

**GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE  
(IA DIVISION-INDUSTRY-2 SECTOR)**

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**Dated: 21.01.2022**

**MINUTES OF THE 48<sup>th</sup> MEETING OF THE EXPERT APPRAISAL  
COMMITTEE**

**(INDUSTRY-2 SECTOR PROJECTS)**

**HELD ON 06-07<sup>th</sup> January, 2022**

**Venue: Ministry of Environment, Forest and Climate Change,  
Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-  
110003 through Video Conferencing (VC)**

**(i) Opening Remarks by the Chairman:** The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.

**(ii) Confirmation of minutes:** The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its 47<sup>th</sup> Meeting of the EAC (Industry-2) held during 23<sup>rd</sup> December, 2021 conducted through Video Conferencing (VC), confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under: -

**06<sup>th</sup> January, 2022 (Thursday)**

**Agenda No. 48.1**

**Proposed 250 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant at Village Sulikhera, Tehsil Bhattu Kalan, District Fatehabad, Haryana by M/s. Goyal Distillery Private Limited- Consideration of Environment Clearance.**

**[IA/HR/IND2/246721/2021, J-11011/531/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s J.M. EnviroNet Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed 250 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant at Village Sulikhera, Tehsil Bhattu Kalan, District Fatehabad, Haryana by M/s. Goyal Distillery Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR& conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

Unit	Capacity	Product
Grain Based Ethanol Plant	250 KLPD	Product: Ethanol (Bio-fuel) By-product: DWGS/DDGS & CO <sub>2</sub>
Co-generation Power Plant	6.0 MW	Power

Total project area is 6.35 hectares (63500 m<sup>2</sup>) and the same is already under the possession of the company. Industry will develop greenbelt in an area of 33% i.e., 2.09 ha (20900 m<sup>2</sup>) out of total area of the project.

The estimated project cost is Rs. 200 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 21.20 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.0 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 120 persons (Permanent 80 & Temporary 40) during operation phase. Industry proposes to allocate Rs. 2.0 Crores (1% of total project cost) towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Reserved Forests (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Fatehabad Branch

(Bhakra Canal) (~4.5 km in NNW direction), Banmadauri Distributary (~6.5 km in WNW direction), Gigorani Distributary (~6.5 km in WNW direction), Adampur Distributary (~6.5 km in SSE direction) and Kheri Distributary (~6.5 km in SSE direction) are the water bodies which lie within 10 km radius.

Total fresh water requirement will be 1254 KLPD which will be sourced from Canal water. Effluent of 1178 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 1500 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 5.5 MW, which will be sourced from the 6.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 1x500 KVA and 2x1000 KVA which will be used as standby during power failure. Adequate Stack height (5 m & 7 m) will be provided as per CPCB norms. Boilers of 2 x 30 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 55 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup>.

#### **Details of process emissions generation and its management:**

CO<sub>2</sub> (189 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

#### **Details of Solid waste/Hazardous waste generation and its management:**

- Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (117 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (56 TPD) generated from the boilers will be used for brick manufacturing. Company will supply ash to nearby brick manufacturers in covered vehicles and will also explore possibilities for in-house brick manufacturing unit.
- Used oil (0.5 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 250 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations PP has informed that Land use conversion is not required for development of biomass based projects as per Haryana Bio-energy Policy 2018 notified by Government of Haryana. Letter has been obtained from Haryana Renewable Energy Development Agency (HAREDA) regarding clarification that the project is covered under the Haryana Bio-Energy Policy, 2018 and does not require land conversion EAC. However, EAC has opined that 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. Further, EAC directed PP to submit an undertaking for the following commitments/information:

- Industry shall install solar power of at least 10% of its total power requirement in nearby villages.
- The proposed budget of Rs 2.00 crores towards CER shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Copy of LoI agreement from OMCs for procurement of Ethanol.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). 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.
- (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 1254 KLPD which will be sourced from Canal 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. Industry shall construct a storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing plant shall be installed for utilization of fly ash.
- (vii). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate Rs. 50 Lakhs/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.
- (ix). 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.

- (x). 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. PESO certificate shall be obtained.
- (xi). 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.
- (xii). 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.
- (xiii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.
- (xiv). PP proposed to allocate Rs. 2.00 Crores for improving infrastructure in the public schools nearby. All the proposed activities under CER shall be completed within 2 years.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). 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.

## **Agenda No. 48.2**

**PROPOSED ESTABLISHMENT OF GRAIN BASED ETHANOL DISTILLERY OF CAPACITY 198 KLD ALONG WITH CO GEN POWER PLANT – 4.5 MW AT Plot No - 146(P), 147(P), 144(P), VILLAGE-MARINGI, TEHSIL – PARALAKHEMUNDI, DISTT – GAJAPATI (ODISHA) BY M/S COASTAL BIOTECH PVT LIMITED- Consideration of Environment Clearance.**

**[IA/OR/IND2/245646/2021, J-11011/520/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Environmental and Technical Research Centre., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed establishment of Grain based Ethanol Distillery of capacity 198 KLD along with co gen power plant – 4.5 mw at plot no - 146(p), 147(p), 144(p), village- Maringi, Tehsil – Paralakhemundi, Distt – Gajapati (Odisha) by M/s Coastal Biotech Pvt limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR& conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

### **The details of products and capacity are as under:**

<b>Sr.No.</b>	<b>Product Details</b>	<b>Quantity</b>
1	Ethanol	198 KLD
2	Co-Gen Power	4.5 MW

Proposed land area is 12.14 hectares, which is already under the possession of M/s Coastal Biotech Pvt Limited. Industry will develop greenbelt in an area of 33 % i.e., 4.0081 hectares out of total area of the project.

The estimated project cost is Rs 20000 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 4500 Lakh and the Recurring cost (operation and maintenance) will be about Rs 300 Lakh per annum. Total Employment will be 130 persons as direct & indirect. Industry proposes to allocate Rs 200 lakhs towards Corporate Environmental Responsibility.

There are no National Parks/ Protected Forests (PF), within 10 Km radius. Reserved Forests – Lavanyakota Reserve Forest at distance of 1.92 km in south east direction. River/ water body Mahendratanya River flowing at a distance of 12.88 Km in the west direction.

Total water requirement for the Grain based Ethanol Plant will be 3355 KLPD out of which 2325 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 1030 KLPD, which will be met from river water. Spent Wash (Slops) generation from Distillation, will be sent through separation of suspended solids in Decanter Centrifuge, part Thin Slops are concentrated in multi-effect evaporators to form a Thick (Protein) Syrup, which is mixed with the Wet Cake DWG separated earlier from Decanters. This interim product called DWGS has 30-32% w/w Solids is subject to drying in a rotating steam tube bundle dryer to deliver a value-added by-product – DDGS – Distillers Dried Grains with soluble and which has min. 90% Solids and max 10% moisture. This DDGS sells as Cattle Feed / Poultry Feed / Fish Feed based on its Protein Content. Hence, entire spent wash is decanted, concentrated into syrup in a Multi-Effect Evaporation followed by Drying, in order to achieve Zero Effluent Discharge. Effluent of 1211 KLPD quantity will be treated through state of art CPU/Effluent Treatment Plant of 1500 KLPD capacity (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid discharge system.

Power requirement for proposed project will be 2857 KWH (maximum) will be met from Co-generation power plant of 4.5 MW. Unit has proposed 1 no of boiler of capacity 40 TPH. Electro Static Precipitator (ESP) with a stack of height of 72 m will be installed for controlling the particulate emissions within the statutory limit of 50mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

- ESP with a stack height of 72 m will be installed for controlling the particulate emissions. Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO<sub>2</sub> generated (142 TPD) during the fermentation process will be collected by utilizing CO<sub>2</sub> scrubbers and sold to authorized vendors.

#### **Details of Solid waste/Hazardous waste generation and its management:**

Waste	Quantity	Uses / Disposal
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Total Ash	4.14 MT/Day	Will be provided to Brick Manufacturer Industry.
Condensate polishing unit sludge	1.5 KLD	Used as manure.
Cattle Feed DDGS	85 MT/Day	Will be sold as cattle feed.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 198 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- At least 15% of the total plant area will be reserved for parking with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass in rainy season.
- Industry shall meet at least 10% of its power requirement through renewable energy.
- The proposed budget of Rs. 2.00 crores towards CER shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 60 Lakhs per annum.
- Industry shall surrender permission granted by Irrigation Deptt., Odisha for water supply of 2025 KLD from Surface water. As proposed fresh water requirement for the project shall not exceed 1030 KLPD.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 198 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). 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.
- (iii). 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.
- (iv). Industry shall surrender permission granted by Irrigation Deptt., Odisha for water supply of 2025 KLD from Surface water. Total fresh water requirement shall not exceed 1030 KLPD which will be met from

river 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. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass in rainy season. Industry shall meet at least 10% of its power requirement through renewable energy.
- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP proposed to allocate Rs. 60 Lakhs/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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be

completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.

- (xiii). PP proposed to allocate Rs. 2.00 crores towards CER and shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

### **Agenda No. 48.3**

**Proposed establishment of Grain based Ethanol Distillery capacity 250 KLD along with 7.0 MW at No. 02, Plot – B, Industrial Growth Centre, Matia Tehsil: Matia, District: Goalpara, Assam of M/s Gulshan Polyols Limited- Consideration of Environment Clearance.**

**[IA/AS/IND2/245539/2021, J-11011/519/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Environmental and Technical Research Centre., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed establishment of Grain based Ethanol Distillery capacity 250 KLD along

with 7.0 MW at No. 02, Plot – B, Industrial Growth Centre, Matia Tehsil: Matia, District: Goalpara, Assam of M/s Gulshan Polyols Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR& conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr.No.</b>	<b>Product Details</b>	<b>Quantity</b>
1	Ethanol	250 KLD
2	Co-Gen Power	7.0 MW

Proposed land area is 7.26 hectares, which is already under the possession of M/s Gulshan Polyols Limited. Industry will develop greenbelt in an area of 33 % i.e., 2.395 hectares out of total area of the project.

The estimated project cost is Rs 20000 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 4200 Lakh and the Recurring cost (operation and maintenance) will be about Rs 350 Lakh per annum. Total Employment will be 150 persons as direct & indirect. Industry proposes to allocate Rs 200 lakhs towards Corporate Environmental Responsibility.

There are no National Parks/ Protected Forests (PF), within 10 Km radius. Reserved Forests – Doshikata Reserve Forest at distance of 2.5 km in west direction. River/ water body Dudhnai flowing at a distance of 0.96 Km in the North direction and Brahmaputra River at 7.60 in North direction.

Total water requirement for the Grain based Ethanol Plant will be 4509 KLPD out of which 3156 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 1353 KLPD, which will be met from ground water. Spent Wash (Slops) generation from Distillation, will be sent through separation of suspended solids in Decanter Centrifuge, part Thin Slops are concentrated in multi-effect evaporators to form a Thick (Protein) Syrup, which is mixed with the Wet Cake DWG separated earlier from Decanters. This interim product called DWGS has 30-32% w/w Solids is subject to drying in a rotating steam

tube bundle dryer to deliver a value-added by-product – DDGS – Distillers Dried Grains with soluble and which has min. 90% Solids and max 10% moisture. This DDGS sells as Cattle Feed / Poultry Feed / Fish Feed based on its Protein Content. Hence, entire spent wash is decanted, concentrated into syrup in a Multi-Effect Evaporation followed by Drying, in order to achieve Zero Effluent Discharge. Effluent of 1501 KLPD quantity will be treated through state of art CPU/Effluent Treatment Plant of 2500 KLPD capacity (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid discharge system.

Power requirement for proposed project will be 3607 KWH (maximum) will be met from Co-generation power plant of 7.0 MW. Unit has proposed 1 no of boiler of capacity 60 TPH. Electro Static Precipitator (ESP) with a stack of height of 72 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

- ESP with a stack height of 72 m will be installed for controlling the particulate emissions. Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO<sub>2</sub> generated (180 TPD) during the fermentation process will be collected by utilizing CO<sub>2</sub> scrubbers and sold to authorized vendors.

#### **Details of Solid waste/Hazardous waste generation and its management:**

<b>Waste</b>	<b>Quantity</b>	<b>Uses / Disposal</b>
Total Ash	6.4 MT/Day	Will be provided to Brick Manufacturer Industry. During non availability of Rice Husk, Coal will be utilised as fuel. Coal based fly ash generation will be 77 MT/day which will be provided to Brick Manufacturer / Cement Industry.
Condensate polishing unit sludge	1.7 KLD	Used as manure.
Cattle Feed DDGS	100 MT/Day	Will be sold as cattle feed.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 250 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- At least 15% of the total plant area will be reserved for parking with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass in rainy season.
- Industry shall meet at least 10% of its power requirement through renewable energy.
- The proposed budget of Rs. 2.00 crores towards CER shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 60 Lakhs per annum.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). 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.
- (iii). 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.
- (iv). Total fresh water requirement shall not exceed 1353 KLPD which 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. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass in rainy season. Industry shall meet at least 10% of its power requirement through renewable energy.
- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.



- (vii). PP proposed to allocate Rs. 60 Lakhs/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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.
- (xiii). PP proposed to allocate Rs. 2.00 crores towards CER and shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.

- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

#### **Agenda No. 48.4**

**Grain Base Distillery Project of 250 KLD Fuel Ethanol Plant along with Co-gen Plant of 6.3 MW ( By Product : 125 TPD of CO2 Generation & 113-155 TPD of DDGS) by M/s. Dhanuka Biotech Private Limited located at Khasara no. 140, 141/1, 141/2, 141/3, 141/4, & 142, Village Jhanjharwada Tehsil & Dist Neemuch Madhya Pradesh - Consideration of Environment Clearance.**

**[IA/MP/IND2/247671/2021, J-11011/535/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services, Bhopal (MP), made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Grain Base Distillery Project of 250 KLD Fuel Ethanol Plant along with Co-gen Plant of 6.3 MW ( By Product : 125 TPD of CO2 Generation & 113-155 TPD of DDGS) by M/s. Dhanuka Biotech Private Limited located at Khasara no. 140, 141/1, 141/2, 141/3, 141/4, & 142, Village Jhanjharwada Tehsil & Dist Neemuch Madhya Pradesh.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr No</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1.	Fuel Ethanol	Nil	250 KLD of fuel ethanol	250 KLD of fuel Ethanol
2	Co generation of Power	Nil	6.3 MW	6.3 MW
3	DDGS	Nil	113-155 TPD	113-155 TPD

The acquired land area is 8.0 ha with proposed built-up area of 2.65 ha. Green belt will be developed in area of 33 % i.e. 2.65 ha of area with 5300 number of trees within 02 years of time. The estimated project cost is Rs. 267.68 Crore. Total capital cost for environmental measures is proposed as Rs. 5140 Lacs. The recurring cost (operation and maintenance) will be about Rs. 90 Lacs per annum. Total Employment will be 100 persons as direct & 150 persons as indirect after the commissioning of project. Industry proposes to allocate Rs. 133 Lacs (0.5% of project cost) towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. No Major River N is flowing within 10 km from the site.

Total water requirement is estimated to be 4213 KLD and after recycling & reuse of 3185 KLD of water, net fresh water requirement is estimated to be 1028 KLD (4.1 KI per KI) which will be supplied by MPIDC (MP). Spent wash of 1665 KLD will be treated through Multi Effect Evaporator with thermal recompression for thin slops evaporation and followed by CPU. The plant will be based on zero liquid discharge concept.

Power requirement for the project will 3185 KWH and will be met from Co-generation unit of 6.3 MW and MPSEB. Unit will have 01 boilers of 50 TPH, which will be husk fired. ESP with a stack having height of 45 mt will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for proposed boiler.

**Details of process emissions generation and its management:**

PM, SO<sub>2</sub>, NO<sub>x</sub> will be generated from the fuel combustion. Following measures are proposed for implementation:

- Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter for proposed fuel ethanol plant.
- Provision of Good quality of coal for boiler having sulphur less than 0.5%.

- Provision of Adequate stack height of 45 mt for boiler and 30 mt for the DG set.
- Provision of Dust collectors system at various material transfer points.
- Provision of Online continuous monitoring system for stack of boiler.
- Provision of regular monitoring of ambient air quality.
- Development of green belt in time bound manner in consultation with forest department.
- Provision of Dense phase conveying system for ash handling to prevent the fugitive emission.
- Provision of enclosure for all the loading & unloading operations, where ever required.
- Provision of cover over coal conveyors belt along with dust suppression system.
- Provision of dust mask for workers and instruction of compulsory use.
- CO<sub>2</sub> generated during the fermentation process will be collected by utilizing CO<sub>2</sub> Scrubbers.

**Details of Solid waste/Hazardous waste generation and its management:**

<b>Detail Of By Products / Solid/Hazardous Waste And Management</b>			
<b>Type Of Waste</b>	<b>Quantity</b>	<b>Storage</b>	<b>Utilization/ Disposal</b>
DDGS – ( by product)	102 TPD	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Boiler ash	70 TPD	Silo	Brick making or land filling
Waste papers/Boxes	1.5-2 TPD	Covered shed	to recyclers
Used Oil	< 500 lit per year	HDPE drums in covered shed	Given to re-cycler by authorized MPPCB/MoEF
Spent Resin from DM Plant	<50Kg/Yr	HDPE drums in covered shed	Given to re-cycler by authorized MPPCB/MoEF
ETP sludge	55 MT/DAY	Covered shed	AS MANURE

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 250 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall utilize fresh water @3.9 KL/KL of ethanol production.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Agro fuel shall be used as fuel in boiler.
- PP shall install ESP with the proposed boiler.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- PP shall meet 10% of the total power requirement from solar power.
- 15% of the total plant area will be reserved for parking.
- The proposed budget allocation Rs. 2.66 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.

PP has submitted the desired information as sought above.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 250 KLD shall be 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.
- (ii). 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.
- (iii). 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.
- (iv). Total Fresh water requirement shall not exceed @3.9 KL/KL and will be supplied by MPIDC (MP). 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use agro fuel as a fuel of boiler. 10% of the total power requirement shall be met from solar power.

- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP shall allocate at least Rs. 50 Lakhs 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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). 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.
- (xiii). PP proposed to allocate Rs. 2.66 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.
- (xiv). 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.

- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

#### **Agenda No. 48.5**

**Proposed grain-based Fuel Ethanol plant having proposed production capacity of 120 KLPD of Fuel Ethanol and 3 MW of power cogeneration, to be installed by M/s. Shreebalaji Biosolutions Fuels LLP located at Village Kaithra, Tehsil Shahpura, District Jabalpur, Madhya Pradesh - Consideration of Environment Clearance.**

**[IA/MP/IND2/246378/2021, J-11011/527/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Enviro Infra Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project.

During the deliberations, EAC directed PP to submit revised Layout Plan and approval of Petroleum and Explosives Safety Organization (PESO).

**Accordingly, proposal was deferred for the needful.**

#### **Agenda No. 48.6**

**Greenfield project for manufacturing of 180 KLPD Grain Based Bio Ethanol along with 5.0 MW Co-Generation power plant by M/s. Kalindi Ispat Private Limited (Bioenergy Division) located at Village Beplan, Tehsil Masturi, District Bilaspur, Chhattisgarh - Consideration of Environment Clearance.**

**[IA/CG/IND2/244421/2021, J-11011/371/2021-IA-II(I)]**



The Project Proponent and the accredited Consultant M/s. Anacon Laboratories Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Greenfield project for manufacturing of 180 KLPD Grain Based Bio Ethanol along with 5.0 MW Co-Generation power plant by M/s. Kalindi Ispat Private Limited (Bioenergy Division) located at Village Beplan, Tehsil Masturi, District Bilaspur, Chhattisgarh.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

S. No	ProductDetails	Existing Quantity	Proposed Quantity	Total Quantity
1.	Bio Ethanol (Anhydrous Alcohol)	---	180 KLPD (63000 KLA)	180 KLPD (63000 KLA)
2.	Animal Feed Grade Protein (DDGS)	---	28140MT per annum	28140 MT per annum
3.	CO <sub>2</sub> (Carbon Di-oxide)	---	28540 MT per annum	28540 MT per annum
4.	Co-Generation based Power Plant	---	5 MW	5 MW

Total proposed land area is 161880 m<sup>2</sup>. Industry will develop greenbelt in an area of 34.50 % i.e. 55800 m<sup>2</sup> out of total area of the project 161880 m<sup>2</sup>. The estimated project cost is Rs. 195.09 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15.65 crores and the Recurring cost (operation and maintenance) will be approx. Rs. 2.0 Crores per annum. Total Employment will be 200 persons as direct & 300 persons indirect. Industry proposes to allocate Rs 100 Lakhs towards CorporateEnvironment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance

from the project site. River/ water body Shivrath River is flowing at a distance of 4.8 km in W direction.

Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> December 2020 to 28<sup>th</sup> February 2021 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (69.8-72.3) µg/m<sup>3</sup>, PM<sub>2.5</sub> (26.5-28.8 µg/m<sup>3</sup>), SO<sub>2</sub> (9.1- 10.0µg/m<sup>3</sup>) and NO<sub>2</sub> (17.9-18.0µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.44 µg/m<sup>3</sup>, 0.15 µg/m<sup>3</sup>, 0.9 µg/m<sup>3</sup> and 0.9 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub> Sox and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total raw water requirement is 990 m<sup>3</sup>/day which will be met from Shivrath River and collected rain water. PP has already applied for permission of surface water from State Water Resource Department Government of Chhattisgarh. The project proponent has received firm assurance from the SIPB and WRD for grant of required surface water. During the process 672 m<sup>3</sup>/day waste water will be treated online through condensate polishing unit (CPU)/ or ETP having more than 1750 Cubic Meter per day treatment capacity. After treatment 205 m<sup>3</sup>/day will be returned to MEE/ MVR for evaporation and Vapour recovery. This way Zero Liquid discharge will be maintained. There will be no effluent generated or discharged from the Battery Limits.

Power requirement will be 5 MW and will be met from 5 MW Captive Co-gen power plant Additionally 1000 kVA x 2 nos. of DG sets will be used as standby during power failure. Stack (height of 30meters) will be provided as per CPCB norms to the proposed DG sets. A grid Back up from CSPDCL will be obtained to maintain the Power fluctuation in demand and supply. The unit proposes to install a 45 TPH biomass/ coal fired boiler. Electro-static precipitator with a stack of height of 56m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

Sl. No.	Stack attached to	Ht. (m)	Dia. (m)	Temp (°C)	Velocity (m/s)	Volumetric Flow Nm <sup>3</sup> /hr	PM	SO <sub>2</sub>	NO <sub>2</sub>	PM	SO <sub>2</sub>	NO <sub>2</sub>
							(gm/sec)			(TPA)		
Bioethanol plant												
1.	COGEN power 5 MW	56	2.1	130	6.50	81000	1.2	2.5	2.5	37.8	78.8	78.8
2.	DG set 2x1000 KVA	30	0.3	115	10	1953.4	0.04	0.001	0.8	1.3	0.03	25.2

Note: Emission Calculation based on PM concentration 50 mg/NM<sub>3</sub>; SO<sub>x</sub> and NO<sub>x</sub> concentration @ 100 mg/NM<sub>3</sub> each.

S. No.	Name of Process	Type of Equipment	Emission controlled
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1	Distillery Plant with Material Handling	1.Dust extraction system, ESP with Chimney 2. Bag Filters for Grain house; and transfer points. Total 2 Nos.	PM - 50 mg/Nm <sup>3</sup>
2	Co-Generation power plant	ESP with Chimney And 2 Bag Filters at Coal conveyors	PM - 50 mg/Nm <sup>3</sup> SO <sub>2</sub> - 100 mg/Nm <sup>3</sup> Nox - 100 mg/Nm <sup>3</sup> Mercury (Hg) - 0.03 mg/Nm <sup>3</sup>

### **Details of Solid waste/ Hazardous waste generation and its management**

<b>Name of Solid Waste</b>	<b>Qty (TPA)</b>	<b>Disposal / Utilization</b>
Rice Husk Ash with Waste Media	14385.00	To be given free for Brick Making; Cement Plant or for back filling of Mined out land area
ETP sludge from waste water treatment plant	175.00	Will be used in brick making after drying or would be given to Cement plant.
Sludge from CPU	1425.00	Will be given to farmers as high potash manure
STP Sludge from Human Sewage treatment and Food waste	15.00	To be used in composting and then applied on green belt
Total (of Highest):	16000.00	

### **Hazardous & e-waste Management**

The plant facility will result in generation of about 5 kL/year of spent oils (lubricants and transformer oil), which will be stored on site and sold to authorized recyclers.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 180 KLPD will be used for manufacturing of fuel ethanol only.

During the deliberations, EAC directed PP to submit revised Layout Plan showing clearly 33% of the total project area earmarked for greenbelt, 15% of the total plant area for parking and storage pond of 60 days capacity.

**Accordingly, proposal was deferred for the needful.**

## **Agenda No. 48.7**

### **Proposed 210 KLD Grain based Ethanol plant with ZLD along with 5.0 MW Captive Power Plant under EBP Programme Raipur Chhattisgarh by M/s MODI BIOTECH PRIVATE LIMITED- Consideration of Environment Clearance.**

**[IA/CG/IND2/246003/2021, J-11011/522/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Gaurang Environmental Solutions Pvt Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed 210 KLD Grain based Ethanol plant with ZLD along with 5.0 MW Captive Power Plant under EBP Programme Raipur Chhattisgarh by M/s Modi Biotech Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR& conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

#### **The details of products and capacity are as under:**

<b>S. No.</b>	<b>Product Details</b>	<b>Capacity</b>	<b>Details</b>
1.	Grain Based Ethanol Plant	210 KLD	. Product- Ethanol (Bio-fuel) . By-product- DDGS (100 TPD) & CO <sub>2</sub> (150 TPD)
2.	Co-generation power plant	5.0 MW	Power

The total land area for the Greenfield project is 71,700 sq. m. Out of the total area, 11,300 Sq. m. is duly converted for industrial use and land use conversion for the remaining 60,400 sq. m. is under process. Industry will develop greenbelt in an area of 33 % i.e. 23,661 m<sup>2</sup> out of total project area.

The estimated project cost is Rs 192 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 32.7 Crore and the Recurring cost (operation and maintenance) will be about Rs 1.124 Crore per annum. Total Employment will be 250 persons (construction phase: 50 & operation phase: 200). Industry proposes to allocate Rs 2.88 Crore @ 1.5 % of project cost toward Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Sakti Nala is flowing adjacent to project site. Nisda dam & Mahanadi are at a distance of 5.9 km from the proposed project site.

Total water requirement is 3024 m<sup>3</sup>/day of which fresh water requirement of 935.5 m<sup>3</sup>/day will be met from Nisda Dam and NOC has been received from SIPB - Directorate of Industries, Chhattisgarh vide letter no 1100/SIPB/2021/1045 dated 24.12.2021. Remaining water requirement will be met Re-circulated water (spent lees & dryer condensate), process condensate, and treated effluent from ETP & STP to the tune of 2088.5 KLD. Process Effluent (Thin slop) & washing effluent to the tune of 716 m<sup>3</sup>/day will be treated in Multi-effect evaporator and process condensate will be recycled for process water makeup. Other effluent streams (CT & boiler blow down, WTP reject, sealing water) to the tune of 229 KLD will be treated in ETP and treated water will be recycled for CT water makeup and washing, thus maintaining ZLD. Domestic effluent & effluent from floor washing to the tune of 17 KLD will be treated in STP and treated water (16 KLD) will be recycled for greenbelt maintenance.

Power requirement will be 4.2 MW and will be met from Co-generation power plant of 5.0 MW. DG sets (1000 KVA X 2 Nos) are proposed as standby during power failure. Stack height (30 m above roof) will be provided as per CPCB norms to the proposed DG sets. 60 TPH x 1no. Rice husk fired boiler will be installed. ESP with a stack of height of 50 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boiler.

#### **Details of process emissions generation and its management:**

- CO<sub>2</sub> generated (150 TPD) during Fermentation Process will be scrubbed, collected and handed over to end users.

#### **Details of Solid waste/Hazardous waste generation and its management:**

- DDGS (100 TPD) will be sold to Cattle/poultry feed manufacturers.
- Rice husk Ash from Boiler (46 TPD) will be supplied to brick manufacturers &/or used as manure.
- ETP sludge (cake) ~0.13 TPD will be handed over to organic

manure manufacturers.

- Residue solids from MEE (after treatment of RO Reject): 0.54 TPD will be sent to authorized TSDF for final disposal.
- Used/Spent oil: ~ 0.5 KL/Annum will be handed over to CPCB authorized recyclers.
- STP sludge (cake) ~ 2 kg/day will be used as manure for landscaping within premises.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 210 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC observed that Sakti Nallah is flowing just adjacent to the project and asked PP whether the proposed site is safe from flood level line. In this regard PP informed that the proposed plant is at least 3-4 m above the altitude of adjacent nala. However, EAC suggested that PP should consider at least previous 10 years of the flood level line of the proposed location and also obtain NOC from Water Resources Deptt that the proposed site is safe from flood zone. No construction shall be started before obtaining NOC. Further, EAC directed PP to submit an undertaking for the following commitments:

- No form of no waste/effluent or treated water shall be discharged to adjacent nallah.
- At least 15% of the total plant area will be reserved for parking with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Rice husk/Biomass shall be used as fuel in the boiler. Industry shall also consider alternative fuel from rice husk for as rice husk itself can be used as raw material production of Ethanol.
- Industry shall meet at least 10% of its power requirement through renewable energy.
- The proposed budget of Rs. 2.88 crores towards CER be increased to Rs. 3.00 crores and shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 60 Lakhs per annum.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 210 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). Industry should consider at least previous 10 years of the flood level line of the proposed location and also obtain NOC from Water Resources Dept that the proposed site is safe from flood zone. No construction shall be started before obtaining NOC.
- (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. No form of no waste/effluent or treated water shall be discharged to adjacent nallah.
- (v). Total fresh water requirement shall not exceed 935.5 m<sup>3</sup>/day which will be met from Nisda Dam. 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. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Rice husk/Biomass shall be used as fuel in the boiler. Industry shall also consider alternative fuel from rice husk for as rice husk itself can be used as raw material production of Ethanol. Industry shall meet at least 10% of its power requirement through renewable energy.
- (vii). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate Rs. 60 Lakhs/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.
- (ix). 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.
- (x). 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. PESO certificate shall be obtained.
- (xi). 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.
- (xii). 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.

- (xiii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.
- (xiv). PP proposed to allocate Rs. 3.00 crores towards CER and shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). 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.

## **Agenda No. 48.8**

### **Proposed Grain Based Distillery Project of capacity 60 KLD and 2.2 MW Cogeneration Plant District Muzaffarnagar U.P. by M/S True water Beverages- Consideration of Environment Clearance.**

**[IA/UP/IND2/245254/2021, J-11011/501/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Ecomen Laboratories Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed Grain Based Distillery Project of capacity 60 KLD and 2.2 MW Cogeneration Plant District Muzaffarnagar U.P. by M/S True water Beverages.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

#### **The details of products and capacity are as under:**

Sl.No.	Product details	Existing quantity	Proposed quantity	Total quantity
1	Absolute Alcohol(Ethanol)	---	60 KLD	60 KLD
2.	Cogen Power Plant	-----	2.2 MW	2.2 MW
<b>Total</b>		-----	<b>60KLD</b>	<b>60KLD</b>

Total project area is area is 67540 m<sup>2</sup>. Industry will develop greenbelt in an area of 33 % i.e., 22800 m<sup>2</sup> out of total area of the project.

The estimated project cost is Rs 78.12 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 15 crores and the Recurring cost (operation and maintenance) will be about

Rs 3.1 crores per annum. Total Employment will be 70 persons as direct & 155 persons indirect after commissioning. Industry proposes to allocate 1% of the total investment i.e. Rs. 78.12 Lakhs towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Solani River is flowing at a distance of 3 km in West direction.

Total water requirement is 1916 m<sup>3</sup>/day of which fresh water requirement of 540 m<sup>3</sup>/day will be met from Ground water. The plant will be based on Zero Liquid discharge system.

Power requirement will be 2.0 MW and will be met from 2.2 MW Co-Generation Power Plant. 2 DG sets of 750 KVA and 500 KVA will be used as standby during power failure. Stack (height 3 m) will be provided as per CPCB norms to the proposed DG sets. 20 TPH one fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 45 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

**Stack emissions:** Stack monitoring shall be done in a regular basis, Regular cleaning, inspection and maintenance of air pollution control equipment, Workers will be trained regarding emergency actions to be taken during equipment failure, The whole distillery unit will be provided with facility of inter locking so that any failure of equipment or APCE will result in instant shut down of the complete process.

**Fugitive Emissions:** The fugitive dust (PM) emissions occur from road, raw material unloading and loading, vehicle movement leading to the re-suspension of settled dust, etc. Mitigation measures will be Water application to suppress dust generation, Stabilized concreted earthworks with stone, soil, geotextiles, vegetation, compacting, Use enclosures – covering for stockpiles – tarpaulin, plastic, fences, screens, Keep proper shape of stockpiles (avoid steep slopes and faces), Remove muck from truck tyres and under bodies prior to leaving the plant premises, Minimize the drop height of raw materials, All road surfaces for permanent movement of trucks shall be paved (Concreted), Apply water spray in conjunction with cutting, grinding, drilling, Provide enclosure around mixing process, Use mechanical road sweeping machine for regular cleaning of roads, Use industrial vacuum cleaner for cleaning all shop floors and roofs.

## **Details of Solid waste/Hazardous waste generation and its management:**

Solid wastes generated will be wet cake, yeast sludge and ash from the boiler. Solid waste from the grain based operations generally comprises of fibres and proteins in the form of DDGS, which will be ideally used as Cattle Feed. Yeast sludge will be sent to the sludge drying beds or may be added to the wet cake. ETP sludge (1650 kiloliter/annum) will be dewatered using filter press and will be used as manure. Ash (9669 tonnes/annum) from the boiler will be given to brick manufacturing unit. Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized vendors.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 60 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC observed that Solani River is flowing at a distance of 3 km from the proposed project site. In this regard, EAC informed that no construction shall be started without obtaining the NOC/permission State irrigation department that the proposed site is safe from flood zone. Further, EAC directed PP to submit an undertaking for the following commitments/information:

- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- At least 15% of the total plant area will be reserved for parking with the facilities of toilets, drinking water facility and restrooms.
- The proposed budget of Rs 78.12 Lakhs towards CER shall be spent on installation of solar power in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 60 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). No construction shall be started without obtaining the NOC/permission from State irrigation department that the proposed site is safe from flood zone.
- (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 540 m<sup>3</sup>/day 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. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing plant shall be installed for utilization of fly ash.
- (vii). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate Rs. 50 Lakhs/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.
- (ix). 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.
- (x). 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. PESO certificate shall be obtained.
- (xi). 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.
- (xii). 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.
- (xiii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.

- (xiv). PP proposed to allocate Rs 78.12 Lakhs towards CER shall be spent on installation of solar power in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). 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.

#### **Agenda No. 48.9**

**Proposed 100 KLD Grain Based Ethanol plant along with 2.7 MW Co-generation Power Plant at Kh. No 98, Village Patashi, Tehsil Sohagpur, Dist.- Shahdol, M.P. by M/s SMPRIMAL Process Private Limited.-Consideration of Environment Clearance - Consideration of Environment Clearance.**

**[IA/MP/IND2/237692/2021, J-11011/471/2021-IA-II(I)]**

During deliberation EAC noted that Sone River is at approx. 0.74 km from the proposed project site. EAC opined that given the proximity of a perennial river at such a close distance, the proposal cannot be appraised without confirmation that the proposed project site is safe from flood zone. Accordingly, EAC directed PP to obtain NOC/permission from State irrigation department that the proposed site is safe from flood zone. Accordingly, EAC has decided to return the proposal in present form.

**Accordingly, proposal was returned in present form.**

#### **Agenda No. 48.10**

**Grain Based Distillery Plant 100 KLPD along with Power Generation of 3.5 MW by M/s. Umiam Distillation Private Limited located at EPIP Byrnihat, District - Ri-Bhoi, Meghalaya - Consideration of Environment Clearance.**

**[IA/ML/IND2/239603/2021, J-11011/481/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. AmplEnviron Pvt. Ltd., made a detailed presentation on the salient features of the project.

During the deliberations, PP stated that Umtru River is flowing at a distance of 100 meter from project location. EAC opined that the proposed project location cannot be accepted.

**Accordingly, proposal was returned in present form.**

**07<sup>th</sup> January, 2022 (Friday)**

#### **Agenda No. 48.11**

**Establishment of Grain Based Distillery Plant having Capacity 360 KLD along with 9.0 MW Co Generation Power by M/s. Mash Spirits Pvt. Ltd. located at khata no. – 24, 38, 32, 48, 47, 60, 1, village - Gindolamal Tehsil – Ullunda, District – Sonapur (Subarnapur), Odisha - Consideration of Environment Clearance.**

**[IA/OR/IND2/244920/2021, J-11011/367/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Environmental and Technical Research Centre, Lucknow, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Establishment of Grain Based Distillery Plant having Capacity 360 KLD along with 9.0 MW Co Generation Power by M/s. Mash Spirits Pvt. Ltd. located at khata no. – 24, 38, 32, 48, 47, 60, 1, village - Gindolamal Tehsil – Ullunda, District – Sonapur (Subarnapur), Odisha.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr.No.</b>	<b>Product Details</b>	<b>Quantity</b>
1	Ethanol	360 KLD
2	Co-Gen Power	9 MW

Proposed land area is 10.19 hectares, which is already under the possession of M/s. Mash Spirits Pvt. Ltd. Industry will develop greenbelt in an area of 33 % i.e., 3.517 hectares out of total area of the project. The estimated project cost is Rs 209.39 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 5000 Lakh and the Recurring cost (operation and maintenance) will be about Rs 450 Lakh per annum. Total Employment will be 306 persons as direct & indirect. Industry proposes to allocate Rs 2.09 Crores towards Corporate Environmental Responsibility.

There are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius of the project site. Reserved Forests – Singhasan Reserve Forest at distance of 0.5 km in north direction. River/ water body Mahanadi River flowing at a distance of 3.3 Km in the west direction.

Total water requirement for the Grain based Ethanol Plant will be 5982 KLPD out of which 4067 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 1915 KLPD, which will be, met River water (Mahanadi). Spent Wash (Slops) generation from Distillation, will be sent through separation of suspended solids in Decanter Centrifuge, part Thin Slops are concentrated in multi-effect evaporators to form a Thick (Protein) Syrup, which is mixed with the Wet Cake DWG separated earlier from Decanters. This interim product called DWGS has 30-32% w/w Solids is subject to drying in a rotating steam tube bundle dryer to deliver a value-added by-product – DDGS – Distillers Dried Grains with soluble and which has min. 90% Solids and max 10% moisture. This DDGS sells as Cattle Feed / Poultry Feed / Fish Feed based on its Protein Content. Hence, entire spent wash is decanted, concentrated into syrup in a Multi-Effect Evaporation followed by Drying, in order to achieve Zero Effluent Discharge. Effluent of 1964 KLPD quantity will be treated through state of art CPU/Effluent Treatment Plant

of 2500 KLPD capacity (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid Discharge system.

Power requirement for proposed project will be 8000 KWH (maximum) will be met from Co-generation power plant of 9.0 MW. Unit has proposed 1 no of boiler of capacity 75 TPH. Electro Static Precipitator (ESP) with a stack of height of 72 m will be installed for controlling the particulate emissions within the statutory limit of 50mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

- ESP with a stack height of 72 m will be installed for controlling the particulate emissions. Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO<sub>2</sub> generated (260 TPD) during the fermentation process will be collected by utilizing CO<sub>2</sub> scrubbers and sold to authorized vendors.

#### **Details of Solid waste/Hazardous waste generation and its management:**

<b>Waste</b>	<b>Quantity</b>	<b>Uses / Disposal</b>
Total Ash	11.88 MT/Day	Will be provided to Brick Manufacturer / Cement Industry. During non availability of Rice Husk, Coal will be utilised as fuel. Coal based fly ash generation will be 50 MT/day which will be provided to Brick Manufacturer / Cement Industry.
Condensate polishing unit sludge	2.5 KLD	Used as manure.
Cattle Feed DDGS	150 MT/Day	Will be sold as cattle feed.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 360 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- PP shall install ESP with the proposed boiler.
- Biomass shall be only used as fuel in boiler.

- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- 15% of the total plant area will be reserved for parking.
- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- PP shall allocate at least Rs. 60 Lakhs for Occupational Health Safety.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- CO<sub>2</sub> bottling plant shall be installed within plant premises.
- PP shall meet 10% of the total power requirement from solar power.
- The proposed budget allocation Rs. 2.09 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- PP shall not be allowed to start construction of the project without prior permission from concerned Irrigation Department.

PP has submitted the desired information as sought above.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 360 KLD shall be 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.
- (ii). 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.
- (iii). 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.
- (iv). PP shall not be allowed to start construction of the project without prior permission from concerned Irrigation Department. Total Fresh water requirement shall not exceed @4.0 KL/KL and will be met from River water (Mahanadi). 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use biomass only as a fuel of boiler. PP shall meet 10% of the total power requirement from solar power.

- (vi). CO<sub>2</sub> bottling plant shall be installed within plant premises.
- (vii). PP shall allocate at least Rs. 60 Lakhs 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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). 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.
- (xiii). PP proposed to allocate Rs. 2.09 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- (xiv). 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.

- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

### **Agenda No. 48.12**

**Proposed 360 KL/Day Grain Based Distillery Project along with 9 MW Co- Generation Power Plant and ZLD Unit by M/s. Mash Bio-Fuels Pvt. Ltd. located at Village Panimura Jungle, Tehsil Tarbha, District-Subranpur, Odisha - Consideration of Environment Clearance.**

**[IA/OR/IND2/244936/2021, J-11011/368/2021-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Vardan Environet, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed 360 KL/Day Grain Based Distillery Project along with 9 MW Co-Generation Power Plant and ZLD Unit by M/s. Mash Bio-Fuels Pvt. Ltd. located at Village Panimura Jungle, Tehsil Tarbha, District-Subranpur, Odisha.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr. No.</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1	Ethanol	0.0	360 KL/Day	360 KL/Day
2	Power (through Co-Gen Power Plant)	0.0	9 MW	9 MW

Total area for proposed project is 40.0 Acre. About 14.50 Acre area (36.25 % of total project area) proposed for greenbelt development. The estimated project cost is Rs. 209.39 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 822.4 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 115.65 Lakhs per annum. During Operation Phase man power requirement will be estimated 100 Nos. and during construction phase it is estimated as 250 No. Industry proposes to allocate Rs. 299.75 Lakhs approx. 1.09 % towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Tel River is flowing towards E direction within 2. Km from project site. Nibruti Nadi is flowing towards W direction at approx. 6 km from the project site and Suktel River is crossing towards NW direction at 6.0 km from the project site.

Total water consumption in the project will be 1915 KLD which will source from Tel River (Surface Water source). Condensate Polishing Unit (CPU) has been proposed along with Tertiary Treatment for Recycling. RO unit, UV, ACF has been proposed to ensure Zero Liquid Discharge (ZLD). No effluent will be discharged outside the plant premises.

Power requirement for the project is 8.0 MW. Total power requirement for the unit will be sourced from Co-Gen Power Plant of 9.0 MW capacity. Husk based boiler of 75 TPH capacity with TG set of 9 MW capacity. Quantity of Husk will be 650 TPD. D.G. sets of 1 x 1250 KVA and 1 x 500 KVA will be installed for the power backup.

**Details of process emissions generation and its management:**

The major sources of air emissions from the proposed projects include non-point and point source emissions. The major sources of air pollution from the proposed projects will be from flue gas emission, process emission and vehicular emissions. Electrostatic Precipitator will be provided as air pollution control equipment for proposed boiler. The emissions from the boiler are passed through ESP before releasing into atmosphere through the stacks. The proposed boiler stack heights of 69 m will be provided for proper dispersion of the air pollutants.

**Details of Solid waste/Hazardous waste generation and its management:**

<b>Type of Waste</b>	<b>Quantity (TPA)</b>	<b>Storage</b>	<b>Utilization/ Disposal</b>
DDGS – (by product) (Dried distillers' grains with soluble)	58,400	Covered shed	Sold as Cattle Feed, Poultry & Fisheries. Required agreement will be done.
Ash from CPP	23725	Silo	Disposed to brick/cement manufacturing plants. Required agreement will be done.
Waste papers/Boxes	7.5	Covered shed	to recyclers. Required agreement will be done.
Used Oil	2.5 KL	HDPE drums in covered shed	Given to authorized recycler. Required agreement will be done.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 360 KL/Day will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- PP shall install ESP with the proposed boiler.
- Biomass shall be only used as fuel in boiler.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- 15% of the total plant area will be reserved for parking.
- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- PP shall allocate at least Rs. 60 Lakhs for Occupational Health Safety.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- CO<sub>2</sub> bottling plant shall be installed within plant premises.
- PP shall meet 10% of the total power requirement from solar power.



- The proposed budget allocation Rs. 2.99 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- PP shall not be allowed to start construction of the project without prior permission from concerned Irrigation Department.

PP has submitted the desired information as sought above.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 360 KL/Day shall be 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.
- (ii). 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.
- (iii). 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.
- (iv). PP shall not be allowed to start construction of the project without prior permission from concerned Irrigation Department. Total Fresh water requirement shall not exceed @4.0 KL/KL and will be met from Tel River (Surface Water source). 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use biomass only as a fuel of boiler. PP shall meet 10% of the total power requirement from solar power.
- (vi). CO<sub>2</sub> bottling plant shall be installed within plant premises.
- (vii). PP shall allocate at least Rs. 60 Lakhs 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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.

- (x). 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.
- (xi). 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.
- (xii). 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.
- (xiii). PP proposed to allocate Rs. 2.99 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- (xiv). 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.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

### **Agenda No. 48.13**

**Grain Base Distillery Project of 125 KLD Fuel Ethanol Plant along with Co-gen Plant of 4 MW (By Product: 60-65 TPD of CO<sub>2</sub> Generation & 55 TPD of DDGS) by M/s. Oasis Distilleries Ltd. located at Khasra No. 381/2, 382, 383, 384/1, 384/2, 386, 386/1 Village- Borali, Tehsil-Badnawar, Dist-Dhar, Madhya Pradesh - Consideration of Environment Clearance.**

**[IA/MP/IND2/248707/2021, IA-J-11011/2/2022-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services, Bhopal (MP), made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Grain Base Distillery Project of 125 KLD Fuel Ethanol Plant along with Co-gen Plant of 4 MW (By Product: 60-65 TPD of CO<sub>2</sub> Generation & 55 TPD of DDGS) by M/s. Oasis Distilleries Ltd. located at Khasra No. 381/2, 382, 383, 384/1, 384/2, 386, 386/1 Village- Borali, Tehsil-Badnawar, Dist-Dhar, Madhya Pradesh.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr No</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1.	Fuel Ethanol	Nil	125 KLD of fuel ethanol	125 KLD of fuel Ethanol
2	Co generation of Power	Nil	4 MW	4 MW
3	DDGS	Nil	55 TPD	55 TPD

The acquired land area is 19.064 acres with proposed built-up area of 4.6 acres. Green belt will be developed in area of 33 % i.e. 6.5 acres of area with 5200 number of trees within 02 years of time. The estimated project cost is Rs. 135 Crore. Total capital cost for environmental measures is

proposed as Rs. 2236.44 Lacs. The recurring cost (operation and maintenance) will be about Rs. 92 Lacs per annum. Total Employment will be 100 persons as direct & 90 persons as indirect after the commissioning of project. Industry proposes to allocate Rs. 70 Lacs (0.5% of project cost) towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. No Major River N is flowing within 10 km from the site.

Total water requirement is estimated to be 1426 KLD and after recycling & reuse of 966 KLD of water, net fresh water requirement is estimated to be 460 KLD (3.83 KI per KI) which will be supplied by MPIDC (MP). Spent wash of 585 KLD will be treated through Multi Effect Evaporator with thermal recompression for thin slops evaporation and followed by CPU . The plant will be based on zero liquid discharge concept.

Power requirement for the project will 2.5 and will be met from Co-generation unit of 4 MW and MPSEB. One DG set of 1000 KVA is also proposed as alternative source of power. Unit will have 01 boilers of 35 TPH, which will be husk fired. ESP with a stack having height of 42 mt will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for proposed boiler.

### **Details of process emissions generation and its management:**

PM, SO<sub>2</sub>, NO<sub>x</sub> will be generated from the fuel combustion. Following measures are proposed for implementation:

- Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter for proposed fuel ethanol plant.
- Provision of Good quality of coal for boiler having sulphur less than 0.5%.
- Provision of Adequate stack height of 42 mt for boiler and 30 mt for the DG set.
- Provision of Dust collectors system at various material transfer points.
- Provision of Online continuous monitoring system for stack of boiler.
- Provision of regular monitoring of Ambient Air Quality.
- Development of green belt in time bound manner in consultation with forest department.
- Provision of Dense phase conveying system for ash handling to prevent the fugitive emission.
- Provision of enclosure for all the loading & unloading operations, where ever required.
- Provision of cover over coal conveyors belt along with dust suppression system.
- Provision of dust mask for workers and instruction of compulsory use.

- CO<sub>2</sub> generated during the fermentation process will be collected by utilizing CO<sub>2</sub> Scrubbers.

**Details of Solid waste/Hazardous waste generation and its management:**

<b>Detail of by Products / Solid/Hazardous Waste and Management</b>				
<b>Type Of Waste</b>	<b>Quantity (proposed)</b>	<b>Storage</b>	<b>Utilization/ Disposal</b>	
DDGS (by product)	55 TPD	Covered shed	Sold as cattle feed directly	
Boiler ash	25 - 30 TPD	Silo	Ash will be utilized in in-house brick manufacturing facility and balance will be supplied to nearby brick manufacturers.	
Used Oil	< 500 lit per year	HDPE drums in covered shed	Given to re-cycler authorized by MPPCB/MoEF	
Waste Resin From DM plant	Nil	Store in MS Drums	Shall be disposed off at TSDF, Pithampur	

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 125 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Agro fuel shall be only used as fuel in boiler.
- PP shall install ESP with the proposed boiler.
- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.
- PP shall meet 10% of the total power requirement from solar power.
- 15% of the total plant area will be reserved for parking.
- CO<sub>2</sub> bottling plant shall be installed within plant premises.

- The proposed budget allocation Rs. 1.35 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.

PP has submitted the desired information as sought above.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 125 KLD shall be 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.

- (ii). 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.
- (iii). 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.
- (iv). Total Fresh water requirement shall not exceed @3.83 KL/KL and will be met from supplied by MPIDC (MP). 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use agro fuel only as a fuel of boiler. PP shall meet 10% of the total power requirement from solar power.
- (vi). CO<sub>2</sub> bottling plant shall be installed within plant premises.
- (vii). PP shall allocate at least Rs. 50 Lakhs 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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.



- (xi). 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.
- (xii). 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.
- (xiii). PP proposed to allocate Rs. 1.35 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.
- (xiv). 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.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

#### **Agenda No. 48.14**

**Grain Base Distillery Project of 200 KLD Fuel Ethanol Plant along with Co-gen Plant of 4.8 MW (By Product: 98 TPD of CO<sub>2</sub>)**

**Generation & 102 TPD of DDGS) by M/s. Mahakaushal Distillery Pvt. Ltd. located at Plot 61-, Umriya-Dungariya Industrial Area Phase-II, District – Jabalpur, Madhya Pradesh – Re-consideration of Environment Clearance.**

**[IA/MP/IND2/242840/2021, J-11011/511/2021-IA-II(I)]**

The proposal was earlier placed before the EAC (Ind-2) in its 46<sup>th</sup> meeting held during 13<sup>th</sup> – 14<sup>th</sup> December, 2021 wherein EAC deferred the proposal as PP/consultant intimated that they were not able to attend this meeting due to personal reason.

Again, the case has been placed in 48<sup>th</sup> EAC meeting held during 06-07<sup>th</sup> January, 2022.

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services, Bhopal (MP), made a detailed presentation on the salient features of the project.

The proposal is for environmental clearance to the project for Grain Base Distillery Project of 200 KLD Fuel Ethanol Plant along with Co-gen Plant of 4.8 MW (By Product: 98 TPD of CO<sub>2</sub> Generation & 102 TPD of DDGS) by M/s. Mahakaushal Distillery Pvt. Ltd. located at Plot 61-, Umriya-Dungariya Industrial Area Phase-II, District – Jabalpur, Madhya Pradesh.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr No</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1.	Fuel Ethanol	Nil	200 KLD of fuel ethanol	200 KLD of fuel Ethanol
2	Co generation of power	Nil	4.8 MW	4.8 MW
3	DDGS	Nil	102 TPD	102 TPD

The acquired land area is 8.0 ha with proposed built-up area of 27000 sq mtrs. Green belt will be developed in area of 33 % i.e. 2.65 ha of area with 5300 number of trees within 02 years of time. The estimated project cost is Rs. 220 Crore. Total capital cost for environmental measures is proposed as Rs. 1842 Lacs. The recurring cost (operation and maintenance) will be about Rs. 81 Lacs per annum. Total Employment will be 92 persons as direct & 100 persons as indirect after the commissioning of project. Industry proposes to allocate Rs. 110 Lacs (0.5% of project cost) towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Major River Narmada is flowing 7.50 km away from the site.

Total water requirement is estimated to be 2862 KLD and after recycling & reuse of 2062 KLD of water, net fresh water requirement is estimated to be 803 KLD (4.0 KI per KI) which will be supplied by MPIDC Dist Jabalpur (MP). Spent wash of 1300 KLD will be treated through Multi Effect Evaporator with thermal recompression for thin slops evaporation and followed by CPU. The plant will be based on zero liquid discharge concept.

Power requirement for the project will 3185 KWH and will be met from Co-generation unit of 4.8 MW and MPSEB. Unit will have 01 boilers of 42 TPH, which will be husk fired. ESP with a stack having height of 52 mt will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>) for proposed boiler.

### **Details of process emissions generation and its management:**

PM, SO<sub>2</sub>, NO<sub>x</sub> will be generated from the fuel combustion. Following measures are proposed for implementation:

- Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter for proposed fuel ethanol plant.
- Provision of Good quality of coal for boiler having sulphur less than 0.5%.
- Provision of Adequate stack height of 52 mt for boiler and 30 mt for the DG set.
- Provision of Dust collectors system at various material transfer points.
- Provision of Online continuous monitoring system for stack of boiler.
- Provision of regular monitoring of Ambient Air Quality.
- Development of green belt in time bound manner in consultation with forest department.
- Provision of Dense phase conveying system for ash handling to prevent the fugitive emission.
- Provision of enclosure for all the loading & unloading operations, where ever required.

- Provision of cover over coal conveyors belt along with dust suppression system.
- Provision of dust mask for workers and instruction of compulsory use.
- Regular maintenance, green belt along the road and water spraying arrangement over approach road of the unit meeting to NH-12.
- CO<sub>2</sub> generated during the fermentation process will be collected by utilizing CO<sub>2</sub> Scrubbers.

**Details of Solid waste/Hazardous waste generation and its management:**

<b>Detail Of By Products / Solid/Hazardous Waste And Management</b>			
<b>Type Of Waste</b>	<b>Quantity</b>	<b>Storage</b>	<b>Utilization/ Disposal</b>
DDGS - ( by product)	102 TPD	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Boiler ash	70 TPD	Silo	Brick making or land filling
Waste papers/Boxes	1.5-2 TPD	Covered shed	to recyclers
Used Oil	< 500 lit per year	HDPE drums in covered shed	Given to re-cycler by authorized MPPCB/MoEF
Spent Resin from DM Plant	<50Kg/Yr	HDPE drums in covered shed	Given to re-cycler by authorized MPPCB/MoEF
ETP sludge	55 MT/DAY	Covered shed	AS MANURE

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Agro fuel shall be only used as fuel in boiler.
- PP shall install ESP with the proposed boiler.

- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.
- PP shall meet 10% of the total power requirement from solar power.
- 15% of the total plant area will be reserved for parking.
- CO<sub>2</sub> bottling plant shall be installed within plant premises.
- The proposed budget allocation Rs. 2.20 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.

PP has submitted the desired information as sought above.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 200 KLD shall be 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.
- (ii). 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.
- (iii). 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.
- (iv). Total Fresh water requirement shall not exceed @4.0 KL/KL and will be supplied by MPIDC Dist Jabalpur (MP). 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use agro fuel only as a fuel of boiler. PP shall meet 10% of the total power requirement from solar power.
- (vi). CO<sub>2</sub> bottling plant shall be installed within plant premises.
- (vii). PP shall allocate at least Rs. 50 Lakhs 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.
- (viii). 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.

- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). 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.
- (xiii). PP proposed to allocate Rs. 2.20 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.
- (xiv). 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.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

#### **Agenda No. 48.15**

#### **Proposed 100 KLD Grain based distillery project alongwith 2.7 MW Cogeneration Plant at Mor, Mokama, Dist. Patna (Bihar) By M/s BRAJENDRA KUMAR BUILDERS PRIVATE LIMITED- Re-consideration of Environment Clearance.**

**[[IA/BR/IND2/228946/2021, J-11011/360/2021-IA-II(I)]**

The proposal was considered in 42<sup>nd</sup> EAC meeting held during 20<sup>th</sup> – 22<sup>nd</sup> October, 2021 wherein proposal was deferred due to non-submission document related with conversion of land use to industrial purpose. PP has now submitted it and EAC found it in order.

The Project Proponent and the accredited Consultant M/s. Paramarsh Servicing Environment & Development made a detailed presentation on the salient features of the project.

The proposal is for environmental clearance to the project proposed 100 KLD Grain based distillery project alongwith 2.7 MW Cogeneration Plant at Mor, Mokama, Dist. Patna (Bihar) by M/s Brajendra Kumar Builders Pvt. Ltd.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR& conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

#### **The details of products and capacity are as under:**

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol	0	100 KLD	100 KLD
2	Power Cogeneration	0	2.7 MW	2.7 MW
3	DDGS	0	42 TPD	42 TPD

Total land area is 8.32 Ha. which will be used for proposed Grain Based Distillery Project. Permission for land conversion has been obtained from Govt. of Bihar vide letter No. 2601 Dt: 16.12.2021. Industry will develop



greenbelt in an area of 33 % i.e., 2.75 Ha. (27500 m<sup>2</sup>) out of total area of the project.

The estimated project cost is Rs 140 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 7.40 Crores and the Recurring cost (operation and maintenance) will be about Rs 1.60 Crores per annum. Total Employment will be 75 persons as direct & 50 persons indirect. Industry proposes to allocate Rs. 2.1 Crores @ of 1.5 % towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River BudhiGandak is flowing at a distance of 10 Km. in North direction.

Total water requirement is 1633 m<sup>3</sup>/day of which fresh water requirement of 665 m<sup>3</sup>/day will be met from proposed 2 nos. Borewells. Effluent of 1074 m<sup>3</sup>/day quantity will be treated through MEE and Condensate Polishing Unit followed by ACF & PSF. The plant will be based on Zero Liquid discharge system.

Power requirement will be 3000 KVA and will be met from Captive Power Plant. 500 KVA DG sets will be used as standby during power failure. Stack (height 15 m.) will be provided as per CPCB norms to the proposed DG sets. 30 TPH Rice Husk/Coal fired boiler will be installed. ESP with a stack of height of 60 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM<sup>3</sup> for the proposed boiler.

#### **Details of process emissions generation and its management:**

- Boiler will be equipped with ESP for controlling process emission. Bag filters with dust collectors will be installed in Grain handling & milling area and DDGS Dryer section to minimize fugitive emissions.

#### **Details of Solid waste/Hazardous waste generation and its management:**

Boiler Ash (30 TPD) & ETP Sludge (50 Kg/Day) will be generated as solid waste from the proposed distillery project. Waste lube oil from DG Sets will be generated as Hazardous Waste. Boiler ash will be sold to fly ash bricks manufacturing units. ETP Sludge will be reused as biocompost for green belt development.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 100 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- At least 15% of the total plant area will be reserved for parking with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Continuous Ambient Air Quality Monitoring system shall be installed within plant and it shall be connected to SPCB server.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- The proposed budget of Rs. 2.10 crores towards CER shall be spent on upgradation of infrastructure in public schools and installation of solar power in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). 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.
- (iii). 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.
- (iv). Total fresh water requirement shall not exceed of 665 m<sup>3</sup>/day will be met from proposed bore wells. 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. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP proposed to allocate Rs. 50 Lakhs/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.

- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.
- (xiii). The proposed budget of Rs. 2.10 crores towards CER shall be spent on upgradation of infrastructure in public schools and installation of solar power in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xvii). 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.

#### **Agenda No. 48.16**

**On shore Oil & Gas exploration in Deomali PEL area in Tirap and Changlang Districts by M/s. Oil India Limited (NEF PROJECT) located at Districts Tirap and Changlang, Arunachal Pradesh- Re-consideration of Environment Clearance reg.**

**[IA/AR/IND2/56550/2013, J-11011/98/2013-IA II (I)]**

The Project Proponent and the accredited Consultant M/s. SENES Consultants India Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for On shore Oil & Gas exploration in Deomali PEL area in Tirap and Changlang Districts by M/s. Oil India Limited (NEF PROJECT) located at Districts Tirap and Changlang, Arunachal Pradesh.

The proposal was earlier recommended in 12<sup>th</sup> EAC meeting held during 23<sup>rd</sup> -24<sup>th</sup> August, 2016 wherein the project was recommended by EAC on submission of Stage-I Forest Clearance for the forest land involved in the proposed project and NBWL clearance.

PP submitted the ADS reply and project was placed in 41<sup>st</sup> and 42<sup>nd</sup> EAC meeting held during 28<sup>th</sup> -30<sup>th</sup> September, 2021 and 20<sup>th</sup> - 22<sup>nd</sup> October, 2021. PP did not attend both the EAC meetings. Subsequently, EAC informed that if the proposal has been pending just for submitting required clearances the same may be checked by the Ministry and if found adequate, proposal may be recommended as per earlier recommendation. In this regard, PP submitted Stage-I FC in ADS reply but till date NBWL clearance was not obtained as mentioned in the earlier deliberations of the 12<sup>th</sup> EAC meeting held during 23<sup>rd</sup> -24<sup>th</sup> August, 2016.

In view of the above, EAC **recommended** this proposal on submission of Stage I forest clearance subject to clearance from NBWL.

On further examination and inadequate submissions, the competent authority decided that this proposal should be further deliberated in the EAC inviting the PP again. Accordingly, proposal was re-considered by the EAC in its 48<sup>th</sup> meeting held on 06<sup>th</sup> -07<sup>th</sup> January, 2022 in the Ministry wherein the project proponent and their consultant made a detailed presentation.

The proposal was earlier recommended by EAC for 03 wells (DML-1, DML-2 & DML-3) subject to submission of Stage I forest clearance. During deliberation, PP stated and EAC found that Stage-I FC was obtained only for two wells (DML-1, & DML-3). Third well location (DML-2) FC was still awaited. Further, PP also informed that NBWL clearance of Dehing Patkai National Park is awaited.

PP has also requested EAC to grant Environment Clearance for Location-A/B (DML 3/1) for exploratory drilling where Stage-I FC has already been granted and assured that OIL will drill both the locations (DML 3/1) from single plinth whereas location C (DML-2) will be drilled only after obtaining Forest Clearance.

EAC noted that:

- PP has Submitted partial Stage-I Forest Clearance after the lapse of five years and without any concrete proposal. Third well location stage-I FC is pending.
- NBWL clearance of Dehing Patkai National Park is still awaited.
- The baseline data is older than three years which is contravention to the extant rules.
- ToR & PH data are also more than three year old.

In this regard, EAC informed that the PP & consultant should take more care while submitting the proposal. Further, EAC opined that considering the proposal being submitted in 2016, details/data submitted are of obsolete in nature and the ground status of the proposed site and the surroundings of the location might have been changed a lot. In the view of the above, EAC informed PP to submit a fresh proposal by revising and revalidating the whole data and decided to return the proposal in present form.

**Accordingly, proposal was returned in present form.**

#### **Agenda No. 48.17**

**Proposed expansion of Distillery unit from 48 KLPD to 168 KLPD (using Sugar syrup/ B-Heavy molasses /grains as raw materials) by M/s. E.I.D. - Parry (India) Limited located at Sankili Village, Regidi Amadalavalasa Mandal, Srikakulam District, Andhra Pradesh - Consideration of Environment Clearance.**

**[IA/AP/IND2/50730/2014, J-11011/157/2003-IA-II (I)]**

The proposal was earlier placed before the EAC (Ind-2) in its 46<sup>th</sup> meeting held during 13<sup>th</sup> – 14<sup>th</sup> December, 2021 wherein EAC deferred the proposal due to incomplete information/details.

Information desired by the EAC and responses submitted by the project proponent is as under:

<b>S. No</b>	<b>ADS</b>	<b>Reply of PP</b>	<b>Observation of EAC</b>
1.	During deliberations, EAC directed PP to submit Certified Action Taken Report from concerned IRO, MoEFCC for non-compliances mentioned in Certified Compliance Report.	PP has submitted Certified Action Taken Report from concerned IRO, MoEFCC for non-compliances mentioned in Certified Compliance Report.	EAC deliberated the issue and found it satisfactory.

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed expansion of Distillery unit from 48 KLPD to 168 KLPD (using Sugar syrup/ B-Heavy molasses /grains as raw materials) by M/s. E.I.D. - Parry (India) Limited located at Sankili Village, Regidi Amadalavalasa Mandal, Srikakulam District, Andhra Pradesh.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17<sup>th</sup> January 2019 & extension of notification S.O. 750(E) dated 17<sup>th</sup> February 2020, S.O 980(E) dated 02<sup>nd</sup> March, 2021. Accordingly, the proposal has been appraised as category 'B2' project.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 2<sup>nd</sup> March, 2021 and 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

Ministry had issued EC earlier vide EC letter No. F. No. J-11011/157/2003-IA-II dated 08/09/2004 to the existing project 40 KLPD distillery plant and EC letter F. No. J-11011/270/2007-IA II (I) dated 17-08-2007 for expansion of Sugar plant from 2500 TCD to 5000 TCD. Later EC amended on 25-02-2015 for treatment of spent wash. SEIAA, Andhra Pradesh has issued EC for expansion of Distillery unit from 40 KLD to 48 KLD vide EC letter no. SEIAA/AP/SKLM/IND/11/2019/1455 dated 10-09-2020.

Existing plant is having valid Consent For Operation issued by Andhra Pradesh State Pollution Control Board vide order No.

APPCB/VSP/VSP/331/HO/CFO/2021 dated 15<sup>th</sup> November, 2021 and same is valid up to 28<sup>th</sup> February, 2026.

Certified Compliance Report (CCR) on existing Environmental clearance order was issued by IRO, MOEFCC Vijayawada vide letter No. IRO/VIJ/EPA/MISC/111-01/2021 dated 19/08/2021. Action Taken Report towards Non- complied/Partly Complied conditions observed by IRO; MoEFCC, Vijayawada submitted vide letter No. IRO/VIJ/EPA/MISC/111-01/2021/01 dated 04.01.2022. ATR is found satisfactory by the EAC and recommended the proposal.

**The details of products and capacity are as under:**

S. No.	Unit	Product/ By Product	Existing Capacity	Expansion Capacity	After Expansion Capacity
1.	Distillery	Rectified Spirit / ENA / Ethanol /	48 KLPD	120 KLPD (only Ethanol)	168 KLPD
2.	Co-generation power plant	Electricity	16MW	-	16 MW
3.	Sugar	Sugar	5000 TCD	--	5000 TCD
4.	Power from incineration boiler	Electricity	1.06 MW	--	1.06 MW

Existing land area is 8,36,000 m<sup>2</sup> and no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33.9% i.e 2,83,400 m<sup>2</sup> out of total area of project. The estimated project cost for expansion project is Rs. 100 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.0 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.0 Crores per annum. Total Employment will be 100 persons as direct & 100 persons indirect after expansion. Industry proposes to allocate Rs. 1.5 Crores @ 1.5 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Nagavali River is flowing at a distance of 1.1 Kms in N direction.

Total water requirement is 1800 m<sup>3</sup> /day of which fresh water requirement of 610 m<sup>3</sup> /day. The water drawl permission has been obtained from irrigation department Govt of Andhra Pradesh for 8,00,000 cubic yards/annum which is valid up to 18-05-2024. Existing permission is sufficient & no separate permission will be required. Effluent of 720 m<sup>3</sup> /day quantity will be treated through MEE and Condensate Polishing Unit when grains are used as raw material and treated through MEE followed



by incineration in Boiler when Sugarcane juice / B-Heavy molasses is used as raw material. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 3000 KVA including existing 2000 KVA and will be met from Captive power plant of 1.06 MW and Co-generation power plant of 16 MW. Existing unit has 2 Nos of DG sets of 500 KVA & 1000 KVA of Capacity, additionally 1000 KVA DG sets are used as standby during power failure. Existing unit has 2 x 35 TPH Bagasse Fired Boilers, 10.5 TPH and 15 TPH Incineration boilers. ESP with a stack of height of 45 m has been installed for 2 x 35 TPH boilers for controlling the particulate emissions within the statutory limit of 100 mg/Nm<sup>3</sup>, ESP with a stack height of 40 m has been installed for 10.5 TPH to bring down the emissions within the statutory limit of 100 mg/Nm<sup>3</sup> and Bag filters with a stack of 51 m has been installed for 15 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup>. No additional boilers are proposed for the proposed expansion of Distillery unit from 48 KLD to 168 KLD.

#### **Details of process emissions generation and its management:**

- ESP has been provided to the 2 x 35 TPH boilers to bring down the the particulate matter to below 100 mg/Nm<sup>3</sup>.
- The exhaust gases from the boiler are being discharged into the atmosphere through a stack of 45 m height for effective dispersion of gases into the atmosphere.
- ESP has been provided to 10.5 TPH Boiler to bring down the particulate matter to below 100 mg/Nm<sup>3</sup>.
- The exhaust gases from the boiler are being discharged into the atmosphere through a stack of 40 m height for effective dispersion of gases into the atmosphere.
- Bag filters have been provided to the 15 TPH Boiler to bring down the particulate matter to below 50 mg/Nm<sup>3</sup>.
- The exhaust gases from the boiler are being discharged into the atmosphere through a stack of 51 m height for effective dispersion of gases into the atmosphere.
- CO<sub>2</sub> generated (80.4 TPD) during the fermentation process will be collected by utilizing CO<sub>2</sub> scrubbers and sold to authorized vendors.

#### **Details of Solid waste/Hazardous waste generation and its management:**

<b>S. No.</b>	<b>Waste / By product</b>	<b>Quantity (TPD) after proposed expansion project</b>	<b>Proposed method of disposal</b>
1.	Ash from the boilers (2 x 35 TPH)	60	Is being given to brick manufacturing units. The same will be followed after proposed

S. No.	Waste / By product	Quantity (TPD) after proposed expansion project	Proposed method of disposal
			expansion project
2.	Filter cake	200	Is being used as manure for greenbelt development / given to farmers. The same will be followed after proposed expansion project
3.	Yeast sludge	2.5	Shall be utilized as organic manure.
4.	K ASH	20	Will be sold as fertilizer
5.	DDGS	108	Will be sold as cattle feed

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 120 KLPD will be for manufacturing of fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- 15% of the total plant area will be reserved for parking.
- PP shall meet 10% (0.3 MW) of the total power requirement from solar power/wind power.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- The proposed budget of CER shall be Rs. 1.5 Crores and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.

PP has submitted the desired information as sought above.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 120 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). 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.

- (iii). 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.
- (iv). Total Fresh water requirement shall not exceed 480 KLD (@4.0 KL/KL) and will be met from irrigation department Govt of Andhra Pradesh. 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed in grain based mode and in molasses based mode, spent wash shall be dried and incinerated. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall meet 10% (0.3 MW) of the total power requirement from solar power/wind power.
- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP shall allocate at least Rs. 50 Lakhs 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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.

- (xii). 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.
- (xiii). PP proposed to allocate Rs. 1.5 Crores and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- (xiv). 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.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

#### **Agenda No. 48.18**

**Greenfield project for manufacturing of Grain Based Bio Ethanol along with CoGeneration power plant by Hayati Beverages Private Limited at Village Bhainsa, Tehsil and District Bemetara of Chhattisgarh by M/S HAYATI BEVERAGES PRIVATE LIMITED –Re-consideration of Environment Clearance.**

**[IA/CG/IND2/222490/2021, IA-J-11011/319/2021-IA-II(I)]**

The proposal was considered in 40<sup>th</sup> EAC meeting held during 14<sup>th</sup> – 16<sup>th</sup> September, 2021 and again in 43<sup>rd</sup> EAC meeting held during 08<sup>th</sup> – 09<sup>th</sup> November, 2021 wherein proposal was deferred due to non-submission document related with conversion of land use to industrial purpose. PP has now submitted it and EAC found it in order.

The Project Proponent and the accredited Consultant M/s. Anacon Laboratories Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed Greenfield project for manufacturing of Grain Based Bio Ethanol plant of 180 KLD along with Co-Generation power plant of 4.5 MW at Village Bhainsa, Tehsil and District Bemetara of Chhattisgarh by M/s Hayati Beverages Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR& conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>S. No</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1.	Bio Ethanol (Denatured Anhydrous Alcohol)	---	180 KLPD (63000 KLA)	180 KLPD (63000 KLA)
2.	Animal Feed Grade Protein (DDGS)	---	29196 MT per annum	29196 MT per annum
3.	CO <sub>2</sub> (Carbon Di-oxide)	---	30544 MT per annum	30544 MT per annum
4.	Co-Generation based Power Plant	---	4.50 MW	4.50 MW

The total land area for the Greenfield project is 106100 sq. m which is diverted for industrial use. Industry will develop greenbelt in an area of 33.93 % i.e.36000 m<sup>2</sup> out of total area of the project.

The estimated project cost is Rs.195.09 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.15.65 crores and the Recurring cost (operation and maintenance) will be approx. Rs. 2.0 Crores per annum. Total Employment will be 200 persons as direct & 300 persons indirect. Industry proposes to allocate Rs 100

lakhs 0.5 % of project cost toward Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Shivnath River is flowing at a distance of 7.6 km in ENE direction.

Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> December 2020 to 28<sup>th</sup> February 2021 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (41.2- 71.2 µg/m<sup>3</sup>), PM<sub>2.5</sub> (15.5 – 30.8 µg/m<sup>3</sup>), SO<sub>2</sub> (06 - 11.8µg/m<sup>3</sup>) and NO<sub>2</sub> (11.6 - 23µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.23 µg/m<sup>3</sup>, 0.75 µg/m<sup>3</sup> and 0.75 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, Sox and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total raw water requirement is 990 m<sup>3</sup>/day which will be met from TulsipausariAnnicut situated in Shivnath River. PP has already applied for allotment of surface water from State Water Resource Department Government of Chhattisgarh. The project proponent has received firm assurance from the SIPB and WRD for grant of required water. During the process 1289 m<sup>3</sup>/day waste water will be treated online through condensate polishing unit (CPU) or ETP. After treatment 871 m<sup>3</sup>/day will be evaporated in Cooling tower, balance will be returned to MEE/ MVR for evaporation and Vapour recovery. This way Zero Liquid discharge will be maintained. There will be no effluent generated or discharged from the Battery Limits.

Power requirement will be 4.5 MW and will be met from 4.50 MW Captive Co-gen power plant Additionally 1000 x 2 nos. of DG sets will be used as standby during power failure. Stack (height of 30meters) will be provided as per CPCB norms to the proposed DG sets. A grid Back up from CSPDCL will be obtained to maintain the Power fluctuation in demand and supply. The unit proposes to install a 45 TPH coal/biomass fired boiler. Electro-static precipitator with a stack of height of 56m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

Sl .	Stack attached to	Ht . ( m )	Dia . ( m )	Temp (°C )	Velocity (m/s )	Volumetric Flow Nm <sup>3</sup> /hr	PM	SO <sub>2</sub>	NO <sub>2</sub>	PM	SO <sub>2</sub>	NO <sub>2</sub>
							(gm/sec)			(TPA)		
	Bioethanol plant											

1.	AFBC COGE N power 5 MW	56	2. 1	130	8.7	81000	1. 12	2.2 5	2. 25	35. 32	70. 96	70. 96
2.	DG set 2x10 00 KVA	30	0. 3	115	10	1953.4	0. 04	0.0 01	0. 8	1.3	0.0 3	25. 2

**Note: Emission Calculation based on PM concentration 50 mg/NM<sub>3</sub>; SO<sub>x</sub> and NO<sub>x</sub> concentration @ 100 mg/NM<sub>3</sub> each**

S. No.	Name of Process	Type of Equipment	Emission controlled
1	Distillery Plant with Material Handling	1. Dust extraction system, ESP with Chimney 2. Bag Filters for Grain house; and transfer points. <b>Total 2 Nos.</b>	PM - 50 mg/Nm <sup>3</sup>
2	Co-Generation power plant	ESP with Chimney And 2 Bag Filters at Coal conveyors	PM - 50 mg/Nm <sup>3</sup> SO <sub>2</sub> - 100 mg/Nm <sup>3</sup> Nox - 100 mg/Nm <sup>3</sup> Mercury(Hg) – 0.03 mg/Nm <sup>3</sup>

**Details of Solid waste/Hazardous waste generation and its management:**

Name of Solid Waste	Qty (TPA)	Disposal / Utilization
Coal Ash with Waste Media	21315.00	To be given free for Brick Making; Cement Plant or for back filling of Mined out land area
(Or Rice Husk Ash with Waste Media)	(14965.00)	To be given free for Brick Making; Cement Plant or for back filling of Mined out land area
STP Sludge from Human Sewage treatment and Food waste	15.00	To be used in composting and then applied on green belt
<b>Total (of Highest):</b>	<b>21330.00</b>	

**Hazardous & e-waste Management:**



The plant facility will result in generation of about 5 kL/year of spent oils (lubricants and transformer oil), which will be stored on site and sold to authorised recyclers.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 180 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- At least 15% of the total plant area will be reserved for parking with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Rice husk/Biomass shall be used as fuel in the boiler. Industry shall also consider alternative fuel from rice husk for as rice husk itself can be used as raw material production of Ethanol.
- Industry shall meet at least 10% of its power requirement through renewable energy.
- The proposed budget of Rs. 1.00 crores towards CER be increased to Rs. 2.00 crores @ 1% total project cost and shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 70 Lakhs per annum.

PP has agreed to the above commitments. However, PP has not submitted undertaking as desired by EAC. In this regard, all the commitments have been imposed as specific conditions.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per OM dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 180 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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.
- (ii). 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.
- (iii). 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.
- (iv). Total fresh water requirement shall not exceed 990 m<sup>3</sup>/day which will be met from Tulsi-Pausari Annicut situated in Shivnath River. 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. Industry shall construct a rainwater storage facility of 60

days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Rice husk/Biomass shall be used as fuel in the boiler. Industry shall also consider alternative fuel from rice husk for as rice husk itself can be used as raw material production of Ethanol. Industry shall meet at least 10% of its power requirement through renewable energy.
- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP proposed to allocate Rs. 70 Lakhs/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.
- (viii). 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.
- (ix). 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. PESO certificate shall be obtained.
- (x). 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.
- (xi). 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.
- (xii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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. Development of greenbelt shall be completed along with commissioning of the project.

- (xiii). PP proposed to allocate Rs. 2.00 crores towards CER and shall be spent on upgradation of infrastructure in public schools in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). 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.

#### **Agenda No. 48.19**

**Additional Exploratory Drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s OIL AND NATURAL GAS CORPORATION LIMITED- Extension in Environment Clearance reg.**

**[IA/AP/IND2/247823/2021, J-11011/68/2011- IA II (I)]**

The Proposal is for extension in the Environmental Clearance granted by the Ministry vide letter No J-11011/ 68/2011- IA II(I) dated 23<sup>rd</sup> March, 2015 for the project additional Exploratory Drilling (28 Wells) in KG (On-land) PML acreages of Krishna District, Additional Exploratory Drilling (24 Wells) in KG Basin on land PML of West Godavari District and Additional Exploratory Drilling (13 Wells) on land PML acreages of East Godavari District, Andhra Pradesh by M/s Oil and Natural Gas Corporation Limited.

The project proponent has requested for extension in the EC with the details as under:

S.no	EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification / reasons
1	Environmental Clearance issued earlier via F. No J-11011/68/2011- IA II(I) dated 23 <sup>rd</sup> March, 2015.	<p>As per Ministry's S.O. 1141(E) dated 29<sup>th</sup> April 2015, validity of Environment Clearance shall be 7 years from the date of issue.</p> <p>Further, Ministry vide its S.O 221(E) dated 18<sup>th</sup> January 2021 notified that the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of prior Environmental Clearances granted due to outbreak of COVID-19.</p> <p>Hence the validity of the EC shall be 22<sup>nd</sup> March, 2023.</p>	Request for extension of the validity of the EC for there (03) years.	EC was granted 65 exploratory wells out of which 28 wells were successfully drilled. The remaining 37 wells could not be taken up as the G&G studies are under progress to analyse the prospectivity of the area. In addition, studies are in progress to understand the subsurface conditions as the identified exploratory locations are of deeper depths with High Pressure and High temperature conditions.

The Expert Appraisal Committee, after detailed deliberations **recommended** for extension of the validity of EC vide letter J-11011/

68/2011- IA II(I) dated 23<sup>rd</sup> March, 2015 till 22<sup>nd</sup> March, 2026 with all other terms and conditions remain unchanged.

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**GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE**

- (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, ZillaParishad/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 31<sup>st</sup> 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.



**List of the Expert Appraisal Committee (Industry-2) members participated during Video Conferencing (VC) meeting**

<b>S. No.</b>	<b>Name and Address</b>	<b>Designation</b>
1.	Dr. J. P. Gupta	Chairman
2.	Sh. R. K. Singh	Member
3.	Dr. Y.V. Rami Reddy	Member
4.	Dr. T. Indrasena Reddy	Member
5.	Sh. S. C. Mann	Member
6.	Sh. Ashok Agarwal	Member
7.	Dr. T. K. Joshi	Member
8.	Dr. J. S. Sharma	Member
9.	Sh. Sanjay Bist, IMD	Member
10.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
<b>MoEFCC</b>		
11.	Dr. Mahendra Phulwaria	Scientist 'C'
12.	Sh. Kanaka Teja	Research Assistant

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