



PARAMARSH

SERVICING ENVIRONMENT AND DEVELOPMENT

NABET-QCI Accredited EIA Consultant Organization
(NABET Certificate No. NABET/EIA/24-27/RA 0372,
Valid upto 30th Nov.'2027)

BSPCB Empanelment vide Notification No. 31 Dt: 09.12.2021

TO WHOM IT MAY CONCERN

Date : 06.04.2026

M/s Paramarsh Servicing Environment and Development (PSED) is an ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 Certified organization, accredited by Quality Council of India (QCI / NABET) as an EIA Consultant Organization vide certificate No. NABET/EIA/24-27/RA 0372 Dt: 17.02.2025, valid upto 30.11.2027 & Environmental Auditor as per MoEFCC OM vide F. No. 22/20/2021-IA.III [E-164476] dt: 23.08.2021 and empanelled ECO with BSPCB vide Notification No. 03 Dt: 22.05.2025 . Aiming to manage the complex sustainable environment management system PSED was founded and it is the leading consultancy provider in the areas of environment, industrial safety and management systems. PSED is a team of eminent and outstanding technocrats and professionals. PSED believe in moving up the value chain by providing best in class services relating to consultancy on environment & pollution, industrial safety, and project management in order to achieve utmost customer delight. PSED also have sound exposure in the sphere of mining, management systems (ISO) as well as in social and legal aspects pertaining to the environment and safety. Furthermore, PSED provide voluntary self-motivated environment information and programme, encouraging people and community to live the green and safe way of life. We are committed to achieve customer satisfaction by ensuring the excellence of performance in all our offerings and services. PSED is located in Lucknow (Uttar Pradesh), and our operations are spread across India..

Westwell Biorefineries Pvt. Ltd. (WBPL) (Previously SSOPL – Sonasati Organics Pvt. Ltd.) is operating its Grain Based Distillery with Cogeneration power Plant of 10 MW capacity at Vill. Rajpatti Kothi, Block Baikunthpur, of District Gopalganj, State Bihar, having Latitude 26°12'41.91"N & Longitude 84°47'50.16"E at 82-83 m. above MSL. The Project Site is connected to NH 101 & NH -28 through SH-90 and it is about 45 kms. from district head quarter at Gopalganj. WBPL project site is about 3.75 Km. (NW) from Rajapatti Station & 13 Km. N from Masrakh Junction on NER.

WBPL has existing land of 12.14 Ha. (30 Acres). 5.48 Acres of additional contiguous land has been acquired for proposed diversification project. 35.48 Acres of total land will be utilized for WBPL project including diversification project.

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EC for expansion of Grain Based Distillery from 200 KLD to 325 KLD and Cogeneration Power Plant from 5 MW to 10 MW has been obtained from MoEFCC, Govt. of India vide F. No. J-11011/25/2007-IA-II(I) Dt: 05.09.2023. BSPCB has granted CTE for expansion project vide Memo No. 2843 Dt: 15.12.2023 & Consolidated Consent to Operate and Authorization (CCA) vide No. 180599 Dt: 19.12.2024 which is valid upto 31.08.2029. WBPL has obtained NOC from CGWB for withdrawal of 1440 m³/day ground water vide NOC No. CGWA/NOC/IND/REN/1/2024/9426 Dt: 23.04.2024.

To meet the demand supply gap of EBP, as per guidelines of MoEFCC, Govt. of India vide Gazette Notification S.O. 980 (E), Dt: 02.03.2021(Amendment in EIA Notification 2006) WBPL has obtained approval from BSPCB under No Increase in Pollution Load for expansion of project from 325 KLD to 450 KLD vide Ref. No. 714 Dt: 19.06.2025 followed by Consent to Establish (CTE) vide Memo No. 841 Dt: 14.07.2025 and CTO (CCA) vide Ref. No. 1435 Dt: 12.09.2025, which is valid upto 30.06.2030.

For expansion from 325 to 450 KLD WBPL has modified and upgrade the plant, equipment and other auxiliary facilities to meet the requirement of 450 KLPD. Major modification and upgradation has been done in Boiler, MEE, CPU, DDGS Dryer and steam handling system. All other facilities were adequate to handle extended capacity of WBPL project. Thus, in order to utilize the full efficiency of plant and to meet the increasing demand of ethanol, WBPL has increased its production capacity and presently operating on 450 KLD capacity.

Recently, GoI has minimize and restrict Ethanol lifting from ethanol manufacturing units, which results in financial instability of the project. To overcome this scenario, WBPL intends to diversify its products by utilizing CO₂ (generated during ethanol production) for production of its derivatives, process condensate for production of Acetic Acid followed by Esters and by utilizing captive ethanol for production of its derivatives viz. Ethyl Acetate/Acrylate & Pharma Grade Ethanol.

As per guidelines of MoEFCC, Govt. of India (vide Gazette Notification S.O. 980 (E), Dt: 02.03.2021, Amendment in EIA Notification 2006), WBPL has been audited by PSED and the present report on **"No increase in Pollution Load"** is for the proposal of Change in product mix due to product diversification for production of additional products viz.CO₂ derivatives, ethanol derivatives etc. Details are as under ;



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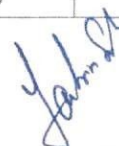
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1. Proposed diversification project will recycle and reuse CO₂ (GHG), generated during production of Ethanol. 66.26% of CO₂ generated from Ethanol project will be reused as raw material for production of CO₂ derivatives and Liquid CO₂.
2. Thin stillage generated during distillation process will be recycle and reuse for production of Corn Oil.
3. Process Condensate generated from MEE will be recycle and reuse for production of Acetic Acid.
4. Due to reuse of process condensate and thin stillage, load on existing pollution control system viz. MEE and CPU followed by RO, will be reduced.

Details of proposed Production facility and production are as under ;

Manufacturing Facilities	Product	Capacity	Raw Material / ETHANOL Requirement
Grain Based Distillery EXISTING	Ethanol	450 KLD (Existing)	NA
	By-Products		
	DDGS	340 TPD (Existing)	
	CO ₂	335 TPD (Existing)	
Power Co-generation	Power	10 MW	
PROPOSED DIVERSIFICATION	Acetic Acid	36.5 TPD	45 m ³ /Hr. Process Condensate
	CO ₂ Derivates (Sodium Bicarbonate / Aluminium Bicarbonate / Calcium Carbonate)	150 TPD	90 TPD CO ₂
	Rice Protein & Fibre	34.5 TPD	300 TPD Rice Starch
	Corn Oil	15 TPD	350 TPD Thin Stillage
	Liquid CO ₂	120 TPD	132 TPD CO ₂
	Esters (n-Propyl Acetate / Isopropyl Acetate / n-Butyl Acetate / Isobutyl Acetate / Isoamyl Acetate)	50TPD	Ethanol : 28 TPD
	Fusel Oil	1.67 TPD	Fermentation Byproduct
	Ethyl Acrylate / Acetate	200 TPD	Ethanol : 100 TPD
	Pharma Grade Ethanol	50 TPD	Ethanol : 60 TPD
TOTAL ETHANOL TO BE USED FOR ETHANOL DERIVATIVES			188 TPD

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WATER & STEAM REQUIREMENT

Manufacturing Facilities	Product	Capacity	Fresh Water Requirement (KLD)	Steam Requirement (TPD)
Grain Based Distillery EXISTING	Ethanol	450 KLD (Existing)	1050	1480
	By-Products			
	DDGS	340 TPD (Existing)		
	CO ₂	335 TPD (Existing)		
Power Co-generation	Power	10 MW		
PROPOSED DIVERSIFICATION	Acetic Acid	36.5 TPD	0	0
	CO ₂ Derivates (Sodium Bicarbonate / Aluminium Bicarbonate / Calcium Carbonate)	150 TPD	113	10
	Rice Protein & Fibre	34.5 TPD	175	200
	Corn Oil	15 TPD	40	10
	Liquid CO ₂	120 TPD	40	10
	Esters (n-Propyl Acetate / Isopropyl Acetate / n-Butyl Acetate / Isobutyl Acetate / Isoamyl Acetate)	50TPD	40	80
	Fusel Oil	1.67 TPD	0	0
	Ethyl Acrylate / Acetate	100 TPD	100	200
	Pharma Grade Ethanol	50 TPD	50	0
TOTAL			1608	1990

Water Balance for Diversification Project ;

Product	One Time Water Requirement KLD	Water Consumption KLD	Water Output (Recycle) KLD	Effluent / Waste Water -KLD	Fresh Water Makeup KLD
Acetic Acid	NA	NA	NA	NA	NA
CO ₂ Derivates (Sodium Bicarbonate / Aluminium Bicarbonate / Calcium Carbonate)	400	113	287	NA	113
Rice Protein & Fibre	1075	75	900	100	175

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Corn Oil	40	40	NA	NA	40
Liquid CO ₂	40	40	NA	NA	40
Esters (n-Propyl Acetate / Isopropyl Acetate / n-Butyl Acetate / Isobutyl Acetate / Isoamyl Acetate)	40	40	NA	NA	40
Fusel Oil	0	0	NA	NA	0
Ethyl Acrylate / Acetate	100	100	NA	NA	100
Pharma Grade Ethanol	50	50	NA	NA	50
TOTAL	1745	458	1187	100	558

As per statutory guidelines, WBPL project is based on ZLD methodology and same will also be maintained during and after diversification for proposed change in product mix. Due to proposed diversification project, additional waste water will be generated which will be recycled and reuse within plant for various activities and air pollution will be control and minimized by existing ESP in existing boiler stack. Existing waste water treatment system i.e. MEE and CPU are adequate to meeting the requirements of diversification project.

Further, in order to control & minimize the impact on air quality within and around the plant premises extensive tree plantation will be carried out by WBPL. Due to diversification project, non point source of emission viz. vehicular pollution will also be increased. To minimize and control non point source emissions, internal roads will be strengthened with paved shoulders and additional tree plantation will be done along the roads. Additionally, Automatic Truck/Dumper Wheel Washing System will be installed at entry & exit points.

Cost of Diversification project with budgetary allocation of EMP is as under ;

Components	Estimated Cost (in Crore Rs.)
1. Land Development	4
2. Civil Works (including Compound Wall, Roads, Drainages, Factory & Office Buildings, Foundations and Water Ponds etc.	15
3. Process Plant & Machinery	267
4. Utilities (including Plant structure, Boiler, Turbine, ETP, WTP, Fire Fighting, Steam Lines,)	5
5. Pollution Control and Environmental Management etc.	3
TOTAL	294 Cr




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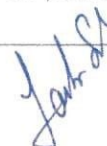
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Pollution load assessment study has been carried out and the findings are summarized as under ;

Components	Existing Scenario 450 KLPD Capacity	Proposed Scenario after Diversification project for change in product mix	Status of Environmental Pollution Load / Remarks
Air Environment			
Point source of Emission	2 nos. 40 TPH Boiler	2 nos. 40 TPH Boiler & Old 8 TPH Boiler	Existing boilers are adequate to meet steam requirement after project diversification.
Boiler Steam Requirement	72 TPH	83 TPH	Steam requirement will be meet through existing boilers.
Stack and APCS	45 m. stack common for all boilers equipped with ESP and multi cyclone with wet scrubber	45 m. stack common for all boilers equipped with ESP and multi cyclone with wet scrubber	Existing air pollution control system is adequate to meet the requirement of WBPL project after diversification.
Fuel	Bagasse, Rice Husk, Other biomass, Gas	Bagasse, Rice Husk, Other biomass, Gas	No Change Emission load reduce when methane gas will be used as fuel in boiler. Coal maxm. 15% of total fuel requirement will be used as auxiliary fuel.
Fuel Quantity	612 TPD OR 300 m ³ /hr. Gas	No Change	No change in storage Existing fuel yard is adequate to handle WBPL project after diversification project.
Air Pollution (Emission) Load max ^m .	0.28 TPD (0.62 Kg / T of Product)	0.28 TPD (0.27 Kg / T of Product)	Reduction in Emission load per quantum of product
Concn. of PM in Stack Emission	PM : < 50 mg/NM ³	PM : < 50 mg/NM ³	Concn. of PM will be maintained within threshold limit by existing air pollution system.

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Components	Existing Scenario 450 KLPD Capacity	Proposed Scenario after Diversification project for change in product mix	Status of Environmental Pollution Load / Remarks
Water Environment			
Total Fresh Water Consumption (Ind. + Dom.)	1050 m ³ /day (1020 Industrial + 30 Domestic) 2.47 KL/KL of Product	1643 m ³ /day (1608 Industrial + 35 Domestic) 1.61 KL/KL of Product	Quantum of fresh Water will be reduced post diversification of WBPL Project.
Spent Wash	2250 m ³ /day 5.0 KL/KL of Product	2250 m ³ /day 5.0 KL/KL of Product	Spent wash generation will be reduced as fresh water requirement is reduced per quantum of product. Spent wash will be handled through modified MEE and Dryer system.
Waste water generation	1150 m ³ /day 2.56 KL/KL of Product	558 m ³ /day 0.54 KL/KL of Product	Spent wash from distillation followed by Process Condensate from MEE will be utilize for production of Acetic Acid. Existing waste water treatment system i.e. MEE, CPU followed by RO is adequate to meet the requirement after change in product mix and will achieve ZLD as existing.
Water Pollution Load (Kg/Day/KL of Product)			
TSS	0.089	0.018	Reduction in pollutants load due to reduced effluent generation per quantum of Product. All treated water will be recycle and reuse within premises for process makeup, cooling tower makeup, green belt irrigation etc. Existing ZLD will be maintained.
BOD	0.056	0.011	
COD	0.332	0.065	
Water Pollution Control System			
MEE (Multi Effect Evaporator)	1370 m ³ /day	No Change	Existing system is adequate
CPU (Condensate Polishing Unit)	1165 m ³ /day	No Change	Existing system is adequate






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Components	Existing Scenario 450 KLPD Capacity	Proposed Scenario after Diversification project for change in product mix	Status of Environmental Pollution Load / Remarks
CPU (Condensate Polishing Unit)	1165 m ³ /day	No Change	Existing system is adequate
Solid Waste Generation			
Boiler Ash	100 TPD	100 TPD	Reutilize with premises in own brick manufacturing unit.
ETP Sludge	0.1 TPD	0.1 TPD	No change
Hazardous Waste Management			
Used or Spent oil (HW cat. No. 5.1) as per Schedule I	0.3 T / Annum	0.3 T / Annum	No Change Will be disposed off through authorized recyclers

Conclusion:

Based on discussion with plant technical personnel, data and details provided by project proponent, analysis of data, as verified by the project proponent and technical data as presented above, it is evident that there will not be any increase in pollution load in respect to air pollution, water pollution and solid waste management due to proposed diversification project of WBPL for change in product mix. Existing WBPL project is based on ZLD methodology and same will be retained after change in product mix also.

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