

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

Dated: 07.02.2022

**MINUTES OF THE 49th MEETING OF THE EXPERT APPRAISAL
COMMITTEE**

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 27th-28th 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 48th Meeting of the EAC (Industry-2) held during 06-07th January, 2022 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: -

27th January, 2022 (Thursday)

Agenda No. 49.1

Proposed 150 KLPD Grain based Ethanol Plant along with 3.5 MW Cogeneration power plant at Plot No. 4, Growth Centre Begusarai Industrial Area, Village Asurari, Tehsil Barauni, District Begusarai, Bihar by M/s. New Way Homes Private Limited - Consideration of Environment Clearance.

[IA/BR/IND2/249521/2022, J-11011/1/2022-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 150 KLPD Grain based Ethanol Plant along with 3.5 MW Cogeneration power plant at Plot No. 4, Growth Centre Begusarai Industrial Area, Village Asurari, Tehsil Barauni, District Begusarai, Bihar by M/s. New Way Homes 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 16th 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 16th 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	150 KLPD	Ethanol (Biofuel)
Co-generation Power Plant	3.5 MW	Power

Total project area is 8.09 hectares (80900 m²) and the same has been allotted to the company by Bihar Industrial Area Development Authority (BIADA). Industry will develop greenbelt in an area of 33% i.e., 2.7 ha (27000 m²) out of total area of the project.

The estimated project cost is Rs.160 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 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 100 persons (Permanent 85 & Temporary 15) during operation phase. Industry proposes to allocate Rs. 1.6 Crores (1% of total project cost) towards Corporate Environmental Responsibility.

There are no National Parks, Reserved Forests (RF)/ Protected Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius. Balan Nadi (~ 3.5 km in North direction), Baya Nadi (~ 5.0 km in WSW direction), Ganga River

(~ 6.5 km in SW direction) are the water bodies which lies within 10 km radius.

Total fresh water requirement for the Grain based Ethanol Plant will be 2504 KLPD out of which 1756 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 768 KLPD (748 KLPD Plant + Domestic 20 KLPD) which will be sourced from groundwater. Effluent of 741 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 1000 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for proposed Ethanol plant will be 3.5 MW, which will be sourced from the 3.5 MW Co-generation Power Plant. Unit will be having two D.G. Sets of 500 KVA each which will be used as standby during power failure. Adequate Stack height (5 m) will be provided as per CPCB norms. Boiler of 27 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 45 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³.

Details of process emissions generation and its management:

CO₂ (114 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 (70 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (30 TPD) generated from boiler 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 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 150 KLPD will be for manufacturing of fuel ethanol only.

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

- a) Industry shall install briquetting plant within plant premises for utilisation of fly ash.
- b) Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.

- c) The proposed budget of Rs 1.60 crores towards CER be increased to Rs. 2.00 Crores and shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before 2 years against the proposed timeline of 3 years.
- d) Industry shall install CO₂ plant in the premises for efficient collection of CO₂ generated during fermentation.

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 16th June, 2021, project falls in category B2 and the proposed capacity of 150 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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 768 KLPD which will be sourced 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 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). Industry shall install CO₂ plant premises for efficient collection of CO₂ generated during fermentation.
- (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. 49.2

100 KLPD Grain Based Ethanol Plant along with 3.0 MW Co-generation Power Plant at Village- Balanda, Post-Kalunga, Tehsil-Lathikata, District Sundargarh, Odisha by M/s Rourkela Sponge LLP - Consideration of Environment Clearance.

[IA/OR/IND2/249259/2021, J-11011/548/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Grass Roots Research & Creation India (P) 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 establishment of 100 KLPD Grain Based Ethanol Plant along with 3.0 MW Co-generation Power Plant at Village- Balanda, Post-Kalunga, Tehsil-Lathikata, District Sundargarh, Odisha by M/s Rourkela Sponge LLP.

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 16th 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 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sl.No	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 100 KL/D
2	Major Raw Material	Grain (primarily broken rice)
3	Final Product & By-Product	Ethanol (100 KL/D) DDGS- 47 TPD CO ₂ - 76 TPD
4	Co-Generation Power Plant (1 x 26 TPH-AFBC)	3.0 MW

Total land required for the project is 4.33 Ha. Industry will develop greenbelt in an area of 33% of total project area i.e. 1.428 Ha out of total area of the project.

The estimated project cost is Rs 134.79 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 499 lakh and the Recurring cost (operation and maintenance) will be about Rs 106.25 lakh per annum. Total Employment will be 440 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Details of River /water body within 10 km distance from the project site:

Sl. no	Location	Direction	Distance (km)
1.	Brahmani River	ENE	4.7
2.	Longmohan Nadi	W	2
3.	Sankh River	N	5.6
4.	Koel River	NE	6.7
5.	Pitamahal Dam	SW	1.6
6.	Kansabahal Dam	WSW	9.5
7.	Sagjor RF	WSW	2.5
8.	Kumaria RF	WSW	6.2
9.	Butukupiri RF	SE	2
10.	Rutukupiri RF	S	7.5
11.	Bamniphahar RF	NE	9.6
12.	Kamarpahar RF	NE	8.5
13.	Jogisar RF	N	7.7
14.	Balanda RF	S	0.3

One Time Total water requirement for the project will be 1495 KLD which will be further reduced through recycling & reuse of 1095 KLD. Total fresh water demand for distillery operation is 401 KLD @4KL of water/KL of Ethanol. Net fresh water requirement including power plant of 3.0 MW is 571 KLD @5.7 KL/KL of ethanol production, which will be sourced from ground water augmented with rain water. Effluent of 439 KLD quantity will be treated through 530 KL/D ETP/CPU. The plant will be based on Zero Liquid discharge system.

During operation phase power requirement will be 1.75 MW /Day and will be fulfilled by 3.0 MW Co-generation power plant within the project site. Surplus power will be connected to State Grid. For emergency, 1 DG set of 500 KVA will be installed within the plant area. Project will have 26 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be

done to ensure that ambient air quality standards to meet all the time. All the internal roads will be asphalted.

Details of process emissions generation and its management:

- CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

Sl. No	Type of Waste	Quantity (TPA)	Storage	Utilization/ Disposal
1.	DDGS – (by product) (Dried distillers' grains with soluble)	16,450	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
2.	Ash from boiler	13,068	Silo	Sold to Bricks manufactures in nearby area
3.	Waste papers/Boxes	2.5	Covered shed	Sold to recyclers
4.	Used Oil	1.0 KL	HDPE drums in covered shed	Used for oiling the machine in house and balance will be given to authorized re-cycler
5.	Spent Resin from DM Plant	0.6 KL	HDPE drums in covered shed	Given to authorized re-cycler
6.	ETP Sludge	18.28	Covered shed	Disposed to authorized disposal facility

As per OM dated 16th 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:

- Brick manufacturing unit shall be installed besides ash storage

- silos for utilization of fly ash. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Coal of Sulphur content less than 0.5 % shall be used for boiler.
- b) Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
 - c) 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.
 - d) The proposed budget towards CER be increased to Rs. 1.5 Crores and shall be spent on improving infrastructure of public schools and govt. hospitals 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.
 - e) Fresh water requirement shall not exceed 3.5 kL fresh water consumed/kL production of Ethanol.

PP has submitted the desired commitments/information sought above in the form of undertaking except for points (e) which has 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 16th 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). 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. Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- (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 3.5 kL fresh water consumed/kL production of Ethanol 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.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit shall be installed besides ash storage silos for utilization of fly ash. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Coal of Sulphur content less than 0.5 % shall be used for boiler.

- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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. 1.50 crores towards CER and it shall be spent on improving infrastructure of public schools and govt. hospitals 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. 49.3

Laying of Natural Gas transportation pipeline of approx. length 86.615 kms & 36" Dia. to connect proposed LNG Terminal of HPCL Shapoorji Energy Private Limited (now called as HPCL LNG Limited) at Village Chhara (Dist.-Gir-Somnath) with Gujarat State Petronet Limited's (GSPL) Dispatch Terminal at Village -Lothpur (Dist. Amreli) in Gujarat by M/s. Gujrat State Petronet Limited - Consideration of Environment Clearance.

[IA/GJ/IND2/136431/2020, J-11011/16/2020-IA-II(I)]

The proposal is for environmental clearance to the project Laying of Natural Gas transportation pipeline of approx. length 86.615 kms & 36" Dia. to connect proposed LNG Terminal of HPCL Shapoorji Energy Private Limited (now called as HPCL LNG Limited) at Village Chhara (Dist.-Gir-Somnath) with Gujarat State Petronet Limited's (GSPL) Dispatch Terminal at Village -Lothpur (Dist. Amreli) in Gujarat by M/s. Gujrat State Petronet Limited.

All Oil and Gas transportation pipeline project are listed at S.N 6(a) project or activity of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The ToR has been issued by Ministry vide letter NO. IA-J-11011/16/2020-IA-II(I); dated 17.03.2020. Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board on date 24.08.2021 at Gir Somnath District and chaired by Additional District Collector and on 01.09.2021 at Amreli District and chaired by District Collector of Amreli Gujarat State respectively. The main issues raised during the public hearing were related to the land Compensation etc. In addition to that the locals had demanded that the

entire EIA report should be prepared in local (Gujarati) language. GSPL has already provided the executive summary of EIA report in local (Gujarati) language as per the norms of GPCB. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

This is a project of Natural Gas transportation pipeline project with associated facilities. Capacity – 18 MMSCMD

Linear Project with Temporary land use except permanent construction at SV station. (Total permanent land acquisition of approx. 27457 sq. mt.). Industry will develop greenbelt in an area of 33 % around the periphery of SV station i.e. 9000 m² out of total area of the project. The estimated project cost is approx. Rs. 622 Cr. as per pre-feasibility report. Total capital cost earmarked towards environmental pollution control measures is Rs 0.58 Crores and the Recurring cost (operation and maintenance) will be about Rs 0.035 Crores per annum. Total Employment will be 300 persons as direct & indirect.

Proposed pipeline passes through this notified Ecologically Sensitive Zone of Gir Wild Life Sanctuary for length of approx. 25.816 km and total project area in Eco Sensitive Zone is 51.632 Ha. Gir Wild Life Sanctuary is the home for the Asiatic Lions [Panthera leo persica] and is supporting the Asiatic Lion Population. Proposed pipeline crosses River/ water body i.e. Rupen River, Malan River, Chhasi River by HDD (Horizontal Directional Drilling method) without disturbing surface flow of water body.

Ambient air quality monitoring was carried out at 6 locations during October to December 2020 and the baseline data indicates the ranges of concentrations as: PM10 (61.6-67.4µg/m³), PM2.5 (24.2-26.9 µg/m³), SO₂ (4.7-5.7µg/m³) and NO₂ (7.52-9.12µg/m³). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 15 m³/day of which will be met from Nearby Municipal Source Requirement of water will be various activity during construction phase of pipeline is as given below which will be met by tanker supply from nearby municipal source.

Construction Phase	Water requirement & Source	Waste Generation	Water Disposal
	Domestic:3.8KLD Industrial:11.2KLD Total: 15KLD Source: Nearby Municipal Source	Domestic:0.5KLD Industrial:0.05KLD Total: 0.55KLD	Disposed through Sock Pit via Septic Tank
Operation Phase	Domestic:0.3KLD Gardening & Green	Domestic:0.2KLD Industrial: Nil	To nearby

	Belt Development:3.0KLD, Total: 3.3KLD, Source: Nearby Municipal Source	Total: 0.2KLD	municipal Drain
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0.55 m³/day waste water generated which will be disposed off soak pit via septic tank.

- Waste Water will be generated during the construction phase of pipeline to the tune of 0.55 KLD from washing and cleaning which will be Disposed through Sock Pit via Septic Tank.
- No need of Industrial Water requirement during operation phase of proposed Natural Gas Pipeline project.
- In view of the above, No need to carry – out: Any Additional Measures, for the W. P. C. (Water Pollution Control).

Required power for SV / TOP / IP / Dispatch / Receiving stations shall be drawn from nearest local power source of the state Electricity Boards. However, for SVs & control stations, 40 KVA DG sets will be kept as stand by for backup power at each Station. Stack (height 6m) will be provided as per GPCB norms to the proposed DG sets.

Proposed pipeline route passes through Eco-Sensitive Zone of Gir Wild Life Sanctuary for around 25.816 km and at a nearest distance of 4.815 km away from the boundary of Gir Wild Life Sanctuary in Gir Somnath District. As the proposed pipeline passes through ESZ but not passing through any core areas of National parks /Sanctuaries/ Coral reefs / Ecological Sensitive Areas, EAC opined that the proposal may be referred to IA-Policy Division of the ministry for further clarification regarding applicability of EC in the instant proposal.

Accordingly, the project was **recommended** by the committee subject to clarifications from IA-Policy division of the Ministry.

Agenda No. 49.4

Proposed 5 KLPD Malt Spirit Distillery by M/s. Ian Macleod Distillers India Pvt. Ltd. located at Plot No. A2, A3 & A4, Industrial Area Pandoga, District- Una, Himachal Pradesh - Consideration of Environment Clearance.

[IA/HP/IND2/212301/2021, J-11011/201/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. MITCON Consultancy and Engineering Services 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 Proposed 5 KLPD Malt Spirit Distillery by M/s. Ian Macleod Distillers India Pvt. Ltd.

located at Plot No. A2, A3 & A4, Industrial Area Pandoga, District- Una, Himachal Pradesh.

All non molasses based distilleries up to 200 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and are appraised at State Level by Expert Appraisal Committee (SEAC). Due to applicability of General Condition i.e the Interstate boundary within 5 km, the project is appraised at Central Level by Expert Appraisal Committee (EAC).

The ToR has been issued by Ministry vide letter No. IA-J-11011/201/2021-IA-II(I) dated 20.05.2021. Public Hearing for the proposed project has been conducted by HPPCB, Una on 28.10.2021 at Common Facility Centre, Industrial Area Pandoga, Una and chaired by Additional Deputy Commissioner, Una. There were no major issues raised during the public hearing. It was requested that the priority in employment should be given to the unemployed people of the village in the proposed unit. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sr. No.	Particulars	Capacity
Products		
1.	Malt Spirit	5 KLPD
2.	IMFL	1000 Cases
3.	DWGS	13 TPD

Proposed land area available for the project is 43699 m². Industry will develop greenbelt in an area of 34.64 % i.e., 15141 m² out of total area of the project. The estimated project cost is Rs. 50.8 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 3.0 Cr. and the recurring cost (operation and maintenance) will be about Rs. 34.5 lakhs per annum. Total employment will be 77 persons as direct & indirect. Industry proposes to allocate Rs. 1.0 Cr. @ 2.0% of Total Project Cost (Rs. 50.5 Cr.) towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger / Elephant Reserves, Wildlife Corridors etc., within 10 km distance from the project site, However, Reserved Forest is at 500 m in North Direction. River Swan is flowing at a distance of 5.76 km in ESE direction.

Ambient air quality monitoring was carried out at 9 locations during March to May 2021 and the baseline data indicates the ranges of concentrations as: PM₁₀ 27.2 to 58.2 µg/m³, PM_{2.5} 14.9 to 22.8, SO₂ 6.1 to 14.8 µg/m³, NO_x 9.6 to 18.1 µg/m³. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the

proposed project would be $3.22 \mu\text{g}/\text{m}^3$, $0.355 \mu\text{g}/\text{m}^3$ and $2.42 \mu\text{g}/\text{m}^3$ with respect to SPM, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is $162 \text{ m}^3/\text{day}$ of which fresh water requirement of $102 \text{ m}^3/\text{day}$ will be met from Overhead Water Tank- DIC, Una. (In principal approval No. CAF/12/03/21657/112 dtd. 21.01.2021). Distillery effluent of $71 \text{ m}^3/\text{day}$ * quantity will be treated through $75 \text{ m}^3/\text{day}$ ETP. The plant will be based on Zero Liquid Discharge (ZLD) system. (*Conc. Spent Wash Slops (approx. 7 to 8 % w/w solids) is initially settled in settling tank and mixed with other non-process effluent. Other effluent like DM plant washing & boiler blow down, Fermenter washings, Spent- lees will be neutralized in neutralization tanks and mixed with spent wash and then treated in Primary & Secondary Effluent treatment plant. The treated effluent is then passed through RO to get clean water for reuse in the cooling towers and gardening. Industry is based on zero liquid discharge (ZLD) scheme).

Power requirement will be 650 KWH and will be met from Industrial Area, Una. Proposed unit will have 750 KVA (1 No. 500 & 1 No. 250 KVA each) DG sets will be used only as standby during power failures. Stack height >11 m will be provided as per CPCB norms to the proposed DG sets. Proposed 6 TPH boiler based on wood chips/briquettes will be installed for proposed Distillery. Multicyclone with 30 m stack will be installed for proposed boiler for controlling of particulate emission within statutory limit of $115 \text{ mg}/\text{Nm}^3$ for the proposed boiler.

Details of process emissions generation and its management:

Project Activity	Anticipated pollutant	Management
Process emissions	CO_2 and Negligible VOCs	Minor CO_2 generation (1.368 TPD).
Stack, Fugitive emissions, material handling	PM_{10} , $\text{PM}_{2.5}$, NO_x , SO_2 , CO_2	Multicyclone with 30 m stack

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

Sr. No.	Type of waste	Quantity	Final Disposal
1.	DWGS	13 TPD	DWGS is the by-product and will be sold to cattle/poultry feed.
2.	Fly Ash	1.5 TPD	Coal ash will be sold to brick manufacturers.
3.	ETP Sludge	0.5-0.6 TPD	ETP sludge will be Partly recirculate

			and remaining will be used in composting.
4.	Spent oil (5.1)	Negligible	Quantity of Spent oil will be negligible and shall be sent to authorized recycler

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 the plant premises.
- PP shall allocate at least Rs. 35 Lakhs/year 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.
- PP shall utilize 10% (65 KW) of the total power requirement from solar power.
- PP proposed a budget allocation of Rs. 1.0 Crores towards CER and it shall be used for construction/up-gradation of school building with provision of facilities e.g. Toilets, Drinking Water Facilities, Computers/Laptops and Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector and the CER plan shall be completed in two years as planned.

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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the 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 EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the

provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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). 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.
- (ii). 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.
- (iii). Total fresh water requirement shall not exceed 102 m³/day and will be met from Overhead Water Tank- DIC, Una. 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. 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.
- (iv). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. PP shall utilize 10% (65 KW) of the total power requirement from solar power.
- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). PP shall allocate at least Rs. 35 Lakhs/year 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.

- (vii). 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). 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.
- (xii). PP proposed to allocate Rs. 1.0 Crores towards CER and it shall be used for construction/up-gradation of school building with provision of facilities e.g. Toilets, Drinking Water Facilities, Computers/Laptops and Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector and the CER plan shall be completed in two years as planned.
- (xiii). 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.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). 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.

- (xvi). 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. 49.5

Proposed 50 KLPD Molasses/Sugar cane Juice based Distillery/Ethanol plant by M/s. Sri Basaveshwara Sugars Ltd. located at Survey No. 362/1, 362/2 and 366/P1 of Village Balligeri, Tal. Athani, Dist. Belgaum, Karnataka - Consideration of Environment Clearance.

[IA/KA/IND2/244694/2021, J-11011/67/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. MITCON Consultancy and Engineering Services 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 Proposed 50 KLPD Molasses/Sugar cane Juice based Distillery/Ethanol plant by M/s. Sri Basaveshwara Sugars Ltd. located at Survey No. 362/1, 362/2 and 366/P1 of Village Balligeri, Tal. Athani, Dist. Belgaum, Karnataka.

All molasses based distilleries up to 100 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and are appraised at State Level by Expert Appraisal Committee (SEAC). Due to applicability of General Condition i.e the Interstate boundary within 5 km, the project is appraised at Central Level by Expert Appraisal Committee (EAC)

The ToR has been issued by Ministry vide letter NO. IA-J-11011/67/2021-IA-II (I)] dated 02.03.2021. Public Hearing for the proposed project has been conducted by the Karnataka State Pollution Control Board on 15th September, 2021 on site at Sri Basaveshwara Sugars Ltd., Belgaum and chaired by Additional Deputy Commissioner, Belgaum. The main issues raised during the public hearing are related to queries on employment, odor and effluent management. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sr. No.	Particulates	Capacity
1.	Distillery/ Ethanol plant- RS/ ENA/AA/Ethanol (One at a time or in combination)	50 KLPD

The land area available for the project is 176900.0 m². Industry will develop greenbelt in an area of 33 % i.e., 58378 m² out of total area of the project. The estimated project cost is Rs. 21.13 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.23 Cr and the recurring cost (operation and maintenance) will be about Rs. 32.0 lakhs per annum. Total employment will be 100 persons as direct & indirect (Construction & Operation Phase). Industry proposes to allocate Rs. 0.43 Cr. @ 2.0% of Total Project Cost (Rs. 21.13 Cr.) towards Corporate Environment 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 Krishna is flowing at a distance of 24 km towards South direction.

Ambient air quality monitoring was carried out at nine locations during Dec 2020 to Feb 2021 and the baseline data indicates the ranges of concentrations as, PM₁₀ (40.6 to 63.1 µg/m³), PM_{2.5} (15.1 to 25.7 µg/m³), SO₂ (7.2 to 14.9 µg/m³) and NO_x (10.2 to 18.6 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 6.74 µg/m³, 1.11 µg/m³, 1.67 µg/m³ and 0.50 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 583 m³/day of which fresh water requirement of 205 m³/day will be met from Krishna River. (Water drawl permission application to water resources department dated 22.02.2021). Distillery effluent of 386 m³/day* quantity will be treated through 430 CMD Condensate treatment Plant. The plant will be based on Zero Liquid discharge system. (*Conc. Spent wash 64 CMD will be through Multi effect evaporator (MEE) followed by spent wash dryer to produce spent wash powder).

Power requirement will be 2 MW and will be met from own 2 MW captive generation. Proposed integrated unit will have five D.G. sets of capacities 350 kVA x 1. All DG sets will be used only as standby during power failures. Stack height >11 m will be provided as per CPCB norms to the proposed DG sets. Existing Sugar Boiler 20 TPH will be utilized for 50 KLPD proposed Distillery. Stack height of 40 m with Wet scrubber will be provided with proposed distillery boiler, for controlling of particulate emission within statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

Project Activity	Anticipated pollutant	Management
Process emissions	CO ₂ and Negligible VOCs	CO ₂ shall not be release in the air. CO ₂ will be either Bottling/

		dry ice.
Stack, fugitive emissions, material handling.	PM ₁₀ , PM _{2.5} , NO _x and SO ₂ .	Wet Scrubber with 40 m stack

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

Sr. No.	Type of waste	Quantity	Final Disposal
1.	Bagasse Ash	4.4 TPD	It is rich in potash hence, it will sold to farmer as manure.
2.	CPU Sludge	7.7 TPD	Will be mix with press mud for use as manure.
3.	Spent oil (5.1)	0.025 KL/M	Hazardous waste will be given to authorized recycler
4.	Oil soaked cotton waste	10 kg/M	
5.	Discarded Containers	15 no. /M	

During the deliberations, PP has informed that the Balligeri canal is under construction phase and the canal is 300 m distance of the project site. In this regard, PP has submitted NOC from Karnataka Neeravari Nigam Limited. EAC found the NOC satisfactory.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the 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 EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time

and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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). 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.
- (ii). 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.
- (iii). Total fresh water requirement shall not exceed 4 KL/KL and will be met from Krishna 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. 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.
- (iv). The spent wash/other concentrates shall be treated through spent wash dryer to produce spent wash powder. PP shall utilize 10% of the total power requirement from solar power
- (v). CO₂ bottling plant shall be installed within plant premises.
- (vi). PP shall allocate at least Rs. 30 Lakhs/year 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.

- (vii). 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). 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.
- (xii). PP proposed to allocate Rs. 0.43 Crores towards CER and it shall be used for construction/up-gradation of school building with provision of facilities e.g. Toilets, Drinking Water Facilities, Computers/Laptops and Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.
- (xiii). 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.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). 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.

- (xvi). 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. 49.6

Proposed establishment of new grain based 210 KLPD Ethanol Distillery Unit At Village D-3, MIDC, Deori, Taluka - Deori, District – Gondia, Maharashtra State by M/s. Sufalam Industries Limited - Consideration of Environment Clearance.

[IA/MH/IND2/246505/2021, J-11011/528/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Ampl Environ 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 establishment of new grain based 210 KLPD Ethanol Distillery Unit At Village D-3, MIDC, Deori, Taluka - Deori, District – Gondia, Maharashtra State by M/s. Sufalam Industries 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 16th 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 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Description	Unit	Total
Distillery Unit	KLPD	210
Anhydrous Alcohol (Fuel Ethanol)	KLPD	210
Impure Spirit	KLPD	6.6

Fusel Oil	KLPD	2.0
By Product		
CO2	TPD	157
Distillers' Dry Grain with Soluble (DDGS)	TPD	136
Power Generation (TG set)	MW	5

Total project area is 100000 m² (24.71 acre). Industry will develop greenbelt in an area of 33.9 % i.e., 33,915 m² (8.38 acre) out of net plot area of the project.

The estimated project cost is Rs 146.50 Crore Total capital cost earmarked towards environmental pollution control measures proposed unit will be Rs 24.35 Crores and the Recurring cost (operation and maintenance) will be about Rs 1.66 Crores per annum. Total Employment for proposed unit will be 230 (Construction phase 150 Nos & operation phase 80 Nos) persons as direct & 500-1000 persons indirect employment. Industry proposes to allocate Rs 2.19 crores towards Corporate Environment 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 satbahini river flowing at a distance of approx 2.87 Km in west direction & Bagh river at a distance of approx 5.98 Km in north direction.

Total water requirement is 2198 m³/day of which fresh water requirement of 886 m³/day will be met from Nagar Panchayat Deori. Effluent of quantity 2140 m³/d (Spent wash slop 861 + Spent lees 210 + MEE Process Condensate 577 + Dryer condensate 272 + Boiler Blow down 32 + Cooling tower blow down 123 + Washing 65). Spent Wash Slops (approx. 7.36 % w/w solids) will be initially treated in decanters and the thin slops are concentrated in the Multiple Effect Evaporators (MEE) up to 30% solids (w/w). This concentrated spent wash is sent to the DWGS drier along with wet cake generated from decanters and the output is a dry powder with 90% solids and is known as DDGS and Process condensate along with blow down will be treated in Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

Power requirement will be 4.5 MW including which will be met from 5 MW Turbine Generator set connected to 45 TPH boiler. Additionally 2 No of 500 kVA DG sets will be used as standby during power failure. Stack (height 5m.) will be provided as per CPCB norms to the proposed DG sets. Grain based distillery unit proposed to install coal/ rice husk fired boiler of capacity 45 TPH. Electrostatic precipitator (ESP) with a stack of height of 60 m will be installed to proposed 45 TPH boiler for controlling

the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

Sr. No	Source	Fuel	Pollutant	Control Equipment
1	1 No of 45 TPH boiler	Coal or Rice Husk	PM, SO ₂ & NO _x	60 m stack height and ESP as APC Equipment shall be provided
2	D. G. Sets 2 Nos of 500 kVA	HSD	PM & SO ₂	5m Stack Height shall be provided
3	Fermentation Unit	--	CO ₂	CO ₂ Recovery Unit

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

Solid Waste Management

Sr. No.	Description of waste		UOM	Quantity	Treatment	Mode of collection and disposal
1	Yeast sludge		Kg/D	400	Sludge Drying Beds	After drying, it will be sold to brick manufacturer
2	CPU sludge		Kg/D	200	Sludge Drying Beds	After drying, it will be sold to brick manufacturer
3	Boiler ash	Coal as fuel	MT/day	65	Will be sold to brick manufacturer	Will be sold to brick manufacturer
		Rice husk as fuel		56		
Municipal Solid waste from Operational (80 No) workers						
1	Non-Biodegradable		Kg/D	12	--	Manually collected and sold to scrap

Sr. No.	Description of waste	UOM	Quantity	Treatment	Mode of collection and disposal
					vendors
2	Bio-degradable	Kg/D	8	Composting	Used as manure
Municipal Solid waste from Residential colony (20 Family 100 persons)					
1	Non-Biodegradable	Kg/D	20	--	Manually collected and sold to scrap vendors
2	Bio-degradable	Kg/D	30	Composting	Used as manure

Hazardous Waste Management

Sr. No.	Description of waste	Category	UOM	Quantity	Mode of collection and disposal
1	Spent oil	5.1	MT/A	1	Used in own boiler as fuel

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

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

- a) Fresh water requirement shall not exceed 3.5 kL fresh water consumed/kL production of Ethanol.
- b) Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. Coal of Sulphur content less than 0.5 % may be used during non-availability of rice husk in rainy season.
- c) Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- d) The proposed budget towards CER be increased to Rs. 2.50 Crores. The proposed amounts shall be equally spent on installation of solar power and on improving infrastructure of 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.

- e) PP shall allocate Rs. 50 Lakhs per annum Fund for occupational health and safety.

PP has submitted the desired commitments/information sought above in the form of undertaking except for points (a) & (e) which are being 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 16th 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). 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. Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- (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 3.5 kL fresh water consumed/kL production of Ethanol which will be met from Nagar Panchayat Deori. 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 unit will be installed within the plant premises for utilization of fly ash. Coal of Sulphur content less than 0.5 % may be used during non-availability of rice husk in rainy season.
- (vii). CO₂ 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. 2.50 Crores towards CER. The proposed amounts shall be equally spent on installation of solar power and on improving infrastructure of 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. 49.7

Proposed installation of 200 KLPD stand-alone grain-based Fuel Ethanol Plant in the existing Grain Based Distillery unit of 200 KLPD of ENA/Fuel Ethanol and cogeneration of power @ 9 MW capacity by M/s. Pioneer Industries Pvt. Ltd. located at Plot no. A-2, A-3 and A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab - Consideration of Environment Clearance.

[IA/PB/IND2/28674/2010, J-11011/38/2010-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 and informed that:

The proposal is for environmental clearance to the project for Proposed installation of 200 KLPD stand-alone grain-based Fuel Ethanol Plant in the existing Grain Based Distillery unit of 200 KLPD of ENA/Fuel Ethanol and cogeneration of power @ 9 MW capacity by M/s. Pioneer Industries Pvt. Ltd. located at Plot no. A-2, A-3 and A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab.

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

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16th 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-11011/38/2010-IA II (I) dated 22nd March, 2021 to the existing project of 200 KLPD grain based distillery and 9 MW of cogeneration of power in favour of M/s. Pioneer Industries Ltd.

Certified Compliance Report (CCR) on existing Environmental clearance order was issued by IRO, MoEFCC, Chandigarh vide letter no. 5-65/2005-RO(NZ)/690-691 dated 14.10.2021. Action Taken Report towards Non-

complied/Partly Complied conditions observed by IRO, MoEFCC, Chandigarh submitted vide letter No. 5-65/2005-RO(NZ)/15-16-17 dated 06.01.2022. ATR is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

S. No.	Item	Unit	Existing Capacity	Proposed Additional Capacity	Total
1.	ENA/RS/ Impure spirit/ Country spirit/ Denatured spirit/ Fuel Ethanol (Absolute ethanol)	KL	200	200 (Fuel Ethanol Only)	400
2.	By-products				
	CO ₂	MT	160	140	300
	Fusel Oil	MT	3.2	2.0	5.2
	DDGS	MT	200	105	305

Existing land area is 19.76 hectares (197600 sq. meters) and no additional land area will be used for the proposed expansion. Industry has already developed green belt in an area of 6.67 hectares (66700 sq. meters) which is more than 33 % of total land area. The estimated project cost is Rs. 115 crores for the proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 14.50 crores and recurring cost (operation and maintenance) will be about Rs. 2.75 crores. Total employment generation will be 200 persons as direct and indirect employment due to the proposed expansion. Industry proposes to allocate Rs. 1.725 crores towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km distance from the project site.

Total water requirements for the existing plant and proposed expansion will be 2365 m³/day. Maximum daily water requirements for the proposed 200 KLPD fuel ethanol plant will be 900 m³/day. All the fresh water requirements for the existing as well as proposed project will be met from ground water. The industry has already got the permission from Punjab Water Regulatory and Development Authority, Punjab for the extraction of ground water @ 1490 m³/day. The project area falls under Green Area for ground water extraction and further extraction permission will be available at the time of actual requirements. The industry will generate a total of 1197 m³/day of condensates including spent lees from the proposed expansion. Out of this, 680 m³/day will be directly used in the process for slurry preparation. Remaining condensates @ 517 m³/day will be treated in condensate polishing unit and reused for cooling tower makeup water. Effluent from misc. streams

will be 104 m³/day which will be treated in ETP and reused for water of green belt within the industrial premises.

Total power requirements after the proposed expansion will be around 9000 KVA and will be met from inhouse cogeneration power plant. Existing unit has 3200 KVA D G sets to be used as standby during power failure. Stack height to the D G sets has been provided as per norms. Existing unit has 2 x 12 TPH, 1 x 25 TPH and 1 x 50 TPH biomass/coal fired boilers. No additional boiler will be installed during the proposed expansion.

Details of process emissions generation and its management:

The industry will install dryers for the handling of DWGS for controlling process odours from the factory.

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

During the deliberation, PP has informed that average daily production of distillery currently stands at 165 KLPD and has submitted affidavit for the same. EAC opined that the proposal may be recommended for expansion as the Industry has achieved more than 80% of granted capacity.

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

- PP shall utilize fresh water @3.75 KL/KL of ethanol production.
- The proposed budget of CER shall be Rs. 4.0 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.
- The industry shall construct closed silos for feeding of rice husk to the rice husk fired boilers.
- 15% of the total plant area will be reserved for parking.
- PP shall meet 10% of the total power requirement from solar power.
- As per observations in CCR issued by IRO, it was noted that the Industry has not yet developed 33% green belt. Therefore, industry shall be developing 33% green belt as prescribed in EC and shall submit compliance status within 6 months.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.

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 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD 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). 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.
- (v). Total Fresh water requirement shall not exceed @ 3.75 KL/KL and will be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. The industry shall construct closed silos for feeding of rice husk to the rice husk fired boilers. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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 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. The industry shall be submitting compliance status of this condition within 6 months.
- (xiv). PP proposed to allocate Rs. 4.0 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.
- (xv). 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.
- (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. 49.8

Expansion of On shore Oil & Gas Well Appraisal, Developmental Drilling & Production through Surface Facilities Cambay Field, Ta. Khambhat, Dist. Anand, Gujarat by M/s Oilex Limited - Consideration of Environment Clearance.

[IA/GJ/IND2/238854/2007, J-11011/493/2007-IA II (I)]

The Project Proponent and the accredited Consultant M/s. Eco Chem Sales & Services made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project expansion of On shore Oil & Gas Well Appraisal, Developmental Drilling & Production through Surface Facilities Cambay Field, Ta. Khambhat, Dist. Anand, Gujarat by M/s Oilex Limited.

All Offshore and onshore oil and gas exploration, development & production proposals are listed at S.N. 1(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

Standard ToR has been issued by Ministry vide letter No. IA-J-11011/183/2019-IA-II (I); dated 6th June 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 28th October, 2021 presided by Additional District Magistrate, Anand district. The main issues raised during the public hearing are related to local employment and road repair issues.

Ministry had issued EC earlier vide letter no. F. No. J-11011/493/2007-1A II(I) dated 06.05.2008 to the existing project Oil and Gas Well Appraisal and developmental Drilling and Expansion of Existing Gas Collection Station in Cambay Field, Khambhat Taluka in District Anand in Gujarat in favor of M/s. Oilex Limited.

Certified Compliance report has been obtained from Integrated Regional Office, Gandhinagar vide letter No J-11/29-2021-IROGNR dated 08th Dec 2021 wherein 4 non-compliances and 1 partial compliance were observed. ATR has been submitted by PP to IRO, Gandhinagar. Based ATR furnished, IRO Gandhinagar revised the non-compliances and partial compliances to complied.

The details of products and capacity are as under:

S. No.	Product	Quantity	Unit
1.	Natural Gas	2.83	MMSCFD (Million standard cubic feet per day)
2.	Crude Oil	2385	m ³ /day (Meter cube per day)

Co-Ordinates of Proposed Wells

#	Well No	Latitude	Longitude	Village	District
1.	EP-IV	22°23'19.00"N	72°35'38.00"E	Malasoni	Anand

#	Well No	Latitude	Longitude	Village	District
	CH W1				
2.	EP-IV CH W2	22°21'51.00"N	72°35'58.00"E	Zalapur	Anand
3.	EP-IV CH W3	22°22'24.74"N	72°36'6.48"E	Zalapur	Anand
4.	EP-IV NW W11	22°23'58.704"N	72°33'36.00"E	Bhimtalav	Anand
5.	EP-IV NW W12	22°24'49.824"N	72°33'33.84"E	Bhimtalav	Anand
6.	EP-IV 19Z W1	22°21'25.51"N	72°35'12.98"E	Near Sokhada	Anand
7.	EP-IV 19Z W2	22°21'52.00"N	72°35'25.00"E	Near Sokhada	Anand
8.	EP-IV 35 W1	22°20'31.00"N	72°35'58.00"E	Neja	Anand
9.	EP-IV LC W1	22°20'1.00"N	72°36'57.00"E	Khambhat	Anand
10.	EP-IV LC W2	22°21'3.17"N	72°37'17.58"E	Nagara	Anand
11.	EP-IV LC W3	22°20'15.72"N	72°37'13.87"E	Nagara	Anand
12.	EP-IV SE W1	22°19'52.00"N	72°38'50.00"E	Kansari	Anand
13.	EP-IV SE W2	22°21'23.00"N	72°38'58.00"E	Kali Talavadi	Anand
14.	EP-IV SE W3	22°21'22.00"N	72°40'13.00"E	Chhatardi	Anand
15.	EP-IV NE C W1	22°24'30.00"N	72°37'42.00"E	Rangpur	Anand
16.	EP-IV NE C W2	22°24'12.00"N	72°37'13.00"E	Rangpur	Anand
17.	EP-IV NE C W3	22°24'24.00"N	72°38'25.00"E	Malu	Anand
18.	EP-IV NE C W4	22°23'40.70"N	72°38'5.17"E	Motipura	Anand
19.	EP-IV NE O W1	22°23'20.00"N	72°39'50.00"E	Sayama	Anand
20.	EP-IV NE O W2	22°24'16.00"N	72°39'50.00"E	Hariyan	Anand
21.	EP-IV NW W1	22°24'13.00"N	72°33'38.00"E	Bhimtalav	Anand
22.	EP-IV NW W2	22°23'20.00"N	72°33'48.00"E	Daheda	Anand
23.	EP-IV NW W3	22°22'46.00"N	72°34'53.00"E	Malasoni	Anand
24.	EP-IV NW W4	22°24'43.00"N	72°34'16.00"E	Bhimtalav	Anand
25.	EP-IV NW W5	22°24'13.00"N	72°34'29.00"E	Bhimtalav	Anand

#	Well No	Latitude	Longitude	Village	District
26.	EP-IV NW W6	22°23'49.00"N	72°34'33.00"E	Bhimtalav	Anand
27.	EP_IV NW W7	22°23'23.00"N	72°34'40.00"E	Malasoni	Anand
28.	EP-IV NW W8	22°24'7.00"N	72°35'37.00"E	Jinaj	Anand
29.	EP-IV NW W9	22°24'39.00"N	72°35'8.00"E	Jinaj	Anand
30.	EP-IV NW W10	22°24'2.00"N	72°35'23.00"E	Jinaj	Anand

Existing land area acquired is 12.96 m² for 9 nos. of workover wells, additional 43.2 m² land will be acquired for proposed 30 nos. new wells. M/s Oilex Limited will develop area as social forestry/Plantation by having consultation with the Forest department.

The estimated project cost is Rs. 965 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 0.26 Crores/well and the Recurring cost (operation and maintenance) will be about Rs. 0.11 Crores per annum/well. Total Employment will be 10 persons as direct & 45 persons indirect during construction. Total Employment will be 25 persons as direct & 45 persons indirect after expansion. Industry proposes to allocate Rs. 4.825 Crores @ of 0.50% towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Water body Gulf of Khambhat is abutting to the block boundary in South direction.

Ambient air quality monitoring was carried out at 10 locations during 1st October 2020 to 31st December 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (46.2 – 72.4 µg/m³), PM_{2.5} (20.4 – 45.8 µg/m³), SO₂ (4.0 – 14.0 µg/m³) and NO_x (7.8 – 16.8 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.04 µg/m³, 0.35 µg/m³ and 0.86 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 40 m³/day of which fresh water requirement of 32 m³/day will be met from Water Tankers from locally approved/authorized vendors. Effluent (Produced water) generated will be in the range of 0-100 KLD quantity. Produced water generation will differ from well to well. Produced water will be disposed off by reinjection in abandoned well.

4375 KVA for drilling of each well and will be made available from D.G. Sets and 250 kVA from Gas Engine Generator (GEG) during production.

The rated capacity of the DG sets/ GEG are having capacity 1375 kVA and 250 kVA during drilling and 250 kVA during production. Stack (height 30 m for 1375 kVA DG. Set and height 9 m for 250 kVA) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

There will be generation of NO_x from the Flare stack. 30 m stack height will be provided.

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

Used lubricating oil (1-2 tons/well) will be sent to CPCB authorized recyclers and sludge containing oil & other drilling work (10 m³/well) shall be generated which will be disposed as per as per Hazardous Waste Rule 2016 and its amendment.

During deliberation PP has informed that a Court case was filed by GPCB against M/s Oilex Ltd on 18th February 2019 in Khambhat local court. The court case was filed by GPCB after it had issued a closure order against Oilex's C-73 EGPF citing lack of valid EC due to absence of the word "EGPF" in their EC. On 31st July 2021 interim order was passed by the court framing charges against M/s Oilex to mutually settle the matter. Subsequently, the case was disposed of before Lok Adalat on 11th December 2021 upon payment of a penalty of INR 4 lakhs. Currently, there is no litigation pending against the proposed project. EAC directed that PP shall obtain revoke to closure order filed by GPCB. PP has made detailed presentation on CCR and EAC found the compliance status satisfactory. Further, EAC sought following commitments from PP:

- The proposed budget of Rs. 4.825 towards CER shall be spent on improving green energy and on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed within 3 years.

PP agreed to the commitments sought by EAC.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the 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 EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental Clearance.

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 and subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). 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.
- (ii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iii). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (iv). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.
- (v). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.

- (vi). Approach road shall be made pucca to minimize generation of suspended dust.
- (vii). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (viii). Total fresh water requirement shall be 32 KLPD which will be met from tankers. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.
- (ix). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (x). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (xi). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xiii). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xiv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xv). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling

site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.

- (xvi). PP proposed to allocate Rs. 4.825 Crores towards CER and it shall be spent on improving green energy and on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed within 3 years.
- (xvii). No lead acid batteries shall be utilized in the project/site.
- (xviii). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xix). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.
- (xx). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 49.9

Onshore Oil & Gas development drilling and production (16 exploratory and 73 developmental drilling wells) in Dibrugarh, Sibsagar and Charaideo Districts under Moran, Moran Extension, Dholiya and some by M/s Oil India Limited - Consideration of Environment Clearance.

[IA/AS/IND2/226998/2017, J-11011/156/2017 - IA II (I)]

The Project Proponent and the accredited Consultant M/s ERM 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 Onshore Oil & Gas development drilling and production (16 exploratory and 73 developmental drilling wells) in Dibrugarh, Sibsagar and Charaideo Districts under Moran, Moran Extension, Dholiya and some by M/s Oil India Limited.

All Offshore and onshore oil and gas exploration, development & production proposals are listed at S.N. 1(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

ToR has been issued by Ministry vide letter No. J-11011/156/2017 - IA II (I) dated 31st May 2017. Public Hearing for the proposed project had been conducted by the State Pollution Control Board on 6th September 2019 presided by Circle Officer, Rajgarh and on 8th December 2020 presided by Additional Deputy Commissioner, Sivasagar and on 11th December 2020 presided by Additional Deputy Commissioner, Charaideo respectively for Dibrugarh, Sivasagar and Charaideo districts. The main issues raised during the public hearing are related to environmental protection measures, site restoration plan, social developmental plans, emergency preparedness, local employment, local infrastructure development in the area etc.

Ministry had issued EC earlier vide letter no. J-11011/1259/2007-IA-II(I); dated 1st November 2011 to the Drilling of Development Well (2 nos) and Exploratory Well (6 nos) at Moran Area, District Dibrugarh, Sivasagar and Charaideo, Assam by M/s Oil India Limited. Certified compliance report has been issued by Integrated Regional Office (IRO), Guwahati vide letter No. RO-NE/E/IA/AS/MI/54/1273-1275 dated 6th October 2021. M/s OIL submitted Action Taken report to IRO and IRO provided updated compliance report No. RO-NE/E/IA/AS/MI/54/1548-1550 dated 25th November 2021.

The details of products and capacity are as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Wells and production installations	8 wells	89 wells and 9 production installations	97 wells and 9 production installations

The total land required for the project will be 3300000 m². M/s Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 157500 m².

The estimated project cost is Rs. 3470 crore. Capital cost of EMP would be INR 2.12 crores and recurring cost for EMP would be approximately INR 2.39 crores per annum for drilling of 89 wells and operation of 9 production installations. M/s Oil India Ltd. will earmark INR 4.50 crores as part of PH Action Plan in for Dibrugarh, Sivasagar and Charaideo districts in line with the comments and suggestions made by the local public during Public Hearing. Total Employment will be 60 persons as direct & 120 persons indirect after expansion for each drill site construction and drilling. Oil India Ltd. will earmark INR 4.50 crores as

part of CER Plan in Dibrugarh, Sivasagar and Charaideo districts in line with the comments and suggestions made by the local public during Public Hearing. Additionally, Oil India Ltd. will comply with the conditions mentioned by EAC in this regard. OIL proposes to allocate funds for CSR activity as per CSR Act and Rules, Govt. of India.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves etc. within 10 km of the well locations or production installations.

Ambient air quality monitoring was carried out at 8 locations during 05.10.2017 to 31.12.2017 and the baseline data indicates the ranges of average concentrations as: PM₁₀ (54.79 - 60.88 µg/m³), PM_{2.5} (27.83 - 33.71 µg/m³), SO₂ (5.92 - 6.40 µg/m³) and NO₂ (17.4 - 19.6 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 11.03 µg/m³, 0.0046 µg/m³, 0.037 µg/m³ and 0.63 µg/m³ with respect to NO_x, SO₂, PM₁₀ and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 50 m³/day of which fresh water requirement of 39 m³/day will be met from groundwater. Effluent of 21.8 KLD quantity will be treated through ETP and Septic tank. The project will be based on Zero Liquid discharge system.

Power requirement will be met through two Diesel Generator Sets of 1250 kVA each. Another 1250 kVA DG set will be kept as standby. Stack height of 7 m will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

The operation of DG sets, movement of vehicles and machineries during construction and drilling, flaring of natural gas will result in the generation of air pollutants, if gas reserves are encountered during drilling operations. Stacks will be used with DG sets and flare system as per CPCB norms.

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

Drill cuttings and spent drilling mud will be disposed to HDPE lined pit within the drill site. The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. Recyclable wastes will be periodically sold to local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

During deliberations, PP has made a detailed presentation on Certified Compliance Report. EAC found the compliance status satisfactory. Also,

EAC noted that the Moran EC Block boundary lies at about 8.3 km distance from the boundary of the Panidehing Bird Sanctuary. PP has informed that none of the proposed wells/installations are falling within 10km distance of the Sanctuary and nearest proposed well in Moran Block is located 10.6 km from Panidehing Bird Sanctuary, hence NBWL is not applicable for the project. EAC agreed to it. Further EAC observed following discrepancies in the proposal:

- The baseline data is older than three years which is contravention to the extant rules.
- Public Hearing is presided by Circle Officer which was below the rank of ADM which is in contravention to the extant rules. PP has informed that ADM was absent for the meeting at the last minute due to protests going on for NRC and sent his representative to attend the meeting.
- PP included an extra project activity for laying of 480 km of pipeline which is out of scope of work for the ToR obtained.

In the view of the above, EAC desired the following additional information from PP:

- A fresh base line data for a period of 15 days shall be submitted.
- Justification from SPCB shall be furnished for conducting PH with presiding officer below the rank of ADM.

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

Agenda No. 49.10

Proposed 250 KLPD Grain Based Ethanol Plant along with 6.0 MW Co-generation Power Plant by M/s. Baidyanath Biofuels Private Limited located at Plot no. B – 48, Additional Butibori Industrial Area, Tehsil Nagpur (Rural), District Nagpur, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/250679/2022, J-11011/6/2022-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 for Proposed 250 KLPD Grain Based Ethanol Plant along with 6.0 MW Co-generation Power Plant by M/s. Baidyanath Biofuels Private Limited located at Plot no. B – 48, Additional Butibori Industrial Area, Tehsil Nagpur (Rural), District Nagpur, Maharashtra.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for

Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

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

The details of products and capacity are as under:

Units	Plant Capacity	Product
Grain based Ethanol plant	250 KLPD	Ethanol (Biofuel)
Co-Generation Power Plant	6.0 MW	Power

Total project area is 9.2 ha (92000 m²) and the same has been allotted to the company by Maharashtra Industrial Development Corporation (MIDC) in Additional Butibori Industrial Area. Industry will develop greenbelt in an area of 33% i.e., 3.04 ha (30400 m²) out of total area of the project. The estimated project cost is Rs. 235 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. 2.0 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 150 persons (Permanent 100 & Temporary 50) 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, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Reserved Forests are Junapani RF (~3.5 km in North direction), Injoli RF (~6.0 km in NE direction), Dongargaon RF (~7.0 km in NE direction), Wargaon RF (~7.0 km in ESE direction) and an Unnamed Protected Forest (~7.5 km in WNW Direction) lies within 10 km radius. Wadgaon Reservoir (~7.0 km in ESE direction), Vaghai Nala (~7.0 km in SSW direction), Krishna Nala (~7.5 km in NNE direction), Vena River (~8.0 km in SE direction), Pipra Distributary (~9.0 km in WSW direction) and Kanholi Canal (~9.0 km in NW direction) are the water bodies which lies within 10 km radius.

Total fresh water requirement will be 1457 KLPD which will be sourced from MIDC Butibori Water Supply Scheme. Total input for first run for Ethanol Plant will be 4307 KLPD. 2960 KLPD will be recycled and net fresh water requirement will be 1347 KLPD for proposed Ethanol Plant and 110 KLPD Domestic use. 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 1 x 1250 and 1 x 650 KVA which will be used as standby during power failure. Adequate Stack height (7 m; 5 m) will be provided as per CPCB norms. Boiler of 50 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 65 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³.

Details of process emissions generation and its management:

CO₂ (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 (116 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (48 TPD) generated from the boiler will be used for cement/brick manufacturing. Company will supply ash to nearby cement/brick manufacturers in covered vehicles.
- 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 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 250 KLPD will be used for manufacturing fuel ethanol only.

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

- PP shall use low sulphur coal with maximum sulphur content of 0.5% as fuel for the proposed project.
- The proposed budget allocation Rs. 2.0 Crores towards CER and shall be used within two years 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 shall meet 10% (approx. 550 KW) of the total power requirement from solar power.
- Ash shall be supplied to nearby cement units for which the company shall obtain MoU and the ash shall be transported in closed ash bulkers only. In case company fails to obtain MoU with nearby cement manufacturers, in-house briquetting plant shall be installed inside plant premises.

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 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD 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). 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.
- (v). Total Fresh water requirement shall not exceed 1457 KLPD and will be met from MIDC Butibori Water Supply Scheme. 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.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Ash shall be supplied to nearby cement units for which the company shall obtain MoU and the ash shall be transported in closed ash bulkers only. In case company fails to obtain MoU with nearby cement manufacturers, in-house briquetting plant shall be installed inside plant premises. ESP shall be installed with the boiler. PP shall use Biomass- Rice husk/ Agriculture waste or coal as a fuel of boiler. PP shall use low sulphur coal with maximum sulphur content of 0.5%. PP shall meet 10% (approx. 550 KW) of the total power requirement from solar power.
- (vii). CO₂ bottling plant shall be installed within plant premises.
- (viii). PP shall allocate at least 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 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.
- (xiv). PP proposed to allocate Rs. 2.0 Crores towards CER and shall be used within two years 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.
- (xv). 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.
- (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. 49.11

Proposed 60 KLPD Grain based distillery unit along with 2.0 MW Cogeneration power plant by M/s. Krishnamohan Energy and Infrastructure Private Limited located at Gunawad, Patwari Halka 11, Ratlam Tehsil and Ratlam District, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/236458/2021, J-11011/454/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Sd Engineering services 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 Proposed 60 KLPD Grain based distillery unit along with 2.0 MW Cogeneration power plant by M/s. Krishnamohan Energy and Infrastructure Private Limited located at Gunawad, Patwari Halka 11, Ratlam Tehsil and Ratlam District, Madhya Pradesh.

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

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

The details of products and capacity are as under:

Sr. No.	Name of Products	Quantity
1	Grain based Ethanol plant (ethanol)	60 KLD
2	Co-power generation	2.0 MW
Sr. No.	Name of By-Products	Quantity
1	Distiller's Wet Grains with Solubles (DWGS)	40 MT / Day
2	Distiller's Dry Grains with Solubles (DDGS)	40 MT / Day
3	Fusel Oil	2700 Lit / Month

Total project area is 5.0 hectares (50,000 sqm) and the same is already under the possession of the company. Industry will develop greenbelt in an area of 33% i.e., (16,500 sqm) out of total area of the project. The estimated project cost is Rs. 105 Crores. Total capital cost earmarked

towards environmental pollution control measures is Rs. 156 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 26 lakhs/ annum. Total Employment will be 100 persons during operation phase. Industry proposes to allocate CER budget is Rs. 30 lakhs 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. The nearest water body Maleni river is flowing at a distance of 0.2 km in SE direction.

Total water requirement will be 835 KLD (Fresh water: 495 KLD + Treated Recycled water: 340 KLD) which will be sourced from Maleni River. Effluent of 413.5 KLD will be treated through state of CPU/Effluent Treatment Plant of 401 KLPD capacity and STP capacity of 4 KLD. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 1800 KVA, which will be sourced from the 2.0 MW Co-Generation Power Plant. Unit will be having D.G. Sets of capacity of 1500 KVA (1x1000 KVA and 1x500 KVA) which will be used as standby during power failure. Adequate Stack height (14 m) will be provided as per CPCB norms. The proposed Boilers capacity of 1 x 20 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 36.77 m for controlling the particulate emissions within the statutory limit of 115 mg/Nm³.

Details of process emissions generation and its management:

CO₂ (45 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 (40 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Boiler Ash (39.9 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.
- Domestic solid waste (50 Kg/day) generated during operational phase as segregated in separate coloured bins at designated places. Disposed to authorized vendors.

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

During deliberations, PP has informed that Maleni River is flowing at a distance of 0.2 km in SE direction. EAC directed that Construction shall not be started at project site without prior permission of State Irrigation Department.

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 16th June, 2021, project falls in category B2 and the proposed capacity of 60 KLPD 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). 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.
- (v). Total Fresh water requirement shall not exceed @4.0 KL/KL and will be met from Maleni 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 storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption. Construction shall not be started at project site without prior permission of State Irrigation Department.
- (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. ESP shall be installed with the boiler. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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 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.
- (xiv). PP proposed to allocate Rs. 30 Lakhs 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 the commencement of operations of the plant.
- (xv). 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.
- (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. 49.12**Onshore Oil and Gas Development & Production from KG/ONDSF/KAZA/2018 Block, Krishna District, Andhra Pradesh by M/s Vedanta Limited (Division Cairn Oil & Gas)- Consideration of Environment Clearance.****[IA/AP/IND2/142679/2020, J-11011/52/2020-IA-II(I)]**

The Project Proponent and the accredited Consultant M/s. Eco Chem Sales & Services made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Onshore Oil and Gas Development & Production from KG/ONDSF/KAZA/2018 Block, Krishna District, Andhra Pradesh by M/s Vedanta Limited (Division Cairn Oil & Gas).

All Offshore and onshore oil and gas exploration, development & production proposals are listed at S.N. 1(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

Standard ToR has been issued by Ministry vide letter No. IA-J-11011/52/2020-IA-II(I); dated 02nd April 2020. Public Hearing for the proposed project has been conducted by the State Pollution Control Board (APPCB) on 12.04.2021 presided by District Revenue Officer, Krishna. The main issues raised during the public hearing are related to Land lease, Land Subsidence, Hydraulic fracking, green belt, employment CSR, and well blowout.

The details of products and capacity are as under:

S. No.	Product	Quantity	Unit
1.	Natural Gas	30	Million standard cubic feet per day (MMSCFD)
2.	Crude Oil	30000	Barrels of Oil Per Day (BOPD)

Proposed well co-ordinates to be drilled in block KG/ONDSF/KAZA/2018:

Well ID	Latitude	Longitude	Actual revenue Village	District
1	16° 13' 46.661" N	81° 0' 1.886" E	Nidumolu	Krishna
2	16° 13' 42.160" N	81° 1' 48.175" E	Tarakaturu	Krishna
3	16° 13' 21.019" N	80° 59' 36.988" E	Kosuru	Krishna

Well ID	Latitude	Longitude	Actual revenue Village	District
4	16° 13' 29.741" N	81° 1' 2.691" E	Nidumolu	Krishna
5	16° 13' 12.235" N	81° 0' 25.142" E	Kaza	Krishna
6	16° 13' 14.870" N	81° 1' 55.831" E	Maddipatla	Krishna
7	16° 12' 49.232" N	81° 1' 30.320" E	Maddipatla	Krishna
8	16° 12' 25.772" N	80° 59' 43.830" E	Kaza	Krishna
9	16° 12' 25.771" N	81° 0' 51.194" E	Kaza	Krishna
10	16° 12' 41.358" N	81° 2' 9.505" E	Kanchakoduru	Krishna
11	16° 11' 56.955" N	81° 1' 18.276" E	Kaza	Krishna
12	16° 11' 56.945" N	81° 2' 25.638" E	Kaza	Krishna
13	16° 11' 20.682" N	80° 59' 43.831" E	Kaza	Krishna
14	16° 11' 20.681" N	81° 0' 51.190" E	Kaza	Krishna
15	16° 11' 20.673" N	81° 1' 58.549" E	Kaza	Krishna
16	16° 15' 38.443" N	80° 59' 47.748" E	Avurupudi	Krishna
17	16° 15' 38.442" N	81° 0' 55.131" E	Nidumolu	Krishna
18	16° 15' 38.434" N	81° 2' 2.514" E	Elakurru	Krishna
19	16° 15' 38.420" N	81° 3' 9.898" E	Kalapatam	Krishna
20	16° 15' 38.400" N	81° 4' 17.281" E	Mukkollu	Krishna
21	16° 15' 38.374" N	81° 5' 24.664" E	Kankata	Krishna
22	16° 14' 33.354" N	80° 59' 47.749" E	Palankipadu	Krishna
23	16° 14' 33.352" N	81° 0' 55.126" E	Nidumolu	Krishna
24	16° 14' 33.344" N	81° 2' 2.503" E	Nidumolu	Krishna
25	16° 14' 33.331" N	81° 3' 9.880" E	Pinagudurulanka	Krishna
26	16° 14' 33.311" N	81° 4' 17.257" E	Guduru	Krishna
27	16° 14' 33.285" N	81° 5' 24.634" E	Kankata	Krishna
28	16° 13' 28.241" N	81° 3' 9.863" E	Tarakaturu	Krishna
29	16° 13' 28.221" N	81° 4' 17.234" E	Guduru	Krishna
30	16° 13' 28.196" N	81° 5' 24.604" E	Narikepalapalem	Krishna
31	16° 12' 23.151" N	81° 3' 9.846" E	Rayavaram	Krishna
32	16° 12' 23.132" N	81° 4' 17.210" E	Guduru	Krishna
33	16° 11' 48.130" N	81° 5' 26.015" E	Ramarajupalem	Krishna
34	16° 11' 15.987" N	81° 3' 10.719" E	Rayavaram	Krishna
35	16° 11' 15.967" N	81° 4' 18.077" E	Mallavolu	Krishna

Onshore Block comprising approximately area of 114.93 Km². Total 90 hectares shall be required from the entire Kaza Block area. Industry will develop greenbelt in an area of 33.00 % i.e. 29.7 ha out of total area of the project.

The estimated project cost is Rs. 650 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 33 Crores and the Recurring cost (operation and maintenance) will be about Rs. 3.3 Crores per annum. Total Employment will be 125 persons as direct & 80 persons indirect. Industry proposes to allocate Rs. 6.5 Crores towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife Corridors etc. within 10 km distance from the proposed wells. Machilipatnam canal passes through the center of the Block.

Ambient air quality monitoring was carried out at 12 locations during 1st December 2019 to 29th February 2020 and the baseline data indicates

the ranges of concentrations as: PM₁₀ (40.3 – 65.3 µg/m³), PM_{2.5} (19 – 35.3 µg/m³), SO₂ (11.1 – 18.5 µg/m³) and NO_x (14.2 – 22.6 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.07 µg/m³, 0.18 µg/m³ and 7.24 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1000 KLD will be met from Bore well, deep saline water. Effluent (industrial) of 30 KLD quantity from drilling of each well will be treated through Mobile ETP and reused for drilling operations. The plant will be based on Zero Liquid discharge system.

Power requirement for the proposed project will be 1300 KVA and will be met from D.G. Sets/ GEG. The rated capacity of the DG sets are Camp sites – 150 kVA – 2No's; Drilling operation – 2 No's – 1500 kVA and 2 No's – 500 kVA during drilling Operations. DGs and or GEGs at each well pad location would be 150 kVA – 2No's and 500 kVA – 2No's during production. Stack (height 2.5 m for 150 kVA DG. Set, 3.5 m for 500 kVA D.G. Set and 500 kVA GEG) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

There will be generation of NO_x from the Flare stack. 30 m stack height will be provided.

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

S. No.	Type of Hazardous Waste	HW Category	HW during drilling phase (from drilling a well)	HW during Production phase (from each production well pad location)	Hazardous waste Disposal Practice
1.	Drill Cutting containing oil	2.1	500 MT/Well	-	SLF/Co-processing
2.	Sludge containing oil	2.2	1 MT/well	1 MT/ annum	SLF/Co-processing
3.	Drilling mud and other drilling wastes	2.3	300 MT/Well	-	SLF/Co-processing
4.	Discarded containers/ barrels/	33.3	4 MT/well	5 MT/ annum	Sales to registered recyclers
5.	Used Oil	5.1	-	1.0 TPA	Sales to registered recyclers/Re-process
6.	Spent / waste oil	5.1	4.00 MT/Well	5 MT/ annum	Sales to registered recycler/Reprocess
7.	Wastes/ residues containing oil	5.2	1.00 MT/Well	1 MT/ annum	Sales to registered recycler /Incineration

8.	Lead Acid batteries	-	-	0.5 MT / annum	Sales to registered recyclers
9.	E-Waste	-	-	0.2 MT / annum	Sales to registered recyclers
10.	Bio Medical waste	-	5 Kg	10 Kg	SLF/Incineration

During deliberations EAC noted that the proposed water requirement of 1000 KLPD is too high and suggested that net water requirement shall not exceed 30 KLPD per well drilled. Further, EAC sought following commitment from PP:

- The proposed budget towards CER be increased to Rs. 10 Crores which shall be spent to set up one small hospital and providing ambulance services to the areas nearby in consultation with District Magistrate.

PP agreed to the commitment 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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the 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 EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental Clearance.

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 and subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). 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.
- (ii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iii). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (iv). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.
- (v). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (vi). Approach road shall be made pucca to minimize generation of suspended dust.
- (vii). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (viii). The net water requirement shall not exceed 30 KLPD per well drilled which will be met from Bore well, deep saline water. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.
- (ix). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (x). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into

nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

- (xi). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xiii). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xiv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xv). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.
- (xvi). PP proposed to allocate Rs. 10 Crores towards CER which shall be spent to set up one small hospital and providing ambulance services to the areas nearby in consultation with District Magistrate.
- (xvii). No lead acid batteries shall be utilized in the project/site.
- (xviii). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xix). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.
- (xx). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues

and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 49.13

Expansion of molasses distillery capacity from 60 KLPD to Multi-feed (C molasses, B Heavy Molasses, Cane Juice/Syrup) 300 KLPD by M/s. Shree Datta Shetkari Sahakari Sakhar Karkhana Limited located at Dattanagar, Taluka Shirol, District Kolhapur, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/246849/2018, J-11011/33/2001-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Sd Engineering services 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 Expansion of molasses distillery capacity from 60 KLPD to Multi-feed (C molasses, B Heavy Molasses, Cane Juice/Syrup) 300 KLPD by M/s. Shree Datta Shetkari Sahakari Sakhar Karkhana Limited located at Dattanagar, Taluka Shirol, District Kolhapur, Maharashtra.

During the deliberations, PP has informed that, Ministry had issued EC earlier vide letter no. SEIAA-EC-0000002257; dated 01.06.2020 to the existing project for Expansion of Sugarcane crushing capacity from 9000 TCD to 15000 TCD, Distillery capacity from 60 KLPD to 90 KLPD (Rectified Spirit/ENA/Ethanol) and establishment of 21 + 5 MW Co-generation Power Plant in favour of M/s. Shree Datta Shetkari Sahakari Sakhar Karkhana Limited, Dattanagar, Tal. Shirol, Dist. Kolhapur, Maharashtra.

The granted expansion EC from 60 KLPD to 90 KLPD distilleries is not yet implemented by PP. PP has applied for Environmental Clearance in this Ministry for Expansion of molasses distillery capacity from 60 KLPD to Multi-feed (C molasses, B Heavy Molasses, Cane Juice/Syrup) 300 KLPD having EC obtained from SEIAA for expansion 60 KLPD to 90 KLPD dated 01.06.2020.

PP has also informed that, two Litigations are pending against the proposal. The details are as below:

Sr. no	Court's name	Case No.	Parties	Stage	Next date
1	Chief	RCC	Maharashtra	Evidence	17.03.2022

	Judicial Magistrate, Kolhapur	247/2018	Pollution Control Board v/s Shree Datta Shetkari Sahakari Sakhar Karkhana Limited, Shirol	before charge	
2	National Green Tribunal, Pune	Appeal No. 29/2020	Dastgir Bandar & Other v/s. Union of India & Others	Filing of affidavit & say	04.02.2022

During the deliberations, EAC directed that PP needs to resolve the litigations and achieve operational capacity of 90 KLPD for which EC is already given earlier before applying for expansion and decided to return the proposal.

Accordingly, proposal was returned in present form.

Agenda No. 49.14

Proposed 100 KLPD Ethanol Plant (B-Heavy Molasses Based) along with 2.5 MW Co-generation Power Plant at Village Mundia Pistor, Tehsil Bazpur, District Udham Singh Nagar, Uttarakhand by M/s Uttarakhand Sahakari Chini Mills Sangh Limited- Consideration of Environment Clearance.

[IA/UK/IND2/202279/2021, J-11011/82/2021-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 establishment of proposed 100 KLPD Ethanol Plant (B-Heavy Molasses Based) along with 2.5 MW Co-generation Power Plant at Village Mundia Pistor, Tehsil Bazpur, District Udham Singh Nagar, Uttarakhand by M/s Uttarakhand Sahakari Chini Mills Sangh Limited.

All Molasses based distilleries up to 100 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and are appraised at State Level by Expert Appraisal Committee (SEAC). Due to applicability of General Condition i.e the Interstate boundary of Uttarakhand and Uttar Pradesh at an approximate distance of 1.5 km, the project is appraised at Central Level by Expert Appraisal Committee (EAC). It was informed that no litigation is pending against the proposal.

Standard ToR for the project has been issued by Ministry vide letter No J-11011/82/2021-IA-II(I) dated 12th March, 2021. Public Hearing for the proposed project has been conducted by the Uttarakhand State Pollution Control Board on 25th August, 2021 presided by Officer in Charge, District Magistrate Office, Uttam Singh Nagar. The main issues raised during the public hearing are related to Air pollution, Road safety & traffic management, alternative site, Water, odour pollution & Groundwater unavailability.

The details of products and capacity are as under:

S. No.	Units	Capacity	Products
1.	B-Heavy Molasses Based Ethanol Plant	100 KLPD	Ethanol (Biofuel), Absolute Alcohol, Impure spirit
2.	Co-generation Power Plant	2.5 MW	Power

Total project area is 8.093 ha (80930 m²) which is already under the possession of the company. The land has been notified as industrial by Government of Uttarakhand for installing proposed ethanol plant. Industry will develop greenbelt in an area of 33% i.e., 2.7 ha (27000 m²) out of total area of the project.

The estimated project cost is Rs.120 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 35 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 90 & Temporary 30) during operation phase. Industry proposes to allocate Rs.1.2 Crores (1% of total project cost) towards Corporate Environment Responsibility.

There are no national parks, Wildlife Sanctuary, Biosphere Reserve, Tiger / Elephant Reserve, Wildlife Corridors, Protected Forests (PF) etc. falls within 10 km radius of the project site. Reserved Forest Jogipura RF (~9.5 Km in NNW) lies within 10 km radius. Rivers like Khera Nadi (~1.5 km in ENE Direction), Hathichinghar Nadi (~1.5 km in SW), Ghuga Nadi (~3.0 km in WSW), Dabka Nadi (~6.5 km in SE), Naiya Nadi (~6.5 km in SW), Baur Nadi (~7.5 km in ESE), Kosi River (~8.0 km in WNW), Burhikosi Nadi (~9.0 km in NW), Dabka Nadi (~9.0 km in NNW), Canal/Nala like Ghirsai Canal (~4.0 km in SSE), Pilakheri Nala, ghuga Nala, Jangi Khan Nala, Labaduwa Nala, Gandhi Nala, Sandla Nala, Joraiya Nala, Ghanghas Nala, Gangli Nala, Distributary like Ram Sagar distributary, Karimbaksh No 1 distributary, Kela distributary, Mundiya Pistaur distributary, Telipura distributary, Chakarpur distributary are the water bodies which lies within 10 km radius.

Ambient air quality monitoring was carried out at 8 locations during Summer season (March 2021 to May 2021) and the baseline data indicates the ranges of concentrations as: PM₁₀ (53.2 to 86.9 µg/m³), PM_{2.5} (25.9 to 46.7 µg/m³), SO₂ (6.32 to 12.53 µg/m³) and NO₂ (12.34 to 28.36 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.294 µg/m³, 1.77 µg/m³ and 2.06 µg/m³ with respect to PM₁₀, Sox and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 483 KLPD [458 KLPD Industrial & 25 KLPD Domestic & others] which will be sourced from the Groundwater. Total input for first run will be 1583 KLPD. 1128 KLPD will be recycled and net fresh water requirement will be 458 KLPD for proposed plant. Effluent of 429 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 500 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 2.5 MW, which will be sourced from the 2.5 MW Co-generation Power Plant. Unit will be having D.G. Sets of 2 x 1000 KVA which will be used as standby during power failure. Adequate Stack height (7 m) will be provided as per CPCB norms. Boiler of 25 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 60 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³

Details of process emissions generation and its management: CO₂ (70 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Spent wash (638 TPD) generated will be concentrated in Multi-effect evaporator and then used as fuel in boiler.
- Ash (20 TPD) from generated from the boiler will be utilized for brick manufacturing/ soil amendment/converted to ash granules to be used as potash fertilizer.
- Sludge will be dried and given to farmers to be used as soil manure.
- Used oil (0.5 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

During deliberations EAC suggested that proposed budget of Rs 1.20 crores towards CER shall be spent on installation solar power and on

improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed within 2 years.

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 ToR. 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). 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.
- (ii). The project proponent will treat and reuse the treated water within the integrated industry and no waste or treated water shall be discharged outside the premises.

- (iii). Total fresh water requirement for the integrated industry shall not exceed 483 KLPD which shall be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/Irrigation division in this regard, and renewed from time to time. 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.
- (iv). The spent wash shall be treated in MEE and used as fuel in incineration boiler. Effluent shall be treated through state of art CPU/Effluent Treatment Plant and the plant will be based on Zero Liquid Discharge system.
- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). 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.
- (vii). 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.
- (viii). 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.
- (ix). 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 TSD.
- (x). 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.
- (xi). 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. Development of greenbelt shall be completed along with commissioning of the project.

- (xii). PP proposed to allocate Rs 1.20 crores towards CER and shall be spent on installation of solar power and on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed within 2 years.
- (xiii). 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.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). 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.
- (xvi). 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. 49.15

120 KLPD Grain Based Ethanol Plant along with 3.2 MW Co-generation Power Plant at Memar Village, Taluka Bavla, District Ahmedabad, Gujarat by M/s Growthpath Petrochem (P) Limited- Consideration of Environment Clearance.

[IA/GJ/IND2/238950/2021, J-11011/476/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Grass Roots Research & Creation India (P) 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 120 KLPD Grain Based Ethanol Plant along with 3.2 MW Co-generation Power Plant at Memar Village, Taluka Bavla, District Ahmedabad, Gujarat by M/s Growthpath Petrochem (P) 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 16th 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 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

SL.No	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 120 KLD
2	Major Raw Material	Grain (primarily broken rice)
3	Final Product & By-Product	Ethanol (120 KLD) DDGS- 70 TPD CO ₂ - 60 TPD
2	Co-Generation Power Plant (1 x 32TPH-AFBC)	3.2 MW

Total land required for the project is 4.23 Ha. Industry will develop greenbelt in an area of 33% of total project area i.e. 1.396 Ha out of total area of the project.

The estimated project cost is Rs.200.88 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 497 lakh and the Recurring cost (operation and maintenance) will be about Rs.99 lakhs per annum. Total Employment will be 114 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Bhogava River is at approx. 9.3 km towards South West.

One Time Total water requirement for the project will be 1,682 KLD which will be further reduced through recycling & reuse of 1,244 KLD. Total fresh water demand for distillery operation is 438 KLD @3.6KL of water/KL of Ethanol. Net fresh water requirement including power plant of 3.2 MW is 718 KLD which will be sourced from ground water and augmented with rain water. The applications for permission of withdrawal of ground water has been submitted to CGWA vide application no 21-4/8051/GJ/IND/2021 dated 1/11/2021. Effluent of 476 KLD quantity will be treated through 600 KLD ETP/CPU. The plant will be based on Zero Liquid discharge system.

During operation phase power requirement will be 2.9 MW/Day and will be fulfilled by In-house Co-generation power plant within the project site. Surplus power will be connected to State Grid. For emergency, 2 DG set of 500 KVA each will be installed within the plant area. Project will have

32 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be done to ensure that ambient air quality standards to met all the time. All the internal roads will be asphalted.

Details of process emissions generation and its management:

CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

Type of Waste	Quantity	Storage	Utilization/ Disposal
DDGS – (by product) (Dried distillers' grains with soluble)	24,500 TPA	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Ash from boiler	4,200 TPA	Silo	Sold to Bricks manufactures in nearby area
Waste papers/Boxes	3.0 TPA	Covered shed	Sold to recyclers
Used Oil	2.0 KL	HDPE drums in covered shed	Used for oiling the machine in house and balance will be given to authorized re-cycler
Spent Resin from DM Plant	0.6 KL	HDPE drums in covered shed	Given to authorized re-cycler
ETP / CPU Sludge	376 KL	Stored in the dedicated Place	Given to authorized re-cycler

As per OM dated 16th 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 the deliberations,EAC directed PP to submit an undertaking for the following commitments/information:

- a) Industry shall install briquetting plant within plant premises for utilisation of fly ash. Coal of Sulphur content less than 0.5 % shall be used for boiler.

- b) Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- c) The proposed budget of Rs 2.00 crores towards CER shall be spent on improving infrastructure of 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.
- d) 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.

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 16th June, 2021, project falls in category B2 and the proposed capacity of 120 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. Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- (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 718 KLPD which will be sourced 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 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. Coal of Sulphur content less than 0.5 % shall be used for boiler.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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 towards CER which shall be spent on improving infrastructure of 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. 49.16

Proposed 200 KLPD Grain based Ethanol Plant along with 7.0 MW Cogeneration power plant at Village SatrodKhas, Tehsil & District Hisar, Haryana by M/s. Associated Distilleries (A unit of Globus Spirits Limited)- Consideration of Environment Clearance.

[IA/HR/IND2/243226/2021, J-11011/506/2021-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 200 KLPD Grain based Ethanol Plant along with 7.0 MW Cogeneration power plant at Village SatrodKhas, Tehsil & District Hisar, Haryana by M/s. Associated Distilleries (A unit of Globus Spirits 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 16th 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 16th 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	200 KLPD	Product: Ethanol (Bio-fuel)
Co-generation Power Plant	7.0 MW	Power

Total project area is 8.09 hectares (80900 m²) and the same is already under the possession of the company. Industry will develop greenbelt in an area of 33% i.e., 2.67 ha (26700 m²) out of total area of the project.

The estimated project cost is Rs. 150 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 23 Crores and the Recurring cost (operation and maintenance) will be about Rs. 3.0 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 120 persons (Permanent 95 & Temporary 25) during operation phase. Industry proposes to allocate Rs. 1.5 Crores (1% of total project cost) towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserved Forests (RF), Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius of the plant site. One Protected Forest (PF) - Bir Hisar PF (~5.0 km in NW direction) lies within 10 km radius of the plant site. Balsamand Sub Branch (Bhakra Canal) (Adjacent in East direction). Hisar Major Distributary (Western Yamuna Canal) (Adjacent in North direction), Dewa Distributary (~ 1.5 km in South direction), Petwar Distributary (~ 4.0 km in South direction). Few minor agricultural canals are also present in 10 km radius area.

Total water requirement for the Grain based Ethanol Plant will be 3106 KLPD out of which 2137 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 969 KLPD (461 KLPD Process + 508 KLPD Co-generation Power Plant, Cooling tower & other utilities) and 25 KLPD for Domestic which will be sourced from canal water. Effluent of 929 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 1200 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 4.5 MW, which will be sourced from the 7.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 2 x 1500 KVA which will be used for the power backup. Adequate Stack height (8 m) will be provided as per CPCB norms. Boiler of 50 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 72 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³

Details of process emissions generation and its management:

CO₂ (151 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 (104 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.

- Ash (50 TPD) generated from the boiler will be supplied to brick manufacturers.
- 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 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 200 KLPD will be for manufacturing of fuel ethanol only.

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

- a) The proposed budget of Rs 1.50 crores towards CER be increased to Rs. 2.00 Crores and shall be spent on promoting GoI's "Beti Bachao Beti Padhao (BBBP) Scheme" by construction of Girls schools and Girls hostels along with overall development of infrastructure in consultation with District Magistrate. All the proposed activities under CER shall be completed within 2 years.

PP has submitted the desired commitment 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 16th June, 2021, project falls in category B2 and the proposed capacity of 200 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. Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- (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 969 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). CO₂ 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 and shall be spent on promoting GoI's "Beti Bachao Beti Padhao (BBBP) Scheme" by construction of Girls schools and Girls hostels along with overall development of infrastructure in consultation with District Magistrate. 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. 49.17

Proposed Greenfield Project of 125 KLD Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant at Village- Banara, Tehsil Dumpada, District- Cuttack, Odisha by M/s Cuttack Agrivet Private Limited- Consideration of Environment Clearance.

[IA/OR/IND2/249076/2021, IA-J-11011/523/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Grass Roots Research & Creation India (P) 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 of 125 KLD Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant at Village- Banara, Tehsil Dumpada, District- Cuttack, Odisha by M/s Cuttack Agrivet 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 16th 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 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

SL.No	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 125 KLD
2	Major Raw Material	Grain (primarily broken rice)
3	Final Product & By-Product	Ethanol (125KLD) DDGS- 85 TPD CO ₂ - 62 TPD
2	Co-Generation Power Plant (1 x 37 TPH-AFBC)	4.0MW

Total land required for the project is 4.69 Ha. Industry will develop greenbelt in an area of 33% of total project area i.e. 1.547 Ha. out of total area of the project.

The estimated project cost is Rs.128 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 470 lakh and the Recurring cost (operation and maintenance) will be about Rs.102 lakh per annum. Total Employment will be 209 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. However, following wildlife sanctuaries and forests are falls within 10km study area:

Sl. no	Location	Direction	Distance (km)
1.	Chandka Dampara WLS	South	2.2
2.	Chudang Garh Forest	ESE	5.6
3.	Nandakana WLS	SE	6.25
4.	Sukasana Reserve Forest	WNW	5.8
5.	Khalakhala Reserve Forest	NW	5.8
6.	Shikarachandi Hill Forest	SE	9.5
7.	Subasi Reserve Forest	NNW	9.8
8.	Orninga Reserve Forest	NNW	9.8

One Time Total water requirement for the project will be 1869 KLD which will be further reduced through recycling & reuse of 1368 KLD. Total fresh water demand for distillery operation is 500 KLD @4.0 KL of water/KL of Ethanol. Net fresh water requirement including power plant of 4.0 MW is 739 KLD @5.9 KL/KL of ethanol production, which will be Surface water sourced from Mahanadi River. Effluent of 548 KLD quantity will be treated through 670 KLD ETP/CPU. The plant will be based on Zero Liquid discharge system.

During operation phase power requirement will be 3.5 MW /Day and will be fulfilled by 4.0MW Co-generation power plant within the project site. Surplus power will be connected to State Grid. For emergency, 1 DG set of 250 KVA will be installed within the plant area. Project will have 37 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be done to ensure that ambient air quality standards to met all the time. All the internal roads will be asphalted

Details of process emissions generation and its management:

- CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

Type of Waste	Quantity	Storage	Utilization/ Disposal
DDGS – (by product) (Dried distillers' grains with soluble)	25500 TPA	Covered shed	Sold as Cattle Feed, Poultry & Fisheriesr
Ash from boiler	19,800 TPA	Silo	Sold to Bricks manufactures in nearby area
Waste papers/Boxes	3.0 TPA	Covered shed	Sold to recyclers
Used Oil	2.0 KL	HDPE drums in covered shed	Used for oiling the machine in house and balance will be given to authorized re-cycler
Spent Resin from DM Plant	2.0 KL	HDPE drums in covered shed	Given to authorized re-cycler
ETP Sludge	65.21 Kg/Day	Stored in the dedicated Place	Given to authorized re-cycler

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 125 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations PP informed that the project site is located in NNE direction of the Sanctuary at a distance of 2.2 km from Chandka Dampara WLS and 0.25 Km outside its ESZ boundary. Further, Nandan Kanan WLS is at a distance of 6.25 km and 6.15 Km outside its ESZ. Hence, NBWL is not applicable as the project falls outside the ESZ. EAC agreed to it. Further, EAC directed PP to submit an undertaking for the following commitments:

- a) Brick manufacturing unit shall be installed for utilization of fly ash. Coal of Sulphur content less than 0.5 % shall be used for boiler.
- b) Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- c) 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.
- d) The proposed budget towards CER be increased to Rs. 1.50 Crores and shall be spent on installation of solar power and on improving infrastructure of 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.

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 16th June, 2021, project falls in category B2 and the proposed capacity of 125 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. Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- (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 739 KLD which will be sourced from Mahanadi 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.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit shall be installed for utilization of fly ash. Coal of Sulphur content less than 0.5 % shall be used for boiler.

- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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. 1.50 Crores towards CER and shall be spent on installation of solar power and on improving infrastructure of 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. 49.18

Onshore Oil & Gas exploration & development drilling and production in Ningru Oil & Gas Field in Districts Changlang and Namsai for Ningru PML Block (Arunachal Pradesh) by M/s. Oil India Limited - Amendment of Environment Clearance.

[IA/AR/IND2/249055/2021, J-11011/116/2018-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter F. No. IA-J-11011/116/2018-IA-II(I) dated 7th January, 2020 for the project "Onshore Oil & Gas exploration & development drilling and production in Ningru Oil & Gas Field in Districts Changlang and Namsai for Ningru PML Block (Arunachal Pradesh)" in favour of M/s. Oil India Limited.

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

S. No.	Para of EC issued by MoE F&C C	Details as per the EC	To be revised/read as	Justification /reasons
1	Para No. 2	"Details of 33 wells propose	"Details of 34 wells to be drilled in Ningru PML Block" Details of NMA well added in the table; so total no. of wells will be 34	OIL submitted application for ToR for drilling of 35 wells and

		d to drill in Ningru PML Block" and list of 33 wells provided in the table at Point no. 2						3 production installations in Ningru PML Block. MoEF&CC issued approved ToR vide No.IA-J-11011/116/2018-IA-II(I) dated 4th May, 2018. EIA study conducted for 35 wells and 3 production installations at the Ningru PML area. Two well locations out of 35 wells viz. NMA and Loc V dropped from the proposal as forest clearances was not obtained. OIL obtained EC for 33 wells and 3 production installations vide letter no No.IA-J-11011/116/2018-IA-II(I) dated 7th January, 2020. Currently, MoEF&CC provided In-Principle/Stage-I approval for diversion of forestland for NMA well. OIL submitted
			S N o .	Na me of the drill ing loca tion	Existi ng well plint h and land area	FC details	Remarks	
			34	NMA	NMA	No. FOR.544/CONS/2013 / 2870-73 dated 7 th Decem-ber 2020	Stage-I FC- No drilling activities/ construction activities will be taken up till Stage-II Final FC is obtained	

				necessary fees and compliance report as per advice of IRO, MOEF&CC.
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During deliberation PP has informed that the proposal was earlier appraised and recommended by the EAC (Ind-2) based on EIA studies conducted during its 14th meeting held during 20th – 22nd November, 2019. During deliberation in the meeting, the EAC agreed for the grant of EC for 33 wells and 3 production installations leaving 2 no.'s of drilling locations namely Loc-V & NMA for which Forest Clearance was not available then. However, the Impact Assessment studies were done for these locations including public hearing. Accordingly, Ministry had granted Environmental Clearance vide letter F. No. IA-J-11011/116/2018-IA-II(I) dated 07th January, 2020 for the project "Onshore Oil & Gas Exploration & Development Drilling and Production in Ningru Oil & Gas Field in Districts of Changlang and Namsai for Ningru PML Block (Arunachal Pradesh)" in favour of M/s. Oil India Limited for 33 no.s of drilling wells and 03 no.s of production installations.

PP has now submitted the Stage-I FC for diversion of forestland for NMA location vide letter no. FOR.544/CONS/2013/2870-73 dated 07th December, 2020 of Government of Arunachal Pradesh to MoEF&CC (Forest Division). EAC found the Stage- I FC as satisfactory and in order.

After the detailed deliberations, EAC found the justifications satisfactory and **recommended** the amendments in EC, as desired by the PP, with all other terms and conditions remaining unchanged.

Agenda No. 49.19

Proposed 100 KLD Grain based Ethanol plant along with 3.0 MW captive power plant by M/s. Karvjya Ethnoxy Private Limited located at 2 D.O.(A), Stone no 24/2, 24/10, Murba No 49 & 50, Under Panchyat 1 L.M, Near Village Bhopalpura, Tehsil Suratgarh, District Sri Ganganagar, Rajasthan - Reconsideration of Environment Clearance.

[IA/RJ/IND2/240172/2021, IA-J-11011/443/2021-IA-II(I)]

The proposal was earlier placed before the EAC (Ind-2) in its 45th meeting held during 29th – 30th November, 2021. The PP/consultant was not able to attend for the appraisal of proposal due to technical problem.

Therefore, EAC has decided to defer the proposal.

The proposal was again placed before the EAC (Ind-2) in its 47th meeting held on 23rd December, 2021 wherein EAC deferred the proposal.

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

S. No	ADS	Reply of PP	Observation of EAC
1.	During the deliberations EAC noted that Indira Gandhi Canal is passing approximately 350 m besides the proposed project. In this regard, EAC inquired PP whether Industry has taken permission from State Irrigation Department that the proposed project location is safe from flood line. PP has informed that as examined by them the location is safe from flood zone. However, EAC directed that Industry shall take NOC/permission from State Irrigation Department that the proposed project site is safe from flood zone and deferred the proposal.	PP has submitted NOC w.r.t site suitability of proposed project. 1. Water Resources Department Shrivijaynagar, Branch Anupgarh ; and 2. Vigilance, Quality Control & Regulation, Indira Gandhi Nahar Project, Bikaner	EAC deliberated the issue and found it satisfactory.

Again, the case has been placed in 49th EAC meeting held during 27-28th January, 2022 for re-consideration.

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 for Proposed 100 KLD Grain based Ethanol plant along with 3.0 MW captive power plant by M/s. Karvjya Ethnoxy Private Limited located at 2 D.O.(A), Stone no 24/2, 24/10, Murba No 49 & 50, Under Panchyat 1 L.M, Near Village Bhopalpura, Tehsil Suratgarh, District Sri Ganganagar, Rajasthan.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a

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

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16th 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	Capacity	Details
1.	Grain Based Ethanol Plant	100 KLD	<ul style="list-style-type: none"> • Product- Ethanol (Bio-fuel) • By-product- <ul style="list-style-type: none"> ✓ DDGS 60 TPD & ✓ CO₂ 40 TPD
2.	Co-generation power plant	3.0 MW	Power

The total land area for the Greenfield project is 49,280 sq. m. which has been duly converted for industrial use as per conversion order no. LC/2021-22/109993 dated 16/11/2021. Industry will develop greenbelt in an area of 33 % i.e., 16262 m² out of total area of the project. The estimated project cost is Rs. 149.07 Total capital cost earmarked towards environmental pollution control measures is Rs. 26.6 Crore and the Recurring cost (operation and maintenance) will be about Rs. 0.161 Crore per annum. Total Employment will be 200 persons during operation phase. Industry proposes to allocate Rs. 3.0 Crore @ of 2 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Indira Gandhi Canal ~ 350 M towards West direction.

Total water requirement is 1414 m³/day of which fresh water requirement of 487 m³/day will be met from ground water and application for obtaining NOC from CGWA for ground water withdrawal is under process with CGWA vide application no. 21-4/16203/RJ/IND/2021 dated 21.10.2021. Remaining water requirement will be met from ETP & STP treated water to the tune of 927 KLD. Process Effluent (MEE & Dryer Condensate & Boiler & CT Blow-down) of 670 m³/day quantity will be treated through 700 KLD ETP (Anaerobic digester, aerobic system, MGF-ACF, UV, UF & RO

treatment). Domestic effluent of 8.0 m³/day will be treated in STP (10 KLD). The plant will be based on Zero Liquid Discharge system.

Power requirement will be 2.5 MW and will be met from Co-generation power plant of 3.0 MW. DG sets (500 KVA X 2 Nos) are proposed as standby during power failure. Stack height (5 m above roof) will be provided as per CPCB norms to the proposed DG sets. 30 TPH x 1 no. Rice husk fired boiler will be installed. ESP with a stack of height of 40 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:

CO₂ generated (40 TPD) during Fermentation Process will be scrubbed, collected and sold to end users.

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

- Solid waste from the Grain based operations will be DDGS (60 TPD) which will be sold to Cattle feed manufacturers.
- Ash from Boiler (36 TPD) will be handed over to nearby brick manufacturers in covered vehicles.
- Used oil & grease (0.5 KL/annum) generated from transformers, DG set, plant machinery/gear boxes, etc. - as hazardous waste will be handed over to the CPCB authorized recyclers.
- ETP sludge generated to the tune of ~1 TPD (wet basis) will be handed over to manure manufacturers.
- STP Sludge will be dried & used as manure for landscaping within premises.

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 plant premises.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- 15% of the total plant area will be reserved for parking.
- PP shall utilize fresh water @3.93 KL/KL of ethanol production.
- 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 install ESP with the proposed boiler.
- Biomass/rice husk shall be used as fuel in boiler.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.

- PP shall meet 10% (250 KW) of the total power requirement from solar power.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- The proposed budget allocation Rs. 3.0 Crores towards CER. An amount of Rs. 1.5 Crores 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 and remaining Rs. 1.5 Crores shall be used for providing solar lights in nearby villages.

PP has submitted the desired information as sought above.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 100 KLD will be used for manufacturing fuel ethanol only.

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 Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. 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 16th June, 2021, project falls in category B2 and the proposed capacity of 100 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). 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.
- (v). Total Fresh water requirement shall not exceed 3.93 KL/KL and 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. 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.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. PP shall install ESP with the proposed boiler. Biomass/rice husk shall be used as fuel in boiler. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall meet 10% (250 KW) of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

- (viii). PP shall allocate at least 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 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.
- (xiv). The proposed budget allocation Rs. 3.0 Crores towards CER. An amount of Rs. 1.5 Crores 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 and remaining Rs. 1.5 Crores shall be used for providing solar lights in nearby villages.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products as per CPCB norms and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.
- (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. 49.20

60 KLPD Grain Based Ethanol Plant along with 2.0 MW Co-generation Power Plant by M/s. ESE ENERGY PRIVATE LIMITED located at Khasra No. 406/410/411, Block Kudra, Village Daindh, District Kaimur, Bihar - Reconsideration of Environment Clearance.

[IA/BR/IND2/228207/2021, J-11011/345/2021-IA-II(I)]

Project proponent has requested to withdraw the proposal due to change in project planning. Therefore, EAC has decided to return the proposal in present form.

Accordingly, proposal was returned in present form.

ANNEXURE

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 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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

S. No.	Name and Address	Designation
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. Dinabandhu Gouda, CPCB	Member
10.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
11.	Dr. MahendraPhulwaria	Scientist 'C'
12.	Sh. Kanaka Teja	Research Assistant
