.As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 300 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.</p> <p>2.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 (Annexure –III).</p> <p>3.EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.</p> <p>4.NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from Surface Water (Tamrapani river). State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent obtains such permission. Ground water shall not be used for plant operations.</p> <p>5.Total Fresh water requirement shall not exceed 831 m³/day which will be met from Tamrapani river. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.</p> <p>6.Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.</p> <p>7. APCE- ESP with a stack height of 75 m will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³ from the proposed 60 TPH Bagasse fired boiler and the existing 110 TPH bagasse fired boiler. Coal shall not be used as fuel in the boiler. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the</p>

S. No	EC Conditions
	<p>control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.</p> <p>8.Boiler ash (22 TPD) shall be used in proposed brick manufacturing unit. PP shall install 15% of the total power requirement in the form of solar power inside plant premises/adjacent/nearby areas.</p> <p>9.CO₂ (225 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/ collected in proposed bottling plant.</p> <p>10. PP shall allocate at least Rs. 1.0 Crore/annum for Occupational Health Safety. 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.</p> <p>11.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.</p> <p>12.The unit shall make arrangement for prevention of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained. Location of ethanol storage tanks shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such event should not go beyond the boundary of the plant i.e. the risk should be tolerable (acceptable) at the boundary.</p> <p>13. Company shall maintain an Emergency Response Decision support system in such a way so that identification of the detector's network for the location of the leak source and the probable leaked quantity in real-time, followed by modelling of the dispersion of the plume and consequences as forecast is done in advance and thus, no leak accident may go unattended. Accordingly, Risk Mitigation plan shall be in place.</p> <p>14.Company shall determine the distance of fire hydrant while finalizing its location from ethanol storage tanks or any other hazardous storage substance shall be based on dispersion of Thermal Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.</p> <p>15.Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.</p> <p>16.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.</p> <p>17. The existing green belt of at least 5-10 m width developed in 25.77 hectares i.e., 47 % of the total project area shall be densified @ 2500 trees per hectares, mainly along the plant periphery by February, 2024 as committed by the project proponent. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department</p>

S. No	EC Conditions
	<p>and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. No tree shall be cut or translocated for the present plant expansion.</p> <p>18.PP proposed to allocate Rs. 4.5 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan (Annexure –IV). Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.</p> <p>19.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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. PP shall strengthen and maintain the road connecting the plant and the State Highway. The entry and exit to and from the highway shall through slip roads only.</p> <p>20.Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.</p> <p>21.Continuous online (24x7) monitoring system for stack emissions/effluent 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.</p> <p>22.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. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.</p> <p>23.PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.</p>

Standard EC Conditions for (Distilleries)

1. General Conditions

S. No	EC Conditions
1.1	<p>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</p>

S. No	EC Conditions
	add additional environmental protection measures required, if any.
1.2	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
1.3	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).
1.4	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.
1.5	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.
1.6	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.
1.7	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.
1.8	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.
1.9	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.
1.10	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.

S. No	EC Conditions
1.11	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.

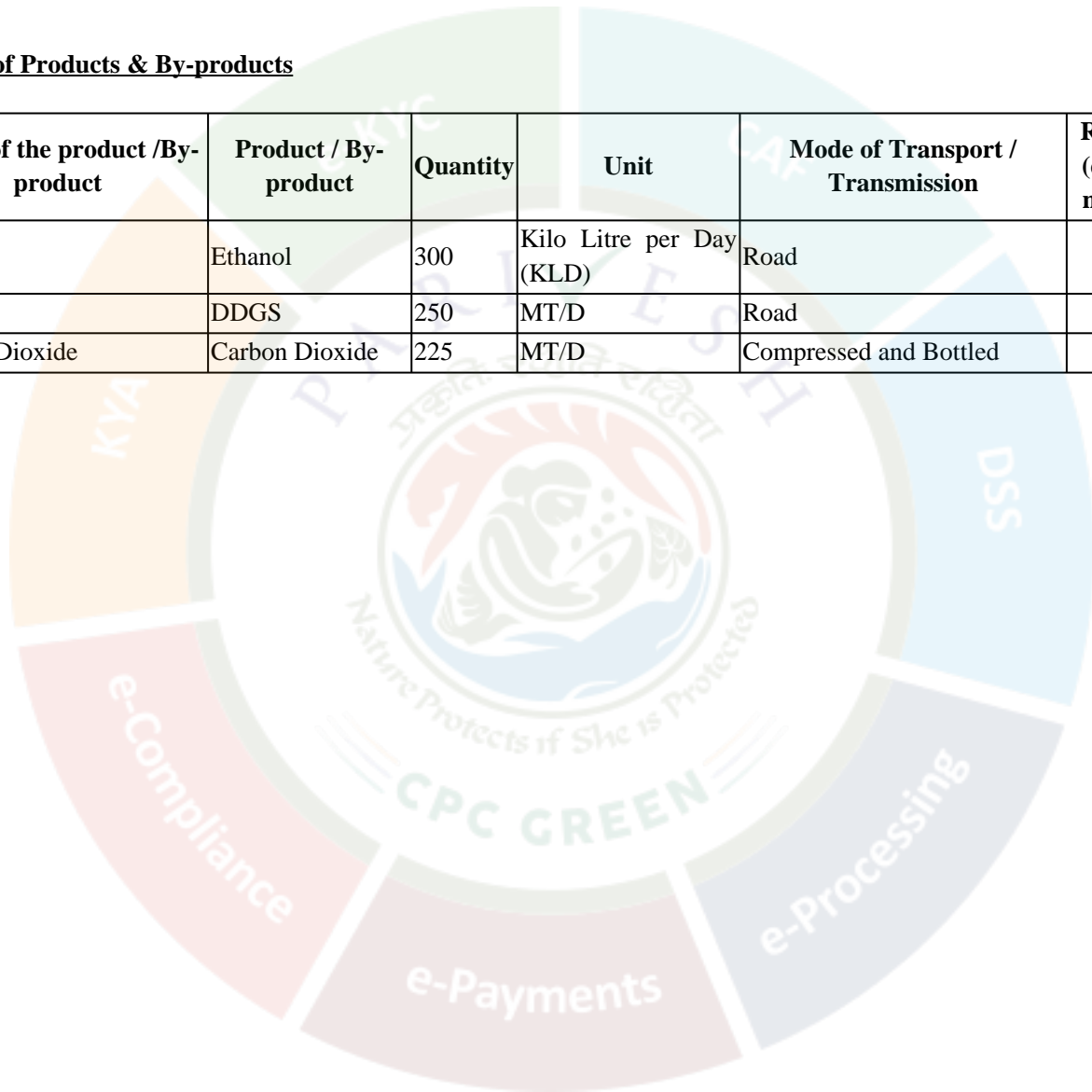
Additional EC Conditions

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Ethanol	Ethanol	300	Kilo Litre per Day (KLD)	Road	
DDGS	DDGS	250	MT/D	Road	
Carbon Dioxide	Carbon Dioxide	225	MT/D	Compressed and Bottled	



The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Existing Capacity	Proposed Expansion capacity	Total capacity
1	Distillery	Ethanol	0	300 KLPD	300 KLPD
2	DWGS dryer	DDGS	0	250 TPD	250 TPD
3	Fermentation unit	Carbon di-oxide	0	225 TPD	225 TPD
4	Cane Crushing Unit	Sugar	4960 TPD	0	4960 TPD
5	Cogeneration Power Plant	Power	25 MW	0	25 MW

Annexure –III**Capital cost and recurring cost of EMP are given below:**

No.	Description	Cost Component (Rs. Lakhs)	
		Capital	Annual O & M
1	Air Pollution: APC Equipment's [ESP for boiler – 1 Nos. (Stack height 75 M), OCMS, CO ₂ bottling Plant, Ash Collection system	Rs. 700	Rs. 70
2	Water Pollution: Installation of CPU, Sugar Factory CPU, STP, MEE, OCMS and Dryer for Grain	Rs. 2,500	Rs. 250
3	Noise Pollution Control: PPE (Ear plugs, Ear Muff, Insulations, Barriers)	Rs. 50	Rs. 5
4	Occupational Health & Safety: Annual Health checkup, Occupational health center	Rs. 100	Rs. 20
5	Environmental Monitoring: Solid waste disposal (storage and disposal), Ash & CPU, Yeast Sludge	Rs. 50	Rs. 5
6	Green Belt Augmentation & Rain Water Harvesting Plan	Rs. 150	Rs. 15
7	Afforestation in Parsenahatti village; 1000 Trees X Rs.500/ No.	Rs. 5	Rs. 2
8	Coverage of Bagasse Yard	Rs. 100	Rs. 10
9	Surfacing of Internal Roads to control fugitive dust and Ash Silo	Rs. 50	Rs. 5
	Total; (12% of Capital Investment of Rs. 299.10 Cr.)	Rs. 3,705	Rs. 382

Details of extended EMP (CER) with proposed activities and budgetary allocation:

No	CER Activities	Amount
1	Non-Conventional Energy Promotions (10 Villages: Channehatti, Tiramal, Edalhond, Ganeshwadi, Rajgoli (Kh.), Rajewadi, Parsenahatti, Rajgoli (Bk.), Ninganhatti, Shivapur) : Provision of Solar Street Lights with Gadget – 1 MS Pole, 18-20 W LED Lamp, Battery, Solar Panel, Wiring etc. 10 Villages X 50 Nos./Village = 300 Solar Street Lights X Rs.30,000/- per No. = Rs.90 Lakhs	Rs. 150 Lakhs
2	Solar Photovoltaic System (10 Villages: Ganeshwadi, Rajewadi, Tiramal, Rajgoli (Bk.), Rajgoli (Kh.), Channehatti, Edalhond, Parsenahatti, Ninganhatti, Shivapur) - 150 KW @ Rs. 0.5 Lakh/KW at Grampanchayat / ZP School Building. 150 KW X Rs.50,000/- = Rs. 75 Lakh	Rs. 75 Lakhs
3	Drinking Water Supply Infrastructure (5 Villages: Ganeshwadi, Edalhond, Shivapur, Rajewadi, Channehatti) - Safe Drinking Water Units with Filtration, RO Module & Storage Tank (2 Unit/ Village @ 500 Lit/Hr) – 10 Units X Rs. 3 Lakhs = Rs. 30 Lakhs & maintenance for 3 years @ Rs. 10 Lakhs lump sum. Total – Rs. 40 Lakhs	Rs.40 Lakhs
4	Water Conservation: Promotion & Supply of "Drip Irrigation" system infrastructure to bring 25 Ha of land belonging to farmers under command within 3 years.	Rs. 40 Lakhs
5	Afforestation: (10 Villages: Rajewadi, Channehatti, Ganeshwadi, Rajgoli (Kh.), Rajewadi, Parsenahatti, Rajgoli (Bk.), Ninganhatti, Shivapur, Edalhond): Plantation of Trees in 10 Villages including supplying plants, their cultivation and maintenance for 2 years. 200 Trees / Village X 10 Villages X Rs. 500/ Tree= Rs.100 Lakh & Maintenance @ Rs.12.5 Lakhs/Yr X 2 YR = Rs. 25 Lakhs, Total – Rs.125Lakhs	Rs. 125 Lakhs
6	Educational infrastructure & facilities (4 Villages: Rajgoli (Kh.), Rajgoli (Bk.), Shivapur, Suthgatti): Assistance to local ZP & other school for library, laboratories, computers, digital literacy, wifi & online learning facilities etc.	Rs. 20 Lakhs

No	CER Activities	Amount
	(1.5% of Capital Investment Rs. 299.10 Cr.) Total	Rs.450 Lakhs

