



सत्यमेव जयते

File No: IA-J-11011/230/2023-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 02/01/2024



To,

SH. PINAKI MUKHERJEE
ZUARI ENVIEN BIOENERGY PRIVATE LIMITED
5TH FLOOR, TOWER A, GLOBAL BUSINESS PARK, MG ROAD, SECTOR 26, GURUGRAM,
HARYANA, GURUGRAM, HARYANA, 122002
pinaki.mukherjee@adventz.com

Subject: Proposed 200 KLPD Grain based Ethanol Plant & 4.9 MW Cogeneration Power Plant under Ethanol Blending Programme at Village Khamariya Pandit, Tehsil Dhaurahara, District Lakhimpur Kheri, Uttar Pradesh by M/s. Zuari Envien Bioenergy Pvt. Ltd- Consideration of Environment Clearance under the provision of the EIA Notification 2006 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 Proposed 200 KLPD Grain based Ethanol Plant & 4.9 MW Cogeneration Power Plant under Ethanol Blending Programme at Village Khamariya Pandit, Tehsil Dhaurahara, District Lakhimpur Kheri, Uttar Pradesh by M/s Zuari Envien Bioenergy Pvt. Ltd. submitted to Ministry vide proposal number IA/UP/IND2/433302/2023 dated 04/11.2023.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23C2505UP5208528N
(ii) File No.	IA-J-11011/230/2023-IA-II(I)
(iii) Clearance Type	EC
(iv) Category	B2
(v) Project/Activity Included Schedule No.	5(g) Distilleries
(vi) Sector	Industrial Projects - 2 Proposed 200 KLPD Grain based Ethanol Plant & 4.9 MW Cogeneration Power Plant under Ethanol Blending Programme at Village Khamariya Pandit, Tehsil Dhaurahara, District Lakhimpur Kheri, Uttar Pradesh by M/s Zuari Envien Bioenergy Pvt. Ltd.
(vii) Name of Project	ZUARI ENVIEN BIOENERGY PRIVATE
(viii) Name of Company/Organization	

	LIMITED
(ix) Location of Project (District, State)	KHERI, UTTAR PRADESH
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. The Ministry of Environment, Forest and Climate Change has examined the proposal for proposed establishment of 200 KLPD Grain based Ethanol Plant & 4.9 MW Cogeneration Power Plant under Ethanol Blending Programme at Village Khamariya Pandit, Tehsil Dhaurahara, District Lakhimpur Kheri, Uttar Pradesh by M/s. Zuari Envien Bioenergy Pvt. Ltd.

4. The proposal was considered in EAC (Ind-2) meeting held 21st – 22nd November, 2023 wherein the project proponent and their accredited Consultant M/s. J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 30th January, 2024) made a detailed presentation on the salient features of the project. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code available above or through the following web link [click here](#).

5. 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.

6. The details of products and capacity are enclosed at Annexure-2.

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 8.094 ha. Green belt will be developed in total area of 2.68 ha i.e., 33% of total project area. The estimated project cost is Rs. 175 Crores. Capital cost of EMP would be Rs. 17.0 Crores and recurring cost for EMP would be Rs. 1.8 Crores per annum. Industry proposes to allocate Rs. 2.50 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 120 persons as direct & indirect.

9. There are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Protected Forests/Reserved Forests, Wildlife Corridors etc. Water bodies: Budhiya Nadi is at a distance of 1.7 km in WSW direction, Baha Nadi is at a distance of 2.3 km in NNE direction, Sarada River is at a distance of 3.8 km in WNW direction, Dahawar Nadi is at a distance 5.8 km in East direction, Bhagahar Nadi is at a distance of 8.5 Km in East direction, Baha Nala is at a distance of 9.5 km in SSE direction and Chauka River is at a distance of 9.5 km in WSW direction.

10. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.355 g/m³, 0.14 g/m³, 0.67 g/m³ and 0.75 g/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 819 CMD which will be met from Ground water. NOC has been obtained by Ground Water Department (Namami Gange & Rural Water Supply Department), Ministry of Jal Shakti, Govt of UP for abstraction of 1100 KLPD groundwater vide NOC certificate no. NOC044258 & NOC035696 valid from 29.08.2023 to 28.08.2028. Effluent of 976 CMD quantity will be treated through Condensate Polishing Unit of capacity 1170 CMD. Raw stillage (1163 KLPD) will be sent to decanter followed by MEE and dryer to produce DDGS (88 TPD). STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Effluent discharge system and no effluent/treated water will be discharged outside factory premises.

12. Power requirement will be 4.9 MW which will be met from the proposed 4.9 MW Co-generation Power plant. 45 TPH Biomass /Rice husk/Bagasse or Coal fired boiler will be installed. Wet ESP with a stack height of 54 m will be installed for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler. 950 kVA DG set will be used as standby during power failure and stack height (7 m) will be provided as per CPCB norms to the proposed DG sets.

13. Details of Process emissions generation and its management:

- Dry ESP with a stack height of 54 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (154 TPD) generated during the fermentation process will be collected in CO₂ plant and it shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (88TPD) will be sold as cattle feed.
- Ash (87 TPD) generated from coal based operation will be given to nearby cement plants and the ash (47 TPD) generated from Biomass-Rice husk/Bagasse based operation will be given to nearby brick manufacturers in covered vehicles only.
- Used oil (0.2 Kiloliters per annum) will be sold to authorized recyclers.

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 200 KLPD will be used for manufacturing fuel ethanol only.

16. Total land of 20 acres (8.094 ha) is completely under the possession of the company and is already converted into Non-agricultural. EAC found the information satisfactory.

17. During deliberations, EAC discussed following issues:

- As suggested by EAC, PP increased the budget of socio-economic developmental activities from 1.75 Crores to 2.5 Crores for 2 years to be spent within the commissioning of the plant. Revised socio-economic developmental activities plan were also submitted.
- PP has informed that company will develop 33% of the total area, i.e., 6.6 acre (2.68 ha) under greenbelt development/ plantation & the same will be completed within the next monsoon season (October, 2024) with a density of 2500 trees/ha. PP has also submitted revised species list that shall be developed as a part of greenbelt development.
- Industry committed that it will strengthen and maintain the approach road from main Road to the plant.
- PP has informed that company will install Dry ESP instead of Wet Hybrid ESP with boiler Stack. ESP as APCE with a stack of height of 54 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boilers.

PP agreed to abide by all the above suggestions made the committee. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

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 to the project **proposed establishment of 200 KLPD Grain based Ethanol Plant & 4.9 MW Cogeneration Power Plant under Ethanol Blending Programme at Village Khamariya Pandit, Tehsil Dhaurahara, District Lakhimpur Kheri, Uttar Pradesh by M/s. Zuari Envien Bioenergy Pvt. Ltd**, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions enclosed at Annexure-1.

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 Uttar Pradesh, 601, Babu Bhawan, Secretariat, Vidhan Sabha Marg, Lucknow (UP) – 1
2. The Regional Officer, Ministry of Env., Forest and Climate Change, Regional Office, Kendriya Bhawan, 5th Floor, Sector “H”, Aliganj, Lucknow - 226020
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Uttar Pradesh Pollution Control Board, Building No. TC-12V, Vibhuti Khand, Gomti Nagar,

5. The Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Mansingh Road, New Delhi – 11.
6. Compliance and Monitoring Division-IA Division, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
7. The District Collector, Lakhimpur District, Uttar Pradesh.
8. 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 200 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 - 3).</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 ground Water. 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 shall obtain such permission.</p> <p>5. Total Fresh water requirement shall not exceed 819 m3/day which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days rain fall capacity and the accumulated water shall 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>

S. No	EC Conditions
	<p>7. Dry ESP (5 field) with a stack height of 54 m will be installed for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³ for the proposed 45 TPH Biomass /Rice husk/Bagasse or Coal fired boiler. SO₂ and NO_x level in the stack emissions shall be less than 100mg/Nm³ 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 control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.</p> <p>8. Ash (87 TPD) generated from coal based operation will be given to nearby cement plants and the ash (47 TPD) generated from Biomass-Rice husk/Bagasse based operation will be given to nearby brick manufacturers in covered vehicles only. PP shall install solar power equal to 15% of the total power requirement inside plant premises/adjacent/nearby areas. As committed, Industry shall strengthen and maintain the approach road from Main Road to the plant.</p> <p>9. CO₂ (154 TPD) generated during the fermentation process will be collected in CO₂ plant and it shall be sold to authorized vendors.</p> <p>10.PP shall allocate at least Rs. 0.50 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 the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting 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>

S. No	EC Conditions
	<p>17.The green belt of at least 5-10 m width shall be developed in nearly 2.68 ha i.e., 33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. 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 and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed within next monsoon season i.e October, 2024. . PP shall develop additional 10.0m thick green belt along the plant boundary towards village Lala Purwa and towards other vulnerable groups to reduce the direct impact.</p> <p>18. PP shall develop green belt all along the village road connecting plant with NH 730, maintain village road , provide safety features along the road to prevent traffic congestion and accidents.</p> <p>19.PP proposed to allocate Rs. 2.50 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan (Annexure - 4). Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.</p> <p>20.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.</p> <p>21.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>22.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>23.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>24.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>

1. General Conditions

S. No	EC Conditions
1.1	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.
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

S. No	EC Conditions
	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.
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.

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	200	Kilo Litre per Day (KLD)	Road	Main product
Power	Power	4.9	Mega Watt (MW)	cables	Boiler of 45 TPH capacity with HWESP as Air Pollution Control Equipment
DDGS	DDGS	88	TPD	Road	DDGS will be utilized as cattle feed
Carbon dioxide	Carbon dioxide	154	TPD	Road	CO2 will be collected and sold to vendors

ANNEXURE-3**Details of capital and recurring cost of EMP:**

S. No.	Description		Capital Cost (Crores)	Recurring Cost/annum (Crores)
1.	Air Pollution management	HWESP + Stack	5.0	0.65
2.	Effluent Treatment Facilities	Condensate polishing unit / ETP and STP	6.0	0.6
4.	Environment monitoring	Lab instrument, Online monitoring System, Third party monitoring, audit	2.0	0.15
5.	Solid waste management	Ash handling & management	3.3	0.25
		Others		
6.	Greenbelt & plantation development	Plantation for greenbelt	0.4	0.15
7.	Rain water harvesting	Required infrastructure	0.3	-
	Total		17	1.8

ANNEXURE-4**Details of CER with proposed activities and budgetary allocation:**

S. No.	Proposed Activities	Implementation of EMP for Social and Infrastructure Development on The Basis of Physical Targets		Total Budget Allocated (Rs. in Lakhs)
		Year 1	Year 2	
1	Up gradation of School infrastructure & Educational facilities- Provide Interactive smart class equipment /gadgets/solar panels like desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipment etc. to students, Seating Benches, installation of potable water facilities (Filters & UV),	Rs. 30 Lakhs (Govt school at Village Behta) (2 nos potable water facilities - Rs.2 lakh, solar panels installation- Rs. 10 lakhs, Rs 18 lakhs for desktop computers, projectors, Interactive White Boards and	Rs. 30 Lakhs (Govt school at Village Khamariya Pandit) (2 nos potable water facilities - Rs. 2 lakh, solar panels installation- Rs. 10 lakhs, Rs 18 lakhs for desktop computers, projectors, Interactive	60

	construction of sanitized toilets etc.	distributing study materials, school bags, sports equipment, etc)	White Boards and distributing study materials, school bags, sports equipment, etc)	
2	Social Infrastructure Development- Installation of Solar Street Light, Solar Lanterns, Development of community infrastructure, Village Pond & RWH pond Infrastructure Development, etc.	Rs. 25 Lakhs Village-Lala Purwa (Rs. 4.5 Lakhs for 75 nos. solar street light, Rs. 5 Lakhs for local ponds & RWH pond development, Rs. 15.5 lakhs will be provided for community infrastructure development {drains, religious centers etc.})	Rs. 25 lakhs Village- Behta (Rs. 4.5 Lakhs for 75 nos. solar street light, Rs. 5 Lakhs for local ponds & RWH pond development, Rs. 15.5 lakhs will be provided for community infrastructure development {drains, religious centers etc.})	50
3	Skill development for youth- Organizing Training programmes for youth/residents in Skill Development centre in collaboration with District/State government	Rs. 25 Lakhs Village - Behta & Lala Purwa (Benefit to be extended to 150 persons)	Rs. 25 Lakhs Village - Behta & Lala Purwa (Benefit to extended to 150 persons)	50
3	Up gradation of healthcare facilities- Provision of oxygen cylinders, ambulance, Health Check- up camps, medical instruments etc.	Rs. 35 Lakhs (PHC at Village-Khamariya Pandit) (Provision of 5 oxygen cylinders- Rs. 2.5 lakhs, 1 ambulance facility-Rs 10lakhs, Health Check-up camps-Rs 2.5 lakhs, medical instruments-Rs 20 lakhs	Rs. 35 Lakhs (PHC at Village-Behta) (Provision of 5 oxygen cylinders- Rs. 2.5 lakhs, 1 ambulance facility-Rs 10 lakhs, Health Check- up camps-Rs 2.5 lakhs, medical instruments- Rs 20 lakhs	70
4	Plantation -Plantation/ Avenue plantation along roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan, etc.	Rs. 10 lakhs Village- Lala Purwa (2000 no. of plants to be planted)	Rs. 10 Lakhs Village- Behta (2000 no. of plants to be planted)	20

Signature Not Verified

Digitally Signed by : Dr Vimal Kumar Hatwal
Member Secretary, MoEFCC (EC)

Date: 02/01/2024