GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 30.09.2022

Meeting ID: IA/IND2/13342/26/09/2022

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 26th – 28th September, 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 membersand 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 Meeting (ID: IA/IND2/13341/23/09/2022) held during 23rd September, 2022conducted through Video Conferencing (VC), confirmed the same. After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

(iii) 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: -

26th September, 2022 (Monday)

Agenda No. 1

Violation in Sugar Mill of 4500 TCD to 7500 TCD and Co-Generation Power Plant of 23 MW to 27 MW within Integrated Complex also consisting of 30 KLPD Molasses Distillery and 30 KLPD Grain/ Cane Juice Syrup Distillery by M/s. CHADHA SUGARS AND INDUSTRIES PRIVATE LIMITED at Village Kiri Afgana, Tehsil Batala, District Gurdaspur, Punjab - Consideration of Terms of Reference

[IA/PB/IND2/284867/2022, J11011/8/201 0-IA-II(I)]

It has been informed to EAC by PP vide letter dated 22.09.2022 that due to unavoidable circumstances they will not be able to attend EAC meeting.

Accordingly, the proposal was deferred.

Agenda No. 2

Onshore Development and Production by drilling and development of wells located at Villages Changara, Chikaliya, Dugari, Indranaj, Isarwada, Jichka, Kalamsar, Kandhroti, Kasbara, Khada, Mahiyari, Moraj, Ralaj, Undel, Varsada, Vasna, Alindra, Antroli, Bhalada, Daloli, Garmala, Kharenti, Khumaarvada, Limbasi, Machhiel, Malavada, Maliyataj, Marala, Matar, Nandhanpur, Nagrama, Palana, Punaj, Ratanpur, Siholdi, Sokhda, Traj, Tranja, Undhela, Vansar, Vastana, Tehsil Tarapur, Sojitra, Anand, Petlad, Borsad, Khambat, Anklav, Mehmedabad, Thasra, Mahudha, Matar, Nadiad and Kheda, District Anand & Kheda, State Gujarat by M/s. Gujarat State Petroleum Corporation Ltd– Consideration of Environmental Clearance

[IA/GJ/IND2/73049/2018, IA-J11011/59/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. SV Enviro Labs & Consultants (NABET certificate no. NABET/EIA/2124/RA 0240 and validity 24.10.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the

project Onshore Development and Production by drilling and development of wells located at Villages Changara, Chikaliya, Dugari, Indranaj, Isarwada, Jichka, Kalamsar, Kandhroti, Kasbara, Khada, Mahiyari, Moraj, Ralaj, Undel, Varsada, Vasna, Alindra, Antroli, Bhalada, Daloli, Garmala, Kharenti, Khumaarvada, Limbasi, Machhiel, Malavada, Maliyataj, Marala, Matar, Nandhanpur, Nagrama, Palana, Punaj, Ratanpur, Siholdi, Sokhda, Traj, Tranja, Undhela, Vansar, Vastana, Tehsil Tarapur, Sojitra, Anand, Petlad, Borsad, Khambat, Anklav, Mehmedabad, Thasra, Mahudha, Matar, Nadiad and Kheda, District Anand & Kheda, State Gujarat by M/s. Gujarat State Petroleum Corporation Ltd.

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).

GSPC is operator for the block awarded Tarapur CB-ON/2 block situated in Kheda and Anand districts of Gujarat state to the consortium of GSPC, ONGC & GEO GLOBAL BARBADOS INC during PRE NELP round of bidding. GSPC is planning to carry out construction of Production Facility at each or any of the well sites (depending on technical and commercial feasibility to optimize the numbers of PRODUCTION FACILITY creation) and connecting wells to PRODUCTION FACILITY through laying of 4"/6" underground pipeline. Total block area is 570 Sq. Km.

The details of products and capacity as under:

S. No	Unit	Product/by product	Existing Quantity	Proposed Quantity	Total Quantity
1	SCM/Day	Crude Oil (per well)	--	30-40	30-40
2	SCM/Day	Natural Gas (per well)	--	5000-7000	5000-7000

Co-ordinates of proposed wells:

Name	Latitude	Longitude
1	22°37'15.6384"N	72°37'34.5859"E
2	22°18'35.0577"N	72°45'27.5662"E

3	22°19'20.3244"N	72°46'3.8566"E
4	22°19'8.6225"N	72°45'19.5444"E
5	22°43'38.5099"N	72°42'26.8199"E
6	22°43'18.8358"N	72°43'22.5028"E
7	22°44'22.8286"N	72°43'26.8424"E
8	22°45'25.3695"N	72°43'3.8233"E
9	22°32'28.5132"N	72°32'54.0802"E
10	22°42'2.1600"N	72°41'45.7400"E
11	22°41'7.0200"N	72°42'20.4300"E
12	22°41'1.1301"N	72°44'17.4899"E
13	22°37'24.4898"N	72°38'15.7101"E
14	22°36'21.4601"N	72°39'8.6000"E
15	22°36'48.8999"N	72°36'10.4101"E
16	22°37'26.4899"N	72°36'26.2099"E
17	22°38'10.3000"N	72°36'58.6800"E
18	22°38'44.0275"N	72°44'14.8355"E
19	22°35'20.5999"N	72°35'24.1299"E
20	22°31'8.8884"N	72°37'20.6944"E
21	22°27'43.1492"N	72°37'57.6480"E
22	22°22'4.2901"N	72°41'13.2799"E
23	22°41'13.2649"N	72°40'15.1733"E
24	22°39'48.0799"N	72°39'10.7101"E
25	22°38'16.3999"N	72°37'58.0799"E
26	22°34'45.4701"N	72°33'11.3398"E
27	22°32'14.0049"N	72°35'24.8577"E
28	22°31'39.9491"N	72°29'55.6781"E
29	22°30'31.8868"N	72°32'23.9630"E
30	22°28'52.8013"N	72°34'57.2534"E
31	22°28'58.9700"N	72°36'35.5200"E
32	22°19'1.0600"N	72°42'9.7400"E
33	22°33'53.2101"N	72°39'2.7401"E
34	22°32'39.8152"N	72°30'10.3543"E
35	22°33'30.2301"N	72°29'35.5402"E
36	22°34'5.1826"N	72°31'46.8943"E
37	22°34'54.3326"N	72°31'53.8223"E
38	22°33'16.9546"N	72°32'27.3641"E
39	22°34'13.1687"N	72°32'43.5495"E
40	22°35'20.8181"N	72°32'38.1504"E
41	22°39'26.6502"N	72°41'49.1825"E
42	22°34'12.4553"N	72°36'43.0060"E
43	22°30'31.0274"N	72°34'46.1314"E

44	22°33'41.8392"N	72°34'50.0819"E
45	22°37'3.7362"N	72°33'47.6686"E
46	22°20'31.2051"N	72°41'38.3376"E
47	22°17'21.1870"N	72°46'3.4222"E
48	22°20'0.1908"N	72°43'23.6647"E
49	22°29'42.8053"N	72°32'6.1124"E
50	22°37'2.8565"N	72°36'57.8321"E

Standard ToR has been issued by Ministry vide letter No IA-J-11011/59/2018-IA-II(I) dated 17.02.2018. Public Hearing for the proposed project had been conducted by the Gujarat Pollution Control Board on 16.06.2022 & 17.06.2022 at Anand and Kheda chaired by Additional District Magistrate and District Magistrate of those respective districts. It was informed that no litigation is pending against the proposal. Major issues raised in PH are related to compensation given for land to be acquired by M/s. GSPC and negative effects on the environment due to the project. PP has informed that land would be taken on rental basis and compensation according to prevailing norms would be paid for land taken on rent and the standing crops on it. Further it was informed that GSPC always follows all environmental guidelines to prevent air, water, soil and noise pollution and he added that they would do the same for this project also so that there was no adverse effect on the environment.

Total land area required is 57000 hectares. The estimated project cost is Rs. 14-15 crores per drilling of 1 well and Rs. 3-4 Crores in the development of production facilities at each site. Capital cost of EMP would be Rs. 44.5 Lakhs and recurring cost for EMP would be Rs. 21.5 Lakhs per annum. Industry proposes to allocate Rs. 0.34 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 10 Nos (Drilling) and 25-30 Nos (Production) persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Shedi River is at a distance of 0.542 Km from Well no 8 in North direction. River Sabarmathi is at a distance of 2.795 Km. Mahi river is at 2.89 km

Ambient air quality monitoring was carried out at 8 locations during 01st January, 2020 To 31st March, 2020 and the baseline data indicates the ranges of concentrations as: PM_{10} (53.2-78.7µg/m^3), PM2.5 (25.4-

41.5µg/m^3), SO2 (16.6-20.2µg/m^3) and NO2 (7.70-15.50g/m^3).AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 80.38 µg/m^3, 15.493 µg/m^3 and 20.93 µg/m^3 with respect to PM, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 40 CMD (Drilling for each well) and 6 CMD (Production for each well) which will be met from locally through approved authorities (name of river, if any). Effluent of 10 CMD (Drilling) and 3 CMD (Domestic) quantity and will be discharged in HDPE line pit at site for natural evaporation. Domestic waste water will be generated and disposed to well designate septic tank at site.

Power requirement will be 662.5KVA (Drilling) and will be met from proposed 2 x 380 KVA DG Sets and Production: From Gujarat Electricity Board (GEB), Power requirement: (Motive: 100 HP &Light: 25 KVA) from GEB; Emergency: 62.5 KVA DG Set. NOC for power requirement from State Grid will be obtained as and when production facility is established. APCE Acoustic enclosure with a stack of height of 9 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed DG sets.

Details of Process emissions generation and its management:

- Fugitive emissions may result from handling and storage of hydrocarbons (crude, diesel & chemicals) which are very minor. At the time of transportation dust will be generated. Water spraying to be done on the access roads to control re-entrained dust during dry season (if required).
- The engines and exhaust systems of all vehicles and equipment used will be maintained as such, that exhaust emissions are low and do not breach statutory limits set for the concerned vehicle/equipment type.

Details of solid waste/Hazardous waste generation and its management

- During drilling, domestic solid waste of approximately 4-5 kg/day per well will be generated and 1-2 kg/day generated during production at

each site will be segregated at source (Organic / inorganic) & disposed accordingly

- Drill Cutting wastes 300-500 MT generated during drilling shall be handover to authorised TSDF facility.
- Waste/Used oil of 200 Liters/Well during Drilling and 30Kg/month during production will be used for internal purpose or handover to authorised disposal site.
- Oily Cotton waste of 15kg/month/well (Drilling) and 30Kg/month (Production) will be handover to authorised disposal site.
- Waste Sludge oil of 1 SCM/Month will be generated. It will be sent to authorised recycler or authorised disposal site.

During deliberations, EAC discussed following issues:

- Action plan along with measures to be taken for issues raised in Public Hearing was not prepared.
- Details of Early Production Facilities for the proposed project to be submitted.
- Details of flaring system for the development wells/EPS to be submitted.
- Details of waste water generation, treatment & disposal from the Early Production Facilities shall be submitted.
- The data presented in wind rose diagram is not matching with isopleth displayed in the presentation. Therefore, fresh GLC shall be estimated and submitted.
- Detailed project cost for the development drilling as well as EPS shall be submitted. Accordingly, capital cost and recurring cost of EMP shall be revised.
- Activities proposed in CER along with timeline shall be submitted. Occupational health and safety budget shall be submitted.
- Onsite emergency plan including oil spill management plan shall be submitted.
- H_2S contingency plan shall be submitted for emissions control.
- Copy of MOU for disposal of hazardous waste to the TSDF site shall be submitted.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 3

Expansion of Barauni Refinery from 6 MMTPA to 9 MMTPA along with Polymer units – Amendment in Environmental Clearance.

[IA/BR/IND2/202205/2021, IA-J11011/15/20 15 - IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 15th February 2019 (F. No. J-11011/15/2015-IA-II (I)) & further extension has been obtained vide letter dated 4th June, 2022 for the project Expansion of Barauni Refinery from 6 MMTPA to 9 MMTPA along with polymer units located at Barauni, District Begusarai (Bihar) in favour of M/s Indian Oil Corporation Limited.

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

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as
1	11(r) (page no.5)	The green belt of 5-10 m width shall be developed in more than 33% of the total project area mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the state Forest Department.	The existing greenbelt of 14.1% of total plant area shall be maintained. The remaining greenbelt having width of 5-10 m to achieve 33% of the total plant area shall be developed mainly along the plant periphery, in downward wind direction along road sides etc. and if area is deficient the green cover shall be compensated with plantation in other

			designated area. As proposed, an agreement with DFO Munger has been signed for greenbelt development in 444.79 Acre area at Munger Forest Division. Selection of plant species shall be as per the CPCB guidelines in consultation with the state Forest Department.

During deliberations, EAC noted following issues:

- PP has informed that the amendment sought is due to space constraints for the proposed expansion.
- Industry has to develop green belt in an area of 33% i.e 292.98 Acre. Existing refinery is already having green belt in an area of 16.71 % i.e 148.39 Acre, township area has green belt in an area of 9.26 % i.e 82.19 Acre.
- Industry proposes to reduce the green belt in existing area to 4.93 % i.e 43.8 Acre and to retain the green belt of 9.26 % i.e 82.19 Acre making it total green belt of 14.19 % i.e 125.99 Acre inside Industry. In order to compensate the short of fall of green belt area of 33 %, Industry proposes to develop green belt of 444.79 Acre at Munger Forest Division which is about 46 km aerial distance from the existing refinery.

After detailed deliberations, EAC recommended for amendment proposed by PP subject to following additional conditions and desired to submit the commitment in writing:

- Existing green belt within the plant premises shall be retained and no trees shall be cut.
- Measures shall be taken for VOC reduction during loading for gasoline and naptha.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

Agenda No.4

Setting up Petrochemical Complex at Dahej, Tehsil: Vagra, District - Bharuch, Gujarat by M/s. Petronet LNG Limited– Consideration of Terms of Reference

[IA/GJ/IND2/288836/2022, IA-J11011/345/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Engineers India Limited (NABET certificate no. NABET/EIA/1922/RA0189_Rev01 and validity 22/11/2023) made a detailed presentation on the salient features of the project and informed that the proposal is for Terms of reference to the project of Setting up Petrochemical Complex at Dahej, Vagra tehsil, District - Bharuch, Gujarat by M/s. Petronet LNG Limited.

All project/activity are listed at 5(c) - Petrochemical complexes of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of Unit capacities and product patterns are as under:

S. No.	Unit	Capacity (KTPA)
1	Propane Dehydrogenation Unit	750
2	Polypropylene Unit	500
3	Propylene Unit	250

S. No.	Product	Capacity (KTPA)
1	Ethane	700
2	Propane	100
3	Hydrogen	32
4	Propylene	250
5	Polypropylene	500
6	C4 LPG	36

Total plant area will be 47.73 Ha which is adjacent to LNG terminal. Discussion on procurement of another 22.6 Ha. land from Gujarat Maritime Board (GMB) near LNG plant is under progress which will be utilized for greenbelt development, parking, administrative building and enhanced security. An area of 20.68 Ha greenbelt will be developed for the proposed project. The estimated project cost is Rs. 14200 Crores.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors within 10 km distance. Lakhigam RF (0.437 Km) and Dahej RF (2.80 Km) are present in the north direction. Gulf of Khambhat (0.2 km), Narmada River (1.36 Km, SE), Ban Khadi (5.53 Km, N) and Ghughar Khadi (6.53 Km N) are present within 10 km radius of the proposed project.

Total freshwater requirement will be 15600 m3 /day and sourced from GIDC water supply system. Proposed effluent generation will be 840 m3/day and treated through new Effluent Treatment Plant. Treated effluents will be discharged to common effluent channel of GIDC.

Total power requirement for proposed petrochemical complex will be 190 MW and sourced from Gujarat Electricity Board. Gas based steam boiler of capacity 50 TPH (1 working + 1 standby) will be installed.

Hazardous waste will be disposed off nearby authorized landfill agency/TSDF. Spent catalysts will be sent back to the original supplier/ approved recycler for reprocessing.

During deliberations, it was noted that the proposed greenbelt of 20.68 Ha is not entirely in the project site. PP has informed that 4 Ha of green belt shall be developed inside the project site and remaining green belt shall be developed outside the plant premises for which additional 20 Ha land will be purchased. After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2:

- CRZ mapping study shall include demarcation of HTL and LTL at / near the project site; Demarcation of ecologically sensitive entities

such as Mangroves, Sand dunes, etc; Superimposition of HTL, LTL and ecologically sensitive areas along with the project site from the authorized institutes.

- Biodiversity study and impact of proposed activities on mud flat shall be carried out.
- Recommendation from SCZMA shall be incorporated in Final EIA/EMP Report.
- 2D Risk assessment modelling shall be conducted. Risk assessment shall include prevailing risk from existing facilities, perceived risks from proposed facilities, societal risk and mitigation measures. Disaster management plan for cyclone shall be detailed.
- Air quality modelling should also include the impact on water boundary layer. The proposed site is in undulating land and dredging shall not be done for levelling the surface.
- As proposed, total 10% greenbelt shall be developed in the project site and 30% shall be developed outside the project site. Copy of land document shall be submitted for 20 Ha additional land to be purchased outside plant premises.
- Project proponent shall submit Final EIA/EMP Report incorporating action plan of issues raised in Public Hearing and SCZMA recommendations.
- Disaster management plan to handle natural disasters like flood, cyclone etc.

Agenda No. 5

Greenfield Grain Based Ethanol Plant of Total Capacity of 250 KLD along with 12 MW Cogeneration Power Plant located at Re-survey Nos. 740, 741,744 745, 746 or Old Survey Nos- 1444, 1445, 1446/1, 1446/2, 1447, Village- Gangad, Taluka- Bavla, District Ahmedabad, Gujarat by M/s. Aamanya Organics Private Limited - Consideration of Environmental Clearance

[IA/GJ/IND2/ 289356/2022, IA-J11011/295/2 022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd (NABET certificate no. NABET/EIA/2124/RA0213 and validity 15th February, 2024) made a detailed presentation on the salient features of the project

and informed that the proposal is for environmental clearance to the project Greenfield Grain Based Ethanol Plant of Total Capacity of 250 KLD along with 12 MW Cogeneration Power Plant located at Re-survey Nos740, 741,744 745, 746 or Old Survey Nos- 1444, 1445, 1446/1, 1446/2, 1447, Village- Gangad, Taluka- Bavla, District Ahmedabad, Gujarat by M/s. Aamanya Organics Private Limited.

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.

The details of products and capacity as under:

S. No.	**Name of unit**	**Name of the product/by-product**	**Production capacity**
1	Distillery	Ethanol	250 KLPD
2	Co-generation power plant	Power	6 MW will be sourced from in-house 12 MW Co-generation Power Plant and surplus 6 MW of power will be supplied to other project of company located adjacent to current plant i.e. M/s. DAPS Infra Pvt. Limited.
3	DWGS dryer	DDGS	172 TPD
4	Fermentation unit	Carbon di-oxide	165 TPD

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

Total land required for the project is 10.05 Ha. Industry will develop green area in an area of 33% of total project area i.e., 3.32 Ha out of total area of the project. The estimated project cost is Rs. 278 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 43.88 Cr and the Recurring cost (operation and maintenance) will be about Rs. 11.15 Cr. per annum. Total Employment will be 210 persons as direct & indirect.Industry proposes to allocate Rs. 2.78 Crores towards extended EMP (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. RodhNadi River is at approx. 7.8 km towards West.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.15 $\mu g/m^3$, 0.36 $\mu g/m^3$, 2.58 $\mu g/m^3$ and 1.31 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total freshwater requirement for distillery operation is 678 KL/Day @ 2.7 KL of water/KL of Ethanol. Net freshwater requirement including power plant of 12 MW and domestic is 1206 KL/Day @ 4.8 KL/KL of ethanol production, which will be sourced from ground water and external agency. The applications for permission of withdrawal of ground water have been submitted to CGWA vide application No- 21-4/9287/GJ/IND/2022 Dated: - 16/06/2022.

Total power requirement will be 6 MW which will be met from in-house co-generation power plant of 12 MW. For emergency, 2 DG set of 750 KVA each will be installed within the plant area. Surplus 6 MW power will be supplied to company's interlinked project DIPL, which is located adjacent to current project. Project will have 96 TPH Coal/Biomass based boiler will be installed. ESP/bag filter/Multi cyclone separator with adequate stack height m will be installed for controlling the particulate emissions within the

statutory limit of 30 mg/nm^3 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:

- ESP & Stack height of 60 meters will be installed for controlling theparticulateemissions from CPP.
- Online Continuous Emission Monitoring System will be installed with the stack and datawillbetransmitted toCPCB/SPCBservers.
- CO_2 (165 TPD) generated during the fermentation process will be collected by utilizingCO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottlingplant.

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

- DDGS (Distilled Dried Grains Stillage) (56,760 TPA) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (34,650 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (5.0 Kilolitres per annum) will be sold to authorized recyclers.
- CPU/ETP sludge (140 TPA) and STP Sludge (2 TPA) will be used as manure.

As per Notification S.O 2339 (E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 250 KLPD will be used for manufacturing fuel ethanol only.

Total land is 10.05 Hectare, and land has been taken on lease basis from Dishman Infrastructure Ltd for 30 Years by M/s. Aamanya Organics Private Limited to set-up Distillery plant. Current land use is deemed industrial Land and change of land use application for final Industrial Land is submitted to competent authority. EAC found the information

satisfactory.

During deliberations, EAC discussed the following issues:

- $PM_{2.5}$ values are mentioned higher than PM_{10} value. In this regard consultant informed that it was typographical error and resubmitted the revised details. Revised AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.15 µg/m3, 0.36 µg/m3, 2.58 µg/m3 and 1.31 µg/m3 with respect to PM10, PM2.5, SO2 and NOX.
- Approach road to the Industry shall be constructed and maintained by the PP.
- Green belt shall be developed dense with a width of 20 m towards the side where school is located.
- Budget allocation shall be made for Environment Monitoring and Environment Management Cell. Accordingly, capital cost has been increased to Rs. 43.88 Crores and Recurring cost per annum is Rs. 11.15 Crores.
- 10% of total power requirement shall be met by solar power.
- 5 field Electrostatic Precipitator shall be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
- Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for makeup water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic Precipitator (5 field and 99.9% efficiency) with a stack height of 60 meters will be installed with the proposed 96 TPH boiler for controlling the particulate emissions within the statutory limit of 30

mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (34,650 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers. PP shall useCoal/Biomass as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. 10% of total power requirement shall be met by solar power.

(ix). CO_2 (165 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

(x). 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 3.32 Hai.e., 33 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.Green belt shall be developed dense with a width of 20 m towards the side where school is located.

(xvi). PP proposed to allocate Rs. 2.78 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.Approach road to the Industry shall be constructed and maintained by the PP.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with

catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 6

Establishment of 150 KLPD grain based Ethanol plant under Ethanol Blending program & 5 MW power plant at Khata No (Plot No): 3(100), 43(200,272,303,334) in Haridabandha Village, Gatiri Gram Panchayt, Nuagaon Tehsil, Nayagarh District,Odisha by M/s

Juststrive Industries Private Limited – Consideration of Environmental Clearance

[IA/OR/IND2/289923/2022; IA-J11011/337/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 16-12-2022) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for Establishment of 150 KLPD grain based Ethanol plant under Ethanol Blending program & 5 MW power plant at Khata No (Plot No): 3(100), 43(200,272,303,334) in Haridabandha Village, Gatiri Gram Panchayt, Nuagaon Tehsil, Nayagarh District, Odishaby M/s Juststrive Industries Private Limited.

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.

The details of products and capacity as under:

S. NO.	NAME OF UNIT	NAME OF THE PRODUCT	PRODUCTION CAPACITY
1	Distillery plant	Ethanol	**150 KLPD**
2	Power plant	Electricity	**5.0 MW**
BY-PRODUCTS			
1	Distillery plant	DDGS	**120 TPD**
2	Distillery plant	CO_2 recovery	**114 TPD**

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.

Total land required is 13.16 Ha. Greenbelt will be developed in total area of 6.40 Ha. i.e. 48.6% of total project area. The estimated project cost is Rs. 236.58 crores. Capital cost of EMP would be Rs. 28.8 crores and recurring cost of EMP would be Rs. 11.7 Crores per annum. Industry proposes to allocate Rs. 2.36 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 100 persons as direct & indirect.

PP informed that letter has been issued vide Memo No. 5328/4F-413/2022 dated 8th August, 2022 by Divisional Forest Officer, Nayagarh Forest Division stating that Sulia Reserve Forest is located at a distance of 20-30 feet from the site and there is movement of elephants in the above forest block. Conservation plan and request letter to PCCF for budget approval of Rs. 145.272 Lakhs for 5 years has been submitted. Water bodies are Dahuka Nadi – 0.5 Kms, Baigania Nadi – 2.4 Kms, Anakapalli Nala – 9.8 Kms are within 10 Km radius. Forests are Sulia Reserve Forest -10 meters, Palba Reserve Forest – 0.8 Kms, Maichheli Reserve Forest – 3.1 Kms, Khandapada Reserve Forest – 3.8 Kms, Hatimunda Reserve Forest – 6.6 Kms & few unmade reserve forest are present with in 10 Kms radius. Dahuka Nadi is at a distance of 0.5 Kms for which PP has submitted NOC dated 02.09.2022 from Superintending Engineer, Nayagarh Irrigation Division stating that industry is not located within the river flood plain corresponding to one in 25 years flood.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.2 µg/m^3, 0.1 µg/m^3, 7.7 µg/m^3, and 1.1 µg/m^3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 600 m^3/day which will be met from Surface water / Ground water. Application has been submitted to CGWB vide dated 19-07-2022 &Nayagarh Irrigation division vide dated 19-07-2022 for obtaining permission. Effluent (Condensate/spent lees/blow down etc.) of 888 m^3/day quantity will be treated through Condensate Polishing Unit of capacity 900 KLPD. Raw stillage (900 KLPD quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 10 KLPD will be installed to treat sewage

generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 5 MW and will be met from the proposed 1 x 5 MW captive power plant. 1 x 40 TPH Biomass / Coal fired boiler will be installed. Electro Static Precipitator with a stack height of 52 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 52 meters will be provided to boiler for effective dispersion of sulphur dioxide emission into the atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 generated (114 TPD) during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (120 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (74 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.3 TPD) and STP Sludge (0.8 Kg/day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 150 KLPD will be used for manufacturing fuel ethanol only.

Total land of 13.16 Hectares is under possession of the company and land

use conversion has been submitted to Office of the Tahasildar, Nuagaon dated 07-08-2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- It has been noted that source for water requirement has been proposed as ground water as well as surface water. In this regard, committee suggested that PP should prefer to surface water for meeting water demand whenever available.
- Connectivity from nearest district road/highway to Industry shall be constructed and maintained by PP.
- Revised details of activities proposed in CER deleting activities such as merit cum means scholarship.
- Invasive species have been proposed as part of green belt. Committee suggested that only native species shall be planted as part of green belt development.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). Industry shall take all the appropriate measures in consultation with the Chief Wildlife Warden to avoid Human Elephant Conflict (HEC) and

protection of the elephants. Site specific Wildlife Conservation plan to avoid HEC with the budget of Rs. 145.272 Lakhs for 5 years shall be implemented.

(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. CLU certificate shall be obtained before start of construction activities.

(v). Total Fresh water requirement 600 m^3/day which will be met from Surface water / Ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for makeup water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). ESP with a stack of height of 52 m will be installed with 40 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (74 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.PP shall use biomass like rice husk, bagasse as fuel for the proposed boiler. Low

sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (114 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be collected in bottling plant.

(x). PP shall allocate at least Rs. 50 Lakhs per 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly

6.40 Ha. (15.8 acres) i.e. 48.6% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 2.36 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be

transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 7

Proposed expansion of Distillery unit from 140 KLPD to 500 KLPD to produce 500 KLPD Ethanol using Sugarcane syrup during sugarcane crushing season and to produce 220 KLPD Ethanol using B heavy molasses during non-crushing season and expansion of captive power plant from 4.5 MW to 14.5 MW under EBP programme by M/s. Siddapur Distilleries Limited- Consideration of Environmental Clearance reg

[IA/KA/IND2/291317/2022, IA-J11011/10/20 17-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan NABET certificate no. NABET/EIA/1992/SA 0138 (Rev. 01) and validity till 20th October, 2022 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 Distillery unit from 140 KLPD to 500 KLPD to produce 500 KLPD Ethanol using Sugarcane syrup during sugarcane crushing season and to produce 220 KLPD Ethanol using B heavy molasses

during non-crushing season and expansion of captive power plant from 4.5 MW to 14.5 MW located at Siddapur Village, Jamakhandi Taluk, Bagalkot District, Karnataka by M/s.Siddapur Distilleries Limited.

As per EIA Notification 2006 (Schedule 5 (g) Category A); however, as per in the MoEF& CC Notification S.O. 345(E), dated the 17th January, 2019, notification number S.O. 750(E), dated the 17th February, 2020, S.O. 980 (E) dated 02nd March, 2021 & S. No. 2339(E) 16th June, 2021, a special provision in the EIA Notification, 2006 "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects.

The details of products and capacity as under:

Sl. No.	**Name of unit**		**Name of the product/by-product**	**Existing Production capacity**	**Additional production capacity**	**Total production capacity**
1	a	Distillery (C-Heavy Molasses) Old plant in operation	ENA	70 KLPD	-	70 KLPD **or**
	b	Distillery (B-Heavy Molasses)	Rectified Spirit/Ethanol	(70 old +70 new =140) KLPD	-	140 KLPD/130 KLPD **or**
	c	Distillery (sugarcane syrup during sugarcane crushing season) From existing plant 140 (70+70) KLPD Ethanol and	Ethanol	140 KLPD	360 KLPD	500 KLPD **or**

		360 KLPD from proposed new distillery unit				
	d	Distillery (B heavy Molasses) during non-crushing season	Ethanol	360 KLPD* * New 360 KLPD will be operated for 220 KLPD		220 KLPD
2	a	Co-generation	Captive Power	4.5 MW	10 MW	14.5 MW
	b	Bio-gas based power plant	Power	2 MW	-	2 MW
3	Carbon di-oxide plant		Carbon di-oxide	90 TPD	120 TPD	210 TPD
4	MEE plant		MEE condensate	1500 KL	500 KL	2000 KL
5	Bio-composting unit		Bio-compost	127 TPD	-	127 TPD

Note: At no time, production capacity of the plant shall exceed 500 KLPD capacity.

Ministry has issued EC to the existing distillery vide letter No. J-11011/10/2017-IA-II(I) dated 30.03.2021 for expansion from 70 KLPD to 140 KLPD. Later, Ministry has issued EC to the existing distillery Vide No. F. No. J-11011/ 10/ 2017-IA-II(I), dated 11.04.2022 for expansion of distillery from 140 KLPD to 220 KLPD to produce Ethanol of 210 KLPD under EBP. PP informed that application has been submitted for surrendering the existing EC issued Vide F. No. J-11011/10/2017-IA-II(I) dated 11.04.2022 as the said EC has not been implemented yet. Certified Compliance report has been obtained from Integrated Regional Office, MoEF&CC, Bangalore vide File no- EP/12.1/04/2018-19/KAR/1442 dated 23/02/2022. The EAC was satisfied with the response of PP.

As per the Ministry's OM regarding surrendering of EC dated 29.03.2022,

PP has surrendered the EC obtained on 11.04.2022. A fresh application for expansion of Distillery unit from 140 KLPD to 500 KLPD to produce 500 KLPD Ethanol using sugarcane syrup during sugarcane crushing season and 220 KLPD Ethanol using B heavy molasses during sugarcane crushing off season and Expansion of captive power plant from 4.5 MW to 14.5 MW under EBP program at above mentioned location has been submitted.

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

Total plant area after expansion will be 30.75 Ha, which is under possession of the company and converted to industrial use/ No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 10.32 Hectares i.e. 33.5 % of the total plant area has already been developed as greenbelt & plantation and the same will be maintained under greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 271.96 Crores including existing investment of Rs. 96.96 Crore. Capital cost of EMP would be Rs. 94.42 Crores and recurring cost for EMP would be Rs. 3.04 Crores per annum. Industry proposes to allocate Rs. 1.77 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 368 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests: Siddapur Reserve Forest at a distance of 100 m in South direction, Hulyal Reserve Forest at a distance of 3 Km in North East direction, Jamkhandi Reserve Forest at a distance of 6 Km in North direction, Mantur Reserve Forest at a distance of 7 Km in South East direction and Banahatti Reserve Forest at a distance of 5.2 Km in North West direction. Water bodies: KattiKere is at a distance of 6 km in North direction, JamakhandiKere is at a distance of 7 Km in North direction and River Krishna is at a distance of 22 Km in North East direction.

AAQ modelling study for point sources emissions indicates that the maximum incremental GLCs after the proposed project would be 2.11 µg/m^3, 1.39 µg/m^3 and 1.64 µg/m^3 with respect to PM_{10}, SO_2 and NO_X

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

Total fresh water requirement after expansion will be 1137 m^3/day, which will be met from Krishna River for which withdrawal permission has been obtained from Krishna bhagyajalanigam limited vide letter No. 5554 dated 31/01/2014. The spent wash generation is 1750 KLD it will be treated in existing CSTR bio-digester of 850 KL capacity and a new additional digester of 500 KL capacity is proposed. Later the bio-digested spent wash will be to concentrated in MEE plant of 2000 KL capacity. Biogas generated from the bio-digester will be used as supplementary fuel in incinerator, concentrated spent wash of 192 KLD used as a fuel in incineration boiler and the balance concentrated spent wash of 208 KLD will be converted into potash powder form by spray dryer technology during rainy season and during non-rainy season it will be used for bio-composting for organic manure preparation and organic manure will be sold to farmers in packed form. The other process and utility effluent of 2372 m^3/day will be treated in condensate Polishing Unit of 2500 KLD capacity and treated effluent will be used completely for molasses dilution and cooling tower makeup, ash quenching and dust suppression. The plant will be based on Zero Liquid Discharge (ZLD)system and treated effluent/water will not be discharged outside the factorypremises. Domestic sewage of 10 KLD is treated in Modular Anaerobic baffled reactor and plate and frame filter press used to filter sludge.

Total power requirement of distillery after expansion will be 7.95 MWH which will be sourced from existing 4.5 MW co-generation power plant, 2 MW Bio gas gen set and proposed 10.0 MW Co-generation plant. It proposed to enhance existing captive power plant from 4.5 MW to 14.5 MW. Existing distillery has 25 TPH slop/biogas/bagasse fired incineration boiler and 12 TPH Biogas fired waste heat recovery boiler. 55 TPH Bagasse fired Conventional boiler and 10 TPH BMSW drier will be installed in distillery. APCE - ESP with a stack of height of 50 m is installed with the existing 25 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 and ESP with a stack of height of 54 m will be installed with proposed 55 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. Industry has 1000 KVA DG set stack height (31m AGL) is provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- CO_2 (210 TPD) generated during the fermentation process is being collected by utilizing CO_2 scrubbers and bottled / made into solid ice and sold to authorized vendors/collected in installed bottling plant.

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

- Concentrated spent wash(208 m^3/day) will be burnt in incineration boiler.
- Boiler Fly ash (47.4 TPD) and Bottom ash (18.1 TPD) will be sold to brick manufacturers.
- Potash powder (92 TPD) will be given to farmers to be used as manure.
- Yeast sludge (141 TPD) is mixed with the Press Mud and converted into organic manure/Dried and sale to the brick manufacturer.
- Used oil of 0.3 Kiloliters per annum and Waste residues containing oil of 0.1 MT/Annum is being sold to authorized recyclers.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed expansion of 360 KLD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

- As per the existing EC, PP has to phase out existing bio-composting plant by 2023. Accordingly, the Committee suggested that PP shall comply with the condition and also incorporate the same condition in the latest EC.
- Spent wash storage lagoon capacity shall not exceed 5 days.
- Donations shall be excluded as activities proposed in CER and revised details of activities proposed in CER along with implementation time line shall be submitted. Accordingly, revised plan has been submitted.
- ESP shall be installed in the 55 TPH bagasse fired boiler. In 10 TPH BMSW dryer shall be provided with efficient bag filter as air pollution control measure to meet the emission norms of 50 mg/Nm^3.
- PP shall allocate at least Rs. 1.00 Crore per annum for Occupational

Health Safety.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the expansion of 360 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). Total Fresh water requirement shall not exceed 1137 CMD of ethanol production which will be met from Krishna River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(v). Spent wash was shall be treated in MEE followed by incineration boiler. The condensate, spentlees and utilities effluent shall be treated in the

ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for makeup water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vi). ESP shall be installed in the 55 TPH bagasse fired boiler. In 10 TPH BMSW dryer shall be provided with efficient bag filter as air pollution control measure to meet the emission norms of 50 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vii). Boiler Fly ash (47.4 TPD) and Bottom ash (18.1 TPD) will be sold to brick manufacturers.PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(viii). CO_2 (210 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be collected in bottling plant.

(ix). Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.

(x). PP shall allocate Rs. 1.00 Crore per 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 10.32 Hectares i.e. 33.5 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 1.77 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for

uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 8

Proposed Expansion and Debottlenecking of Existing Petrochemical complex located at Village - Mora, Tehsil – Chorasi, District - Surat, State - Gujarat by M/s. Reliance Industries Limited - Consideration of Environment Clearance

[IA/GJ/IND2/289949/2021, IA-J-11011/40/2015-IA II (I)]

The Project Proponent and the accredited Consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd. (NABET/EIA/2023/IA0062, valid till 7th October 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Proposed Expansion and Debottlenecking of Existing Petrochemical complex located at Village - Mora, Tehsil – Chorasi, District - Surat, State - Gujarat by M/s. Reliance Industries Limited.

All Petrochemical Complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)are listed at S.N. 5(c) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity are as under:

S. NO	UNIT	PRODUCTS	EXISTING QUANTITY (TPA)	PROPOSED QUANTITY (TPA)	TOTAL QUANTITY (TPA)
1	Cracker	Ethylene (C2)	10,00,000	2,00,000	12,00,000
2		Propylene (C3)	5,00,000	0	5,00,000
3		LPG	2,45,960	0	2,45,960

S. NO	UNIT	PRODUCTS	EXISTING QUANTITY (TPA)	PROPOSED QUANTITY (TPA)	TOTAL QUANTITY (TPA)
4		HTPB	40	200	240
5		Butadiene	2,10,000	0	2,10,000
6		Butene 1	80,000	0	80,000
7		MTBE/ Isobutylene	2,00,000	0	2,00,000
8		Butanediol	43,000	0	43,000
9		C5 Derivatives and Resins	1,15,000	0	1,15,000
10		C5 HCR Resin	28,375	0	28,375
11		72% DCPD	13,500	0	13,500
12		85% DCPD	35,500	0	35,500
13		Heavy Oil	23,500	0	23,500
14		HP DCPD Resin	24,875	0	24,875
15		Hydrogenated HP DCPD Resin	25,500	0	25,500
16		Isoprene	26,125	0	26,125
17		Piperylenes	33,375	0	33,375
18		Internal recycle to furnace	1,00,000	0	1,00,000
19		Cyclohexane	80,000	0	80,000
20		C6 - C8 raffinate / internal recycle to furnace	3,04,000	0	3,04,000
21		Benzene	2,85,000	0	2,85,000
22		Toluene	2,36,400	0	2,36,400
23		Mixed Xylene	1,98,000	0	1,98,000

S. NO	UNIT	PRODUCTS	EXISTING QUANTITY (TPA)	PROPOSED QUANTITY (TPA)	TOTAL QUANTITY (TPA)
24		Para Di Ethyl Benzene	10,000	0	10,000
25		C9 and C9 Resins (C9 plus, C9 205)	1,00,000	0	1,00,000
26		Fuel oil (CBFS)	1,30,000	0	1,30,000
27		Styrene	30,000	0	30,000
28		SBR	2,00,000	0	2,00,000
29		SBR (wet)	480	520	1,000
30		SBR (High Boiler)	3,750	0	3,750
31		Acetylene recovery	14,000	0	14,000
32		PBR	60,000	18,000	78,000
33		Hi boiler (PBR)	630	190	820
34		PBR (wet)	180	125	305
35	Poly Vinyl Chloride (PVC)	Poly Vinyl Chloride (PVC)	4,75,000	0	4,75,000
36		Vinyl Chloride Monomer (VCM)	4,75,000	0	4,75,000
37		HCl – PVC plant	67,992	0	67,992
38		EDC heavy end	11,400	0	11,400
39		PVC Wet resin	12,166	0	12,166
40	Mono Ethylene Glycol	Mono Ethylene Glycol (MEG)	7,20,000	0	7,20,000
41		Ethylene Oxide	1,20,000	1,20,000	2,40,000

S. NO	UNIT	PRODUCTS	EXISTING QUANTITY (TPA)	PROPOSED QUANTITY (TPA)	TOTAL QUANTITY (TPA)
42	(MEG)	HGR (including DEG, TEG GR 1, 2, 3, off-spec glycol)	78,000	0	78,000
43		CO_2	72,000	0	72,000
44	Purified Terephthalic Acid (PTA)	Purified Terephthalic Acid	33,00,000	0	33,00,000
45		Methyl Acetate	30,162	0	30,162
46		PTA (Semi solid lumps)	9,328	0	9,328
47		Crude Benzoic Acid Mix	52,800	0	52,800
48		PTA (Sweeping grade)	1,122	0	1,122
49	Polyester	Polyester Staple Fibre + Chips	5,40,000	0	5,40,000
50		Fibre Fill (PSFF)	1,00,000	0	1,00,000
51		Partially Oriented Yarn + Chips (including IDY, FDY)	4,90,000	0	4,90,000
52		Polyethylene Terephthalate	5,20,000	0	5,20,000
53		Recovered EG	4,310	0	4,310
54		Glycol Residues	4,310	0	4,310

S. NO	UNIT	PRODUCTS	EXISTING QUANTITY (TPA)	PROPOSED QUANTITY (TPA)	TOTAL QUANTITY (TPA)
55		PET Chips	1,500	0	1,500
56		RELCAT	20	140	160
57	Polyethylene	Polyethylene	5,50,000	0	5,50,000
58	Poly propylene & FCP	Poly Propylene	5,00,000	0	5,00,000
59		PP Catalyst	300	0	300
60		Metal salt catalyst	160	60	220
61		Plant sweep/ poly waste/ machine waste	54,000	0	54,000
62		TiO_2 Dry	1,080	0	1,080
63		TiO_2 Wet	2,520	1,480	4,000
64	REL Pipe	HDPE Pipes & Ducts	1,21,000	0	1,21,000
65	Shipping and Tank Farm	Marine Infrastructure Facility	3 Jetties, 1 SBM & Pipelines Coal Jetty	-	3 Jetties, 1 SBM & Pipelines Coal Jetty
66		Dredging (Capital 2.6mm3 + maintenance 1.1 mm3), shore protection (3.2 km)			
67		Product for storage & dispatched of other RIL sites (High speed	1,20,000	0	1,20,000

S. NO	UNIT	PRODUCTS	EXISTING QUANTITY (TPA)	PROPOSED QUANTITY (TPA)	TOTAL QUANTITY (TPA)
		diesel (HSD) etc.			
68	Carbon Fiber, New	PAN Precursor	0	60,000	60,000
69		Carbon Fiber	0	30,000	30,000
	Captive Power				
70	Gas Based Power		139 MW	181 MW	320 MW
71	Steam (Million TPA)		4.64	6.04	10.69
72	Coal Based Power		360 MW	0	360 MW
73	Steam (Million TPA)		15.77	0	15.77
74	Power through PTA waste heat recovery		0	20 MW	20 MW
75	Power from CF Steam Extraction		0	25 MW	25 MW

Standard Terms of Reference have been obtained vide F. No. J-11011/40/2015-IA II (I) dated 26th October 2021. Public Hearing for the proposed project has been conducted by the Regional Officer, Surat, Gujarat Pollution Control Board on 26th July 2022 at Reliance DoT Center, Behind L & T Training Center, RS Nos. 60, 63/1, 65/2+3, 66, 67/1, 67/2, 68, Village - Mora, Taluka - Choryasi, District – Surat, 394510 chaired by District Collector & Magistrate, Shri Aayush Oak. The people attending the PH welcomed the project and made suggestions for social enhancement.

Ministry had issued Environment Clearance to the existing capacity of products as detailed in the EC vide file no. J-11011/40/2015-IA II (I); dated 10th July 2017. Certified Compliance report has been issued by Regional Office, MoEFCC, Gandhinagar, after conducting monitoring at site on 16th and 17th February 2022, vide File no J-11/29-2022-IROGNR dated 21st June 2022. Action Taken Report has been submitted to IRO, MOEFCC, Gandhinagar, dated 24th June 2022 for 4 partial compliances and Certified Action Taken Report has been obtained by IRO, MOEFCC, J-11/29-2022-IROGNR dated 21st July 2022. EAC found the compliance status satisfactory.

Total plant area after expansion will be 398.32 Ha (existing plant area – 398.32 Hectares and additional land required - 0 Hectares for proposed capacity) which is under possession of the company and no additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 98 Hectares i.e. 25% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained. Additional greenbelt has been developed in the ~25 Ha land in our ownership, bordering our complex. The greenbelt already developed, admeasures ~123 Ha (~31%). Plantation is being developed in an additional area of 50 Hectares in neighboring villages. The estimated project cost is Rs. 10,000 Crores. Capital cost of EMP would be Rs. 790 Crores and recurring cost for EMP, post-project, would be Rs. 47 Crores per annum. Total Employment after expansion will be 750 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests / protected forests: -Hazira and Dumas RF at a distance of 8 km in south-west direction.

Ambient air quality monitoring was carried out at 17 locations during March, 2021 to May, 2021 and the baseline data indicates the ranges of concentrations as: PM_{10} (71.0 – 77.0 µg/m^3), $PM_{2.5}$ (40.8 – 44.9 µg/m^3), SO_2 (12.4 – 15.4 µg/m^3) and NO_2 (13.9 – 16.5 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.17 µg/m^3, 12.94 µg/m^3 and 7.37 µg/m^3 with respect to PM_{10}, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Fresh-water requirement of 21,364 m^3/day for the proposed project will be met from Tapi river. NOC Permission has been obtained by RIL-HMD vide letter no. PB-2 / WTR / RELIANCE / F / 421460 dated 5th May 2004. Existing effluent generation is 61,287 m^3/day and it is treated in Effluent Treatment Plant (ETP) of 90,000 m^3/day capacity. Condensate Polishing Unit (capacity in m3/day). Proposed effluent generation of 10,999 m^3/day will be treated in existing ETP and additional ETP will be setup, if required, based on the detailed design consideration and after expansion, ~72,286 m^3/day of treated effluent will be discharged through the existing diffuser (Capacity – 90,000 m^3/day) into Tapi estuary. Of the entire effluent generated, about 10,000 m^3/day of treated effluent is being recycled.

Total power requirement after expansion will be ~599 MW which will be sourced from proposed 680 MW captive power plants. 3,020 TPH of steam will be generated in 12 boilers. No additional boilers are required to be

installed for the project. APCE - ESP with a stack of height of 220 m is installed with the existing coal-fired boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. Industry has 18 nos. of DG Sets with a combined capacity of ~20,000 KVA which are used as standby during power failure. In the proposed project, 10 nos. of additional DG sets of 3.15 MVA capacity each will be provided as a standby arrangement and adequate stack height will be provided as per CPCB norms to the proposed DG sets.

Details of process emissions generation and its management:

Flue gas stacks

- There are 52 nos. of existing stacks attached to the Vaporizers, Furnaces, Incinerators, HRSGs, GT by passes, Heaters, GHUs, Rotary Kiln, Thermal Oxidizer and Boilers.
- Adequate APCM like Low NOx Burners, Multi Cyclone Separator and Scrubber, Hydrosonic venture scrubber, Venturi scrubber, Caustic Scrubber, WESP, Wet Scrubber, ESP are attached to existing Stacks.
- Additional 15 stacks attached to RTOs & DFTOs and 2 stacks attached to Thermal Oxidizers will be installed. 6 stacks of CPP (HRSG, GT By-pass) will be operationalized for expansion of CPP capacity.
- For the 15 proposed stacks of Regenerative Thermal Oxidizer with low NOx burners, RTO with low NOx burners and HPCCU will be provided.

Process Stacks

- There are 28 stacks attached to PVC Dryer Line, CO2 stripper vent, vent absorber, Sludge Dryer, Atmospheric absorber, Off gas expander, Vent Scrubber, Alumina handling Unit, Unloading Hopper, SBR finishing Dry Area Exhaust Stack.
- Adequate APCM like Cyclone separator & wet Scrubber, Carbonate Flash knock out drum, Scrubber, Absorber, HP absorber, Bag filters and CYC are provided and for additional vents, scrubber will be provided.
- Additional 15 stacks attached to Packed scrubbers at CF plant will be installed.
- Adequate Stack Height will be provided to additional stacks for adequate dispersion of emissions.

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

- The existing unit has been granted authorization for 30 numbers of hazardous wastes which are collected, stored, transported and disposed of as per HOW (M&TM) Rules 2016.
- Quantity of 7 of the above wastes is expected to increase due to the proposed project. These additional hazardous wastes will also be disposed in line with HOW (M&TM) Rules, 2016 and the existing established procedures.
- It is endeavored to maximize environment friendly disposal of hazardous wastes by adopting practices for recycle / reuse / co-processing

During deliberations, EAC discussed following issues:

- PP shall submit time bound action plan along with financial commitment for all the issues raised in the PH.
- Incremental GLC for the proposed project was found higher in respect of SO2 and NOx. The Committee suggested to reduce the incremental GLC for the same. Details of measures to be taken to reduce the incremental GLC w.r.t. SO_2 and NO_x to be submitted.
- PP informed that 98 Ha has been developed within the plant premises and 25 Ha of greenbelt has been developed outside the plant premises which comes around 30% of the total plot area. Accordingly, the Committee suggested to provide action plan to achieve 33% greenbelt area.
- Discrepancies were observed in details submitted in AAQ baseline data and AAQ modeling data. The Committee suggested to recheck the baseline data with 6 monthly compliance reports & continuous monitoring station installed by RIL. Accordingly, revised report shall be submitted.
- The Committee noted that fresh water requirement after expansion is around 1.3 Lakhs KLD. The Committee suggested that the company shall reduce the fresh water requirement by recycling the treated water to the tune of 50% atleast. Also, unit shall explore to use treated sewage from the Surat Municipality as fresh water.
- The Committee noted that PP has not allocated funds for CER. Also, committee suggested that PP shall not mix CSR and CER budget. Accordingly, PP shall earmark funds exclusively for CER and submit activities that are proposed in CER along with implementation timeline.
- 3 D risk assessment modelling shall be conducted within 1 year of the final design.

PP vide mail dated 28th September, 2022 submitted additional information as desired by EAC. EAC examined the submitted documents and following observations were made:

(i). Regarding Public Hearing issues, PP has not submitted financial commitment to address issues raised during PH.

(ii). Regarding reducing the incremental GLCs w.r.t SO2 and NOx emissions, PP has not submitted revised reduced incremental GLC after suggesting control measures. Therefore, PP shall submit revised GLC taking into account control measures as proposed.

(iii). Regarding action plan for greenbelt development, submission made by PP needs more elaboration to achieve 33% greenbelt. Accordingly, PP shall submit detailed action plan to achieve 33% greenbelt within and around the premises.

(iv). Regarding AAQ baseline data, PP shall summarise the submitted six monthly monitoring data and estimate resultant concentration considering into account the reduced GLC after considering pollution control measures.

(v). Regarding fresh water consumption, PP shall increase the recycle quantity of treated effluent from the expansion projects (~11,000 m3 /day) to 50% in 5 years since commissioning of the projects. Accordingly, Committee suggested that said measures shall be taken in 3 years from the date of issue of EC.

(vi). Regarding CER, PP shall earmark funds exclusively for CER and submit activities that are proposed in CER along with implementation timeline.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

<u>Agenda No. 9</u>

Establishment of Cane Juice/Molasses based Dual feed Distillery of capacity 300 KLD with 3500 TCD of Sugar Cane, 10 MW Co-Generation Unit and 4 MW Captive Power Plant from Incineration Boiler" located at Sy. No. 42, 43 and 53 of Konanakere Village, Shiggaon Taluk, Haveri District, Karnataka State. by M/s. VINP

Distilleries and Sugars Pvt. Ltd- Amendment in Environmental Clearance

[IA/KA/IND2/289351/2022, IA-J11011/69/20 21-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. IA-J-11011/69/2021-IA-II (I) dated 24.01.2022 for the project "Establishment of Cane Juice/Molasses based Dual feed Distillery of capacity 300 KLD with 3500 TCD of Sugar Cane, 10 MW Co-Generation Unit and 4 MW Captive Power Plant from Incineration Boiler" located at Sy. No. 42, 43 and 53 of Konanakere Village, Shiggaon Taluk, Haveri District, Karnataka State. by M/s. VINP Distilleries and Sugars Pvt. Ltd.

The PP has requested for amendment in the EC with the details are as under;

Sl. No.	Para of EC issued by MoEF &CC	Details as per the EC	To be revised as
1	**2**	Establishment of Cane Juice/Molasses based Dual feed Distillery of capacity 300 KLD with 3500 TCD Sugar Cane, 10 MW Co-Generation Plant and 4 MW Power Generation from Incineration Boiler at Sy. No. 42, 43 and 53 of Konanakere Village, Shiggaon Taluk, Haveri District, Karnataka by M/s. VINP Distilleries and Sugars Pvt. Ltd.	Establishment of Multi-feed distillery (Cane Syrup/Molasses/ Grain) of capacity 300 KLD, 3500 TCD of Sugar Cane, 10 MW Co-Generation Unit and 4 MW Captive Power Plant from Incineration Boiler at Sy. No. 42, 43 and 53 of Konanakere Village, Shiggaon Taluk, Haveri District, Karnataka by M/s. VINP Distilleries and Sugars Pvt. Ltd.
2	**3**	All Molasses based distilleries>100 KLPD & Non-Molasses based distilleries >200 KLD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 and as amended on 13.6.2019 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).	As per EIA Notification dated 14th September 2006 issued by Ministry of Environment & Forests, Govt. of India Vide Gazette Notification No. S.O. 1533(E) dated 14th September 2006, and its subsequent amendments, The proposed project is categorized under 1(d), 5(g), as Category 'A'. All Non Molasses based ethanol projects exceeding threshold limits > 200 KLPD is falling under Category – A
3	**4**	The estimated project cost is Rs 350 crores. Total capital cost earmarked towards environmental pollution	The estimated project cost is Rs. 380 Crores (350 + 30 Crores). Total capital cost earmarked towards environmental

<table>
<tr><td></td><td></td><td>control measures is Rs 570.3 lakhs and the Recurring cost (operation and maintenance) will be about Rs74.6 lakhs per annum. Total Employment will be 150 persons as direct & 150 persons indirect. Industry proposes to allocate Rs 5.25 Crore @ of 1.5 % towards Corporate Environment Responsibility.</td><td>pollution control measures is Rs. 655.3 Lakhs (570.3 + 85 Lakhs) and the Recurring cost (operation and maintenance) will be about Rs.86.6 Lakhs (74.6 + 12 Lakhs) per annum. Total Employment will be 350 Nos (skilled - 130, Semi-skilled - 120 and Unskilled – 100 Nos).
Industry proposes to allocate Rs 5.85 Crores (5.25+0.6 Crores) @ of 1.5 % towards Corporate Environment Responsibility.</td></tr>
<tr><td>4</td><td>10</td><td>Total water requirement is 5922 m^3/day of which fresh water requirement of 1200 m^3/day will be met from Varada River. Effluent of 4290 KLD will be treated through 4400 CPU; Sugar plant effluent shall be 260 KLD which will be treated in 500 KLD ETP Plant. The generated 13.5 KLD domestic sewage is treated in STP of capacity 15 KLD. The plant will be based on Zero Liquid discharge system.</td><td>Total water requirement is 4980 m^3/day of which fresh water requirement of 1200 m^3/day and recycled water of 3780 m^3/day will be met from Varada River.
Effluent of 4290 KLD from Cane juice/Syrup mode (210 days) & Effluent of 4166 KLD from Grain mode (120 days) will be treated through 4400 CPU; Sugar plant effluent shall be 260 KLD which will be treated in 500 KLD ETP Plant. The generated 13.5 KLD domestic sewage is treated in STP of capacity 15 KLD. The plant will be based on Zero Liquid discharge system.</td></tr>
<tr><td>5</td><td>13</td><td>
<table>
<tr><th>Sl.No</th><th>Solid Waste</th><th>Existing Quantity</th><th>Method of collection</th><th>Mode of Disposal</th></tr>
<tr><td>1.</td><td>Yeast sludge from fermenter and digester</td><td>20 TPD</td><td>Mechanical conveyor</td><td rowspan="3">Used as manure.</td></tr>
<tr><td>2.</td><td>Sugar ETP Sludge</td><td>2 TPD</td><td>Sludge drying beds</td></tr>
<tr><td>3.</td><td>CPU Sludge</td><td>20 TPD</td><td>Sludge drying beds</td></tr>
<tr><td>4.</td><td>Boiler Ash</td><td>25 TPD</td><td>Mechanical conveyor</td><td>Sold to brick manufactures.</td></tr>
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<tr><th>Sl.No</th><th>Solid Waste</th><th>After Amendment to EC</th><th>Method of collection</th><th>Mode of Disposal</th></tr>
<tr><td>1.</td><td>Yeast sludge from fermenter and digester</td><td>50.66TPD</td><td>Mechanical conveyor</td><td rowspan="3">Used as manure.</td></tr>
<tr><td>2.</td><td>Sugar ETP Sludge</td><td>2 TPD</td><td>Sludge drying beds</td></tr>
<tr><td>3.</td><td>CPU Sludge</td><td>20 TPD</td><td>Sludge drying beds</td></tr>
<tr><td>4.</td><td>Boiler Ash</td><td>25 TPD</td><td>Mechanical conveyor</td><td>Sold to brick manufactures.</td></tr>
</table>
</td></tr>
</table>

					into common silo for further disposal					into common silo for further disposal	
		5.	Domestic solid waste	75Kg/day	Segregated. Domestic organic solid waste will be composted, while the inorganic solid waste will be handed over to nearby KSPCB authorized recyclers.	Nearby municipal agencies & recyclers.	5	DDGS	240 TPD	Mechanical conveyor	Send to Cattle feed/Poultry.
							6.	Domestic solid waste	87.5 Kg/day	Segregated. Domestic organic solid waste will be composted, while the inorganic solid waste will be handed over to nearby KSPCB authorized recyclers.	Nearby municipal agencies & recyclers.
		Hazardous Waste Generation Details									
		1	Used oil from DG sets	0.1 Kl/A	Stored at an identified place with proper sign board, Stored in leak proof sealed barrel	Usually the oil is very less, Used as lubricants for Conveyor chains and sprockets within	1	Used oil from DG sets	0.1 Kl/A	Stored at an identified place with proper sign board, Stored in leak proof	Usually the oil is very less, Used as lubricants for Conveyor chains and sprocke

					s	the industry to avoid use of fresh oil.				sealed barrels	ts within the industry to avoid use of fresh oil.
		2	Oil Soaked Cotton waste	100 Kg/A	Storage Yard	Used for light up/ start-up of Incineration Boiler	2	Oil Soaked Cotton waste	100 Kg/A	Storage Yard	Used for light up/ start-up of Incineration Boiler
		3	Empty Barrels /Containers	30-50 No's	Storage Yard	Disposed to Local farmers and Employees for house hold usage.	3	Empty Barrels /Containers	30-50 No's	Storage Yard	Disposed to Local farmers and Employees for house hold usage.

During deliberations, PP has informed that as per existing EC only 300 KLD can be manufactured though Cane Juice/Molasses based distillery which is only feasible for 210 days of operation. Above amendments are sought to make use of the same plant and machinery during the off season, on Grain mode for balance 120 days. EAC found the justification for amendment sought satisfactory and recommended for amendment in EC as proposed by the project proponent subject to the following additional conditions:

1. Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make-up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.
2. Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 1200 m3/day which will be met from Varada River. No ground water recharge shall be permitted within the premises. Industry

shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

3. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.
4. Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
5. Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
6. A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.
7. PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 10

Expansion of Distillery from 300 KLD to 600 KLD under EBP programme located at survey No.85, 86/1+3/A, 86/1+3/B, 86/1+3/K, 86/2+4/A, 86/2+4/B, 86/2+4/K, 86/2+4/D, 88/1/A, 88/1/1B, 88/K/2A, 88/K/2B, 90/1A, 90/1B, 90/1K, 90/2A, 90/2B, 90/3, 90/4A, 90/4B, 90/4K of Hunshyal P. G. Village, Gokak Taluk, Belagavi District, Karnataka State by M/s. Satish Sugars Limited (SSL) – Consideration of Environmental Clearance

[IA/KA/IND2/220067/2012, IA-J-11011/ 341/ 2012-IA.II(I)]

The Project Proponent and the accredited Consultant M/s. Environmental Health and Safety Consultants Private Limited (NABET certificate no. NABET/EIA/2124/RA0241 and validity 22.08.2024) 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 existing distillery unit from 300 KLPD to 600 KLPD located at Hunshyal P. G. Village, Gokak Taluk, Belagavi District, Karnataka State by M/s. Satish Sugars Limited.

As per EIA Notification 2006 (Schedule 5 (g) Category A); however, as per in the MoEF&CC Notification S.O. 345(E), dated the 17thJanuary, 2019, notification number S.O.750(E), dated the 17th February, 2020, S.O. 980 (E)dated 02nd March, 2021 & S. No.2339(E) 16th June, 2021, a special provision in the EIA Notification, 2006 "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/ by product	Existing Production capacity	Additional production capacity	Total production capacity
1	Distillery (By using Cane Juice/syrup)	Ethanol	300 KLD	300 KLD	600 KLD or
2	Distillery (By using grain)	Ethanol	210 KLD	--	210 KLD or
3	Distillery (By using molasses)	Ethanol	300 KLD	300 KLD	600 KLD
3	Co-generation power plant for distillery/sugar mill	Power	80 MW	--	--
4	Sugar mill	Sugar	15,000 TCD	--	15,000 TCD
5	DWGS dryer	DDGS	138 TPD	--	138 TPD
6	Fermentation unit	Carbon dioxide	154 TPD	230 TPD	384 TPD
7	Agitated Thin Film Dryer	Conc. Spent wash powder	40 TPD from Syrup based	• 56 TPD from Syrup based • 92 TPD from Molasses based	• 96 TPD from Syrup based • 92 TPD from Molasses based

Note: At no time, operational capacity of distillery shall exceed 600 KLD.

Ministry has issued Environmental Clearance to the existing Industry for a capacity for expansion of 90 KLD to 300 KLD vide File No. J-11011/341/2012-IA-II(I) dated 31.01.2022. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Bangalore vide e-EP/12.1/2021-22/28/KAR dated 24.08.2022. Regarding fulfilment of non-compliances, under taking has been submitted by PP to the IRO, MOEF&CC, Bangalore regarding spending Rs 1,41,91,400/- on Solar lighting system for villages in the next three financial years (2022-23, 2023-24 and 2024-25) and also installation of Online Continues Emission Monitoring Systems (OCEMS) for boiler stacks before crushing season

(2022-23). PP committed that OCEMS will be installed within 1 month. The Committee was satisfied with the response of PP.

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

Total plant area after expansion will be 66 Ha (existing plant area 66 Hectares and there is no additional land required for proposed capacity). Proposed expansion unit requires 2 Ha of land within the existing industrial premises. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 21.78 Hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained/ will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 180 Crores. Capital cost of EMP would be Rs. 5.29 Crores and recurring cost for EMP would be Rs. 0.88 Crores per annum. Industry proposes to allocate Rs. 1.35 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 50 persons as direct & indirect.

There is Ghataprabha bird sanctuary within 10 km distance. Gokak Reserve forest - 12 kms in SW direction. Ghataprabha bird sanctuary is at a distance of 8.42 Km in West direction from project site. ESZ for same is finalized vide Notification No. S.O 2029 (E) dt 27.06.2017. The Eco-sensitive Zone is spread over an area of 22.66 Square kilometres with an extent varying from 0.3 kilometres around the boundary of Ghataprabha bird sanctuary. The project site is located 8.85 Km from notified ESZ. Water bodies: Ghataprabha river is at a distance of 3.45 Km in South direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project (including Sugar and Cogeneration) would be 6.51 µg/m3, 1.69 µg/m3, 1.95 µg/m3 with respect to PM, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 3203 KLD which will be met from Ghataprabha River. Application has been submitted to Water

Resorce Department, Government of Karnataka dated 04.12.2014. Existing effluent generation is 1199 KLD from Distillery which is treated through Condensate Polishing Unit (2400 KLD). Proposed effluent generation will be 1248 KLD from Cane juice mode and 2075 KLD from molasses mode will be sent to RO based Process Condensate Treatment Plant (PCTP) of capacity 2500 KLD. Spent wash will be burnt in incineration boiler to treatment in bio-methanation, concentration in MEE & spray drying to derive potash powder. Domestic waste water will be treated in existing 20 KLD STP. The plant is based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 5 MW which will be sourced from existing Co-generation power plant in sugar distillery. Existing distillery has 60 TPH, 90 TPH & 130 TPH Bagasse fired boiler and the same will be utilised for proposed expansion. Industry has 1 X 250 Kva DG set which will be used as standby during power failure and stack height 10 m will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP with a stack of height of 62 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (230 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and sent to Bottling plant.

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

- Concentrated spent wash of 1123 KLD from syrup mode and 1900 KLD from molasses mode will be burnt in incineration boiler to treatment in bio-methanation, concentration in MEE & spray drying to derive potash powder.
- Boiler ash (11.9 TPD) is being/will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to

brick manufacturers/ given to farmers to be used as manure.

- Used oil of 25 Kilolitres per annum is being/will be sold to authorized recyclers.
- PCTP sludge (0.002 TPD) and STP Sludge (0.001 TPD) will be used as manure.

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

During deliberations, EAC discussed following issues:

- The Committee deliberated the Certified Compliance Report dated 24th August, 2022 for Environmental Clearance for expansion from 90 to 300 KLPD. PP also mentioned action points for three non-compliances points and EAC was satisfied with the response.
- It was informed to the Committee that prior NOC is required as Ghataprabha canal is passing through existing Sugar complex. Accordingly, Committee suggested to put condition that NOC shall be obtained from State Irrigation Department.
- Total fresh water consumption shall not exceed 2.5 KL/KL of ethanol production. PP shall recycle/reuse treated water from sugar in the proposed distillery.
- Budget earmarked for CER shall be increased to 1% of the total project cost. PP shall submit action plan along with implementation timeline for the proposed activities under CER. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed expansion of 300 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form

of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). Total Fresh water requirement shall not exceed 2.5 KL/KL of ethanol production which will be met from Ghataprabha River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(v). Spent wash shall be concentrated in MEE and incinerated. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent from existing and proposed expansion of sugar and distillery unit shall be recycled/reused for make up water of cooling towers/process etc. and no wastewater or treated water shall be discharged outside the premises. Air-cooled condensers for sugar mill as well as distillery. STP shall be installed to treat sewage generated from factory premises.

(vi). ESP with a stack of height of 62 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50

mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vii). Boiler ash will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(viii). CO_2(230 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sent to bottling plant.

(ix). 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.

(x). 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.

(xi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xii). 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. Filter press shall be installed for drying of sludge.

(xiii). 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.

(xiv). The green belt of at least 5-10 m width shall be developed in nearly 21.78 Hectares i.e. 33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xv). PP proposed to allocate Rs. 1.85 Crores towards extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xvii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be

provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xviii). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xix). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xx). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 11

Proposed 120 KLPD Grain Based Distillery along with 3.5 MW Co-Gen Power Plant and ZLD Unit at Village Kadrabad, Tehsil- Indri, District- Karnal, Haryana M/s Nakshtra Biofuels Pvt. Ltd - Consideration of Environmental Clearance

[IA/HR/IND2/ 277010/202 2, IA-J11011/195/2 022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Vardan EnviroNet (NABET certificate no. NABET/EIA/2023/SA0158 and validity 05.05.2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 120 KLPD Grain based Ethanol Plant & 3.5 MW Co-generation power plant (Biomass) and ZLD unit located at Village-Kadrabad, Tehsil-Indri, District- Karnal, State- Haryana by M/s. Nakshtra Biofuels Pvt. Ltd.

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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery	Ethanol	120 KLPD
2	Co-generation power plant	Power	3.5 MW
3	DWGS dryer	DDGS	70-75 TPD
4	Fermentation Unit	CO_2	80-85 TPD

Standard ToR and public Hearing conduction is not applicable as the project falls under category 'B2' as per OM dated 16th June, 2021**.**

Total land area required is 4.08827 ha. (40822.7 Sqm.) Greenbelt will be developed in total area of 1.4287 ha. (14287.9 Sqm) i.e., 35% of total project area. The estimated project cost is Rs. 210.0 Crores. Capital cost of EMP would be Rs. 6.8716 Crores and recurring cost for EMP would be Rs. 0.2454 Crores per annum. Industry proposes to

allocate Rs. 1.075 crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 310 persons as direct & indirect during Operation and construction Phases.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. River/water body Western Yamuna Canal is at a distance of 20 m in South direction & Western Yamuna Canal (Main Branch) is flowing at a distance of 2.26 km in East direction. Western Yamuna Canal at a distance of 20 m for which NOC has been obtained from Water Services Sub- Division, Jyotisar, Irrigation and Water Resource Department, Govt. of Haryana vide. letter no. 7946/38000D dated 31.08.2022 stating that the project site is away from flood prone area.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 82.92 $\mu g/m^3$, 49.97 $\mu g/m^3$, 15.72 $\mu g/m^3$ and 26.82 $\mu g/m^3$ withrespect to PM10, PM2.5, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 960 m^3/day which will be met from ground water. Application has been submitted to HWRA vide. Application no. HWRA/IND/N/2022/3693 dated 22.06.2022.Effluent of 1079 KLPD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1080 KLPD. Raw stillage 890 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.5 MW and will be met from proposed 3.5 MW cogeneration power plant/state grid. Rice husk (Biomass) based Boiler will be installed with Electrostatic Precipitator and a stack height of 40 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 1000 kVA and 225 kVA of

DG Set will be used as standby during power failure and stack height of 15 m will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electrostatic Precipitator will be provided with a stack height of 40 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 of total 80-85 TPD generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) of 24750 TPA will be sold as cattle feed.
- CPP Ash of 9000 TPA will be used in-house for brick manufacturing.
- Used oil 2.5 Kilolitres per annum will be sold to authorized recyclers.
- CPU sludge (0.3 TPD) and STP Sludge (Less than 1 kg Per day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 120 KLPDwill be used for manufacturing ethanol only.

Total land of 4.08227 ha. (40822.7 Sq.m) is under possession of the company and and land use conversion has been completed vide letter no. CLU/KL-1119A/CTP/20799/2022 dated 19.07.2022 land use conversion application has been submitted to Directorate of Town & Country Planning, Haryana dated 09.03.2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- Commitment that Bio mass shall only be used as fuel for boiler. Coal shall not be used.

- Total fresh water consumption shall not exceed 4 KL/KL of ethanol production including consumption for co-generation power plant. PP shall submit revised water balance confining total fresh water requirement to 480 KLD.
- Western Yamuna Canal is at a distance of 20 m. PP has informed that canal is abandoned and known as diffused Western Yamuna Canal. In this regard, EAC opined that clarification from Irrigation Dept. shall be obtained that the proposed site is located at diffused Western Yamuna Canal instead of main Western Yamuna Canal as 20 m distance from the project site seems like encroachment of canal land.
- Budget earmarked for CER shall be increased to 1% of the total project cost. PP shall submit action plan along with implementation timeline for the proposed activities under CER. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- PP shall increase the funds allocated to EMP and shall submit details of the same.

PP has not submitted desired document from the Irrigation Department that project is located at diffused Western Yamuna Canal instead of main Western Yamuna Canal.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

27th September, 2022 (Tuesday)

Agenda No. 1

Establishment of Grain based distillery plant of capacity - 75 KLD along with Co Gen Power – 2.0 MW located at Survey No. 31 and 32, Village – DonadBudurk, Block – BarshiTakli, District - Akola, Maharashtra by M/s. Vaishali Biofuels Pvt. Ltd. - Consideration of Environmental Clearance

The M/s Vaishali Biofuels Pvt. Ltd and the accredited Consultant Paramarsh Servicing Environment and Development (NABET certificate no NABET/EIA/2124/RA0224 and validity 1st May, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 75 KLD Grain based Ethanol Plant & 2.0 MW Co-generation power plant (biomass/rice husk based) located at Survey No. 31 and 32, Village DonadBudurk, Tehsil BarshiTakli, District Akola, State Maharashtra by M/s. Vaishali Biofuels Pvt. Ltd.

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

The details of products and capacity as under:

S.No	Name of unit	Name of the product/by-product	Production capacity
1.	Distillery	Ethanol	75 KLD
2.	Co-generation power plant	Power	2.0 MW
3.	DWGS dryer	DDGS	38 TPD
4.	Fermentation unit	Carbon di-oxide	60 TPD

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

Total land area required is 3.98 hectares. Greenbelt will be developed in

total area of 1.67 hectares i.e., 41.96 % of total project area. The estimated project cost is Rs. 118 Crore. Capital cost of EMP would be Rs. 14.72 Crores and recurring cost for EMP would be Rs. 2.88 Crores per annum. Industry proposes to allocate Rs. 1.77 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 50 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Water bodies: Purnea River is at a distance of 0.60 Km in East direction,Katepurna Reservoir and Spillwayis at distance of 8.13 km in South direction. NOC has been obtained by Irrigation Department, Akola, Govt. of Maharashtra vide outward no. 5242/Resha -1/2022 dated 05.08.2022 stating that survey no. 31 & 32 is not coming in submergence & command area of Katepurna project as well as land does not come in vicinity of Red and Blue Flood Zone Area.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.85µg/m^3, 0.48µg/m^3, 0.94µg/m^3 and 0.71µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 405 m^3 /day, which will be met from Dagadparva Dam. Industrial Water permission application has been submitted vide application ID: 2250139942473100007 to Akola Irrigation division, Akola. Effluent (Condensate/spent lees/blow down etc.) of 469m^3 /day quantity will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 500 KLPD. Raw stillage (488 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 1.975 MW and will be met from proposed 2.0 MW cogeneration power plant. 22 TPH biomass/rice husk fired boiler will be installed. Electrostatic Precipitator with a stack height of 35m will be

installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 250 kVA DG set will be used as standby during power failure and stack height (15 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electrostatic Precipitator with a stack height of 35 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (60 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (38 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (2.4 TPD) will be used for brick manufacturing in own brick manufacturing unit.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.0 TPD) and STP Sludge (0.03 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 75 KLPD will be used for manufacturing fuel ethanol only.

Total land of 3.98 Hectares is under possession of the company and land use conversion has been completed. Development permission is granted by Tehsildar, Barshitakli to the layout approved by Asst Director, Town Planning Department, Akola for industrial use purpose to the land in Survey No. 31 and 32 vide order No R.M.Kra/NAP-34/Donad BK/31-32/2022-23 dated 16.09.2022.

During deliberations, EAC noted that incremental concentrations and GLC values unit are shown incorrectly in presentation. Dominant wind direction is also incorrectly reported. Further, EAC discussed following issues:

- The Committee noted during presentation that incremental GLCs presented in mg/Nm^3, which was very high. CO levels presented very low. It was decided that PP shall relook baseline AAQM data and recalculate incremental GLCs.
- Uniform greenbelt shall be developed in the plant periphery. Revised plant layout with uniform greenbelt shall be submitted.
- PP shall commit that no coal shall be used as fuel.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Further, EAC also recommended that the Ministry should issue show cause notice against the Accredited Consultant M/s. Paramarsh Servicing Environment and Development for submission of misleading facts about predicted incremental concentrations and GLC and presenting incorrect data and units to EAC.

Agenda No. 2

Proposed 1320 KLPD Grain based Ethanol Plant along with 40.0 MW Cogeneration Power Plant located at Village Rathikhera, Tehsil Tibbi, District Hanumangarh, Rajasthan by M/s. Dune Ethanol Private Limited - Consideration of Environmental Clearance

[IA/RJ/IND2/290172/2022, IA-J-11011/339/2022-IA II (I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt Ltd. (NABET certificate no. NABET/EIA/2023/RA0186 and validity 07th February, 2023) 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 1320 KLPD Grain based Ethanol Plant along with 40 MW Co-generation power plant (Biomass/Coal based) located at Village Rathikhera, Tehsil Tibbi, District Hanumangarh, Rajasthan by M/s. Dune Ethanol Private Limited.

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/ by-product	Production capacity
1.	Distillery	Ethanol	1320 KLPD
2.	Co-generation power plant	Power	40 MW
3.	DWGS dryer	AFS	555 TPD
4.	Fermentation unit	Carbon di-oxide	925 TPD

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

Total land area required is 16.19 hectares. Greenbelt will be developed in total area of 5.38 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 450.0 Crores. Capital cost of EMP would be Rs. 45.0 Crores and recurring cost for EMP would be Rs. 3.50 Crores per annum. Industry proposes to allocate additional Rs. 5.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 475 persons as direct during operational phase.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves,

Tiger/ Elephant Reserves, Reserve Forest, Protected Forest, Wildlife Corridors etc. lies within 10 km distance. Water bodies: Ghagghar River is at a distance of 2.5 km in North direction, Indira Gandhi Nahar is at a distance of 1.3 km in East direction, Southern Ghagghar Canal is at a distance of 1.8 km in SW direction, Kishanpura Distributary is at a distance of 4.7 km in West direction & Northern Ghagghar Canal is at a distance of 5.7 km in North direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.90 µg/m3, 0.957 µg/m3 and 1.08 µg/m3 with respect to PM, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 5400 CMD (5280 CMD for distillery and 120 CMD for domestic use) which will be met from Ground water. NOC has been obtained from CGWA vide NOC no. CGWA/NOC/IND/ORIG/2022/15840 dated 17.06.2022. Process Condensate of 5162 CMD will be recycle/reuse in process. Effluent of 1415 CMD will be treated through Waste water Treatment Plant (WWTP) of capacity 1800 CMD. Raw stillage (9152 KLPD) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of Capacity 25 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 24.0 MW and will be met from proposed 40.0 MW co-generation power plant. 2 x 120 TPH biomass/coal fired boiler will be installed. ESP with a stack height of 60 m for each boiler will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 2 nos. 1250 kVA DG set will be used as standby during power failure and stack height (8 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters for each boiler (2x120 TPH) will be installed for controlling the particulate emissions.

- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (925 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grain Stillage) (555 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (440 TPD) generated during coal based operations will be given to cement manufactures & during biomass based operations will be given to brick manufacturers/ Land filling (farm filling) to the nearby farmers. Industry shall also install in-house brick manufacturing plant.
- Used oil (2.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1 TPD) and STP Sludge (5 kg per day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 1320 KLPD will be used for manufacturing fuel ethanol only.

Total land of 16.19 Hectares is under possession of the company and land use conversion application has been submitted to Revenue Department, Govt. of Rajasthan dated 13.09.2022.EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- PP shall commit that CLU certificate shall be obtained before start of construction activities.
- PP shall ensure that coal shall be used in emergency case only and prescribed standard for PM emission will be 30 mg/Nm^3. ESP (5 field and 99.9% efficiency) shall be installed.

- Details regarding fermenter unit, distillation unit and capacity. PP informed that 16 fermenters will be installed with capacity 1900 CMD. Distillation unit shall be 2 in number and diameter of analyser column shall be 4.5 m. EAC suggested that all safety factors shall be considered while designing the complete plant.
- 60 days storage of rainwater shall be provided.
- Air cooled condensers shall be provided and fresh water consumption shall not exceed 4 KL/KL. Revised water balance shall be submitted. Action plan to reduce 20% fresh water consumption. PP has submitted that fresh water consumption will be 5280 CMD for distillery and 120 CMD for domestic use, thereby achieving 4 KL/KL fresh water consumption for ethanol production.
- For calculating GLC & predicted incremental concentration, DG sets have been considered or not. PP informed that DG sets are not considered in AQ modelling for worst case scenario. PP shall perform cumulative AQ modelling including DG sets and submit revised GLC. Also, include transportation emissions in GLC. Recalculate stack height as 60 m is less as per boiler proposed of capacity 120 TPH. PP has submitted that DG sets will be reduced from 4 nos. to 2 nos. of capacity 1250 KVA and revised GLC has been submitted.
- Ash management. Undertaking shall be submitted that MOU will be obtained from brick manufacturers and the MOU shall be submitted in six monthly compliance report. PP has committed toinstall brick manufacturing plant during the meeting.
- Native species shall be included in greenbelt. PP has committed that native species will be planted with consultation of DFO and will be completed within 2 years.
- CER cost shall be increased from Rs. 4 Crores to Rs. 5 Crores. Only nearby villages and schools shall be included not private schools. PP has committed the same.
- OHS budget shall be increased from Rs. 70 Lakhs to Rs. 1 crores. PP has committed the same.
- PP shall ensure that village road/approach road shall be maintained.
- 10% of total power requirement shall be sourced from solar power. PP has committed the same.
- Threat zone is spreading outside plant premises for risk identified. Additional safety measures shall be submitted for the same. PP has submitted detailed safety measures for the threat identified.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 1320 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 5280 KLPD for 1320 KLPD distillery which will be met from Ground water. No ground water recharge shall be permitted

within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption. Air cooled condensers shall be installed in distillery.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). ESP (5 field and 99.9 % efficiency) with a stack height of 60 meters for each boiler (2x120 TPH) will be installed for controlling the particulate emissions for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (440 TPD) generated during coal based operations will be given to cement manufactures & during biomass based operations will be given to brick manufacturers/ Land filling (farm filling) to the nearby farmers. Industry shall also install in-house brick manufacturing plant. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (925 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(x). PP shall allocate at least Rs. 1 Crores/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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 5.38 hectares i.e., 33 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 5.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Village road/approach road shall be maintained by industry.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization

in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 3

Expansion of existing distillery capacity from 100 KLD to 160 KLD (Molasses Based Distillery) along with co-generation power from 3 MW to 4 MW located at village- Golabahar, Tehsil: Gola, District: Lakhimpur Kheri, State: Uttar Pradesh of M/s. Bajaj Hindusthan Sugar Ltd., Unit – Gola, Distillery Division - Consideration of Environmental Clearance

[IA/UP/IND2/285776/2014, IA-J-11011/46/2022-IA-II(I)]

The M/s Bajaj Hindusthan Sugar Ltd, Unit – Gola, Distillery Division and the accredited Consultant M/s. Environmental and Technical Research Centre (NABET certificate no. NABET/EIA/1922/IA0050 and validity 01st November, 2022) 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 existing molasses based distillery capacity from 100 KLD to 160 KLD along with co-generation power from 3 MW to 4 MW at Village Golabahar, Tehsil Gola, District Lakhimpur Kheri, State Uttar Pradesh by M/s. Bajaj Hindusthan Sugar Ltd., Unit – Gola, Distillery Division.

All Molasses based Distillery > 100 KLD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

Sr No	Unit	Product/by-product	Existing Quantity	Proposed Quantity	Total Quantity
1	Distillery	Rectified Spirit / ENA / Ethanol	100 KLD	60 KLD	160 KLD
2	Co-generation power plant	Power	3.0 MW	1.0 MW	4.0 MW

Existing industry is operational on the basis of Consent to Operate because existing distillery unit was established in year 1944, hence not covered under EIA notification 2006. Thus, Environmental Clearance was not applicable. Latest CTO (air and water) has been issued on 09/12/2021 and is valid till 31/12/2021. Certified CTO compliance report has been issued dated 14/07/2022 from SPCB.

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/46/2022-IA-II(I) dated 15th Feb., 2022. It was informed that no litigation is pending against the proposal.

Public Hearing for the proposed expansion project had been conducted by the Uttar Pradesh Pollution Control Board on 30.05.2022 at project site chaired by CDO, Lakhimpur (Authorized by DM, Lakhimpur Kheri) and document showing that CDO designation is equivalent to SDM has been submitted. The main issues raised during the public hearing and their action plan:

Regarding benefit to the farmers by the expansion of the industry and supply of fertilizers to farmers, Industry has allocated the fund of Rs 35.0 Lakhs for Fly ash granulation plant, proposed work will be completed with start of production work at expanded capacity (18 Months) and Fly Ash granules rich in potash is being / will be provided to the nearby farmer.

Regarding sugarcane payment, PP informed that 1000 crore rupees have been paid. The remaining payments will also be made soon. It was

also apprised that the expansion of the project would increase the income of the industry, which would also make it easier to make payments.

Regarding ground water pollution and red color in ground water, unit is being / will be based on Zero Liquid Discharge. Spent wash generated is being / will be concentrated in MEE then concentrate from MEE is being / will be used as fuel in incineration boiler.Other effluent is being / will be treated in Condensate Polishing unit (CPU). Industry allocated fund of Rs 4.25 Crores for expansion of CPU, MEE etc. PP also informed that the amount of iron in the ground water of the surrounding area is high, due to which the ground water becomes light red / brown after keeping it for some time.

Regarding bagasse and ash dispersion on road, PP informed thatcovered conveyer belt will be provided for bagasse transfer to avoid the bagasse fall on the road and nearby areas. Fly ash generated from the incineration boiler will be converted to granule and provided to the farmer as manure. Industry has allocated fund of Rs 50 Lakhs.

Total plant area after expansion will be 8.210 Ha (existing plant area – 8.210 Hectares and no additional land required for proposed capacity) which is under possession of the company and converted to industrial use. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 2.72 Hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained in and around plant premises. The estimated project cost is Rs. 23.34 Crores. Capital cost of EMP would be Rs.8.0 Crores and recurring cost for EMP would be Rs. 3.5 Crores per annum. Industry proposes to allocate Rs. 2.01 Crores towards extended EMP (Corporate Environment Responsibility).Total Employment after expansion will be 250 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests: Gola drain at a distance of 0.32 km in North east direction, Razanagar Reserve forest at a distance of 2.83 km in south east direction. No major water body is present in 10 km radius of project site.

Ambient air quality monitoring was carried out at 08 locations during 1st December 2021 to 28th February 2022 and the baseline data indicates the ranges of concentrations as: PM10 (65.2 - 88.2 µg/m^3), PM2.5 (33.85 – 52.77 µg/m^3), SO2 (9.89 – 14.69 µg/m^3) and NO2 (11.52 – 17.58 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.99 µg/m^3, 0.59 µg/m^3, -1.74 µg/$m^3$and 1.47 µg/$m^3$with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 960 KLD which will be met from Ground Water. NOC has been obtained from UPGWD vide NOC no. NOC046103, NOC023923 dated 17/08/2021. Existing effluent generation is 1152 KLD which is treated through Condensate Polishing Unit of capacity 2000 KLD. Proposed effluent generation will be 1723 CMD which will be treated through upgraded Condensate Polishing Unit of capacity 2000 KLD. Concentrated spent wash will be mixed with biomass and burnt in incineration boiler. Domestic waste water is being/will be treated in STP of capacity 60 KLD. The plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 3.8 MW which will be sourced from proposed 4.0 MW co-generation power plant. Existing unit has 40 TPH slop/biomass fired boiler. 20 TPH slop/biomass fired boiler will be installed. ESP with a stack of height of 85 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. ESP with existing stack of height of 85 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. Industry has 1x 1000 KVA DG set which will be used as standby during power failure and stack height (6.3 m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack of height of 85 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of

50 mg/Nm^3. ESP with existing stack of height of 85 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler.

- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (130 TPD maximum) will be generated after expansion from the fermentation. CO2 bottling unit will be installed within premises and provided to beverage industry as well as fire extinguisher manufacturing industry.

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

- Concentrated spent wash will be incinerated in boiler.
- Ash from Incineration boiler (77.22 TPD) will be utilised as manure or supplied to fertiliser industry.
- Yeast Sludge (16 TPD)will be mixed with press mud and provided to farmer as manure

During deliberations, the Committee noted that PP did not mention regarding litigation (Court case) pending against the company in Form-2. The Committee took it seriously as it seems that facts have been concealed. The Committee mentioned that the matter related to concealment of facts by the Environmental Consultant should be referred to QCI-NABET for necessary action. Further, PP informed that there is one litigation pending in Hon'ble Supreme Court against the Environmental Compensation imposed by CPCB. Stay order issued by Hon'ble Supreme Court to company. Further, CPCB has re-inspected the industry and revoked the earlier closure direction report. Further, Industry has also obtained CTO from UPPCB for existing 100 KLPD and also certified CTO compliance report. Further, EAC desired to submit the details of court case, action plan to comply the direction of the court case. PP shall submit action plan for all issues mentioned in court cases as well as measures taken to control effluent discharge into the river. PP shall also submit current status of the court case w.r.t. stay by the Hon'ble Court on the existing as well as proposed industry.
Further, EAC discussed following issues:

- Details regarding ground water monitoring and presence of piezometer in plant premises. Results of piezometer ground water monitoring shall be submitted. PP has submitted quarterly piezometer monitoring test report.
- Report of upstream and downstream monitoring results of drain shall be submitted. PP has submitted quarterly monitoring report of identified drain from upstream and downstream.
- Fresh water consumption shall not exceed 4 KL/KL of alcohol production. Revised water balance shall be submitted. PP has committed that fresh water consumption for proposed expansion shall not exceed 4 KL/KL of ethanol production.
- CER budget shall be invested before commissioning of plant.
- Distillery is in same premises of sugar mill, hence, Industry shall reduce fresh water consumption to 4 KL/KL. PP has committed the same.
- Report of monitoring of ground water for existing 5-6 years shall be submitted. PP has not submitted the same.
- For fly ash and bagasse transportation, covered conveyor belts shall be provided. PP has committed the same.
- Quantity of CO2 to be generated. PP has submitted that CO2 generated after expansion will be 115 TPD which will be bottled and provided to Beverage industry.
- Details regarding Environmental management cell hierarchy. PP has not submitted hierarchy.
- Village and railway station is near to plant site, hence 20 m wide greenbelt towards village and station shall be developed. PP has committed the same.
- Existing unit was based on bio-composting. The committee suggested that bio-composting shall not be operated. Accordingly, PP shall submit the commitment letter.
- Project cost seems to be on lower side. Accordingly, they have to recheck and submit the same.

In view of the foregoing and after deliberations, the Committee recommended that subcommittee of EAC Industry-II shall undertake a site visit to the existing plant site to review the existing water pollution control measures implemented on site and to suggest additional pollution control measures for the proposed capacity. Based on the site visit report the

instant proposal for EC shall be considered. PP shall also submit the above complete information on the PARIVESH portal.

Accordingly, proposal was deferred for submission of additional information and site visit by the sub-committee.

Agenda No. 4

100 KLD Grain Based Ethanol Plant along with 2.5 MW Co-generation Power Plant located at Village-Bhatbida, Tehsil-Sohela, Dist.-Bargarh, State-Odisha by M/s. Vista Spirits Private Limited - Consideration of Environmental Clearance

[IA/OR/IND2/291293/2022, IA-J-11011/360/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/RA0213 and validity15th February, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project 100 KLD grain based ethanol plant along with 2.5 MW co-generation power plant located at Village Bhatbida, Tehsil Sohela, District Bargarh, State Odisha by M/s. Vista Spirits Private Limited.

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 anotarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S.No	Name of Unit	Name of the product/by-product	Production capacity

1	Distillery	Ethanol	100 KLD
2	Co-generation power plant	Power	2.5 MW
3	DWGS dryer	DDGS	70 TPD
4	Fermentation unit	Carbon di-oxide	68 TPD

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

Total land area required is 5.48 hectares. Greenbelt will be developed in total area of 1.84 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 120.0Crores. Capital cost of EMP would be Rs. 21.28 Crores and recurring cost for EMP would be Rs 4.11 Crores per annum. Industry proposes to allocate Rs. 1.4 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 130 persons as direct & indirect.

There are no national parks, forests, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. There is no forest present within 10 km radius of the project site. Water bodies: Rani River is at a distance of 1.3 km in WSW direction, Banjari Nala is at a distance of 5.1km in ENE direction, Bargarh canal is at distance of 7.6 Km in WSW direction and Bijepur Lake is at distance of 7.7 km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.15 µg/m^3, 0.06 µg/m^3, 0.74 µg/m^3 and 0.41 and 0.39 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_X and CO respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including co-generation power plant will be 580 KLD which will be met from ground water. Application has been submitted to CGWA dated:-23.08.2022 Vide File No-21-4/4149/OR/IND/2022.Effluent (Condensate/spent lees/blowdown etc.) of

488 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 600 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 6 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 2.8 MW will be met from proposed 2.8 MW co-generation power plant. 26 TPH biomass/coal fired boiler will be installed. ESP/bag filter with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 500 kVA DG set will be used as standby during power failure and stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP/bag filter with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (68 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (70 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (42 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (2.5 Kilolitres per annum) will be sold to authorized recyclers.
- ETP/CPU sludge (58 Kg/day) and STP Sludge (0.55 Kg/day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted

self-certification in the form of notarized affidavit declaring that the proposed capacity of 100 KLPD will be used for manufacturing fuel ethanol only.

Total land of 5.48 Hectares land is under the possession of company and land use conversion application has been submitted to competent authority dated12.08.2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- Commitment that CLU certificate shall be obtained before start of construction activities. PP has committed the same.
- Commitment that Ground water withdrawal NOC shall be obtained before start of construction activities. PP has committed the same.
- ESP (5 field and 99.9% efficiency) shall be installed for controlling PM emissions within 30 mg/Nm3 level. PP has committed the same.
- Commitment that village road/approach road connecting NH-53 shall be maintained by industry. PP has committed the same.
- Native species shall be planted as part of greenbelt. Resubmit the tree species of greenbelt. PP has submitted revised list of species.
- Village and temple are present at 0.5 km. 20 m wide greenbelt towards village and temple shall be developed. PP has committed the same.
- Commitment that Industry shall not make provision for direct entry to industry on main road. PP has committed the same.
- 10% of total power consumption shall be sourced from solar power. PP has committed the same.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC

granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged

outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic precipitator (5 field and 99.9% efficiency) with a stack height of 60 meters will be installed with 26 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (42 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (68 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

(x). 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire

fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 1.84 hectares i.e., 33 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.20 m wide greenbelt towards village and temple shall be developed.

(xvi). PP proposed to allocate Rs. 1.4 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no

parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Village road/approach road connecting NH -53 shall be maintained by industry. Industry shall not make provision for direct entry to industry on main road.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with

photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 5

Expansion of Refinery capacity from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex and associated facilities located at Village Agasode, Tehsil Bina, District Sagar, State Madhya Pradesh by M/s. Bharat Oman Refineries Limited - Consideration of Environmental Clearance

[IA/MP/IND2/290279/2022, IA-J-11011/135/2013/IAII(I)]

The Project Proponent and the accredited Consultant M/s. Engineers India Limited (NABET certificate no. NABET/EIA/1922/RA0189_Rev01 and validity 22nd November, 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for capacity expansion from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex and associated facilities located at Village Agasode, Tehsil Bina, District Sagar, State Madhya Pradesh by M/s. Bharat Oman Refineries Limited.

All project/activity are listed at S.N. 4(a) Petroleum Refining Industry and 5(c) Petro-chemical complexes of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

Unit Capacities:

S. No.	Unit	Existing Capacity (MMTPA)	Proposed Capacity (MMTPA)	Total Capacity after expansion (MMTPA)
1	Ethylene Cracker Unit	0	1.2	1.2
2	Hydrocracker Unit	2.623	0.927	3.55

3	LLDPE HDPE Swing Unit	0	0.650	0.650
4	Butene-1 Unit	0	0.050	0.050
5	CDU/VDU Unit	7.8	4.2	12
6	Diesel Hydrotreater	2.372	0	2.372
7	CCR Reformer Unit	0.835	0	0.835
8	Isomerization Unit	0.633	0	0.633
9	SWS I & II Units	161 & 59 TPH	94 TPH	314 TPH
10	Delayed Coker Unit	1.822	0	1.822
11	ATF Merox Unit	0.569	0	0.569
12	Naphtha Hydrotreater	1.55	0	1.55
13	Kero Hydro-desulphurization Unit	0.6	0	0.6
14	HDPE Unit	0	0.500	0.500
15	Hydrogen Unit	0.098	0	0.098
16	Sulphur Recovery Unit	3 x 243 MTPD	0	3 x 243 MTPD
17	Amine Regeneration Unit	468 TPH	106 TPH	574 TPH
18	LPG Treating Unit	0.277	0.09	0.317
19	Bitumen Blowing Unit	0a	0.3	0.3
20	Polypropylene Unit	0	0.550	0.550

Associated facilities such as utility plants, power plant, tankages and dispatch terminal shall be installed, commensurate with above process capacities.

Product Pattern:

S. No.	Product/ By-product	Existing Quantity (KTPA)	Proposed Quantity (KTPA)	Total Quantity (KTPA)
1	LPG	344	6	350
2	Bitumen	0	300	300
3	Sulphur	152	0	152
4	Benzene	0	300	300
5	BS VI Diesel	3641	1459	5100
6	Mineral Turpentine Oil (MTO)	0	100	100
7	Naphtha	189	-89	100
8	Petcoke	523	2	525
9	Polypropylene	0	570	570

10	Toluene	0	180	180
11	Propylene	0	100	100
12	Pyrolysis Fuel Oil (PFO)/Carbon Black Feed Stock (CBFS)	0	50	50
13	BS VI Gasoline	1242	258	1500
14	ATF+SKO	1118	-118	1000
15	PE(HDPE+LLDPE)	0	1200	1200
16	Mixed Xylene	0	100	100

MoEF&CC has issued Environmental Clearance to the existing capacity 7.8 MMTPA vide File No. J-11011/135/2013-IA II (I) dated 15/05/2015. Certified Compliance report of existing ECs has been obtained from Integrated Regional Office, MoEFCC, vide File no 5(0)-1/2022(Env.) dated 10/08/2022. Action Taken Report has been submitted to IRO, MoEFCC, File No. BORL/MoEF/EC/2022/05 dated 07/09/2022 for partial compliances.

Standard Terms of Reference have been obtained vide F. No. J-11011/135/2013/IA II (I) dated 08th February, 2022. It was informed that litigation is pending against the proposal. Details are given below:
One case is pending against the project proponent in the court of Judicial Magistrate Bina, filed by M.P. Pollution Control Board in July 2018 on Zero Liquid Discharge in regard to inspection carried out in October 2017. A petition is lodged in the Hon'ble High Court at Jabalpur for quashing of complaint filed by MPPCB, which is pending for admission/interim orders.

Public Hearing for the proposed project had been conducted by the Madhya Pradesh Pollution Control Board (MPPCB) on 12/08/2022 at Gram Panchayat Bhawan Parisar, VillageAgasod, TehsilBina, DistrictSagar chaired by Additional Collector, Sagar District. The main issues raised during the public hearing and their action plan given below:
Regarding Health support, Education, school admission & upgradation of school,provision of potable water supply,Industry will continue to carry out various CSR & CER activities in future for development in surrounding villages under the proposed project. All CER activities will be carried out during construction phase of the proposed project and CER budget allocated for each activity will be Rs. 30 Crores.

Regarding employment, PP informed that during the constructionphase, average temporary manpower requirement is about 5000. During operational phase, employment ofapproximately 400 persons directly and around 1500 persons indirectly is envisaged.

Regarding fresh water consumption from Betwa river, PP informed that NOC has been obtained from Water Resources Division vide letter no. 14/ 2006/134 dated 06.03.2019. During summer season, Industry is proposing to construct barrage on the river.

Total plant area after expansion will be 1015 Ha. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 1015 Hectares i.e. 290 Ha greenbelt is already developed. Additional 65 Ha greenbelt will be developed in collaboration with State Forest Department to make 33% of the total plant area under greenbelt. The estimated project cost is Rs. 35000 Crores. Capital cost of EMP would be Rs. 510.6 Crores and recurring cost for EMP would be Rs. 2.8 Crores per annum. Industry proposes to allocate Rs. 30 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 1900 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors within 10 km distance. There are no Reserve forests/protected forests within 10 km distance. Water bodies: Betwa river is at a distance of 4.5 Km in west direction.

Ambient air quality monitoring was carried out at 8 locations during January to April, 2022 and the baseline data indicates the ranges of concentrations as: PM10 (65-76 µg/m^3), PM2.5 (20-40 µg/m3), SO2 (15-23 µg/m3) and NO2 (20-26 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would 28.2 µg/m3 and 38.3µg/m3 with respect to SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 101640 m3 /day, out of which 70440 m3/day will be used for expansion of refinery with

petrochemical complex which will be met from Betwa river. NOC has been obtained from Water Resources Division vide letter no. 14/ 2006/134 dated 06.03.2019. Existing effluent generation from refinery is 9000 m3/day which is treated through Effluent Treatment Plant. Proposed effluent generation will be 6240 m3/day which will be treated through new Effluent Treatment Plant of capacity 6240 KLPD. Domestic waste water will be treated in STP having 360 KLD capacity. The plant is being/will be based on Zero Liquid Discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of refinery cum petrochemical complex after expansion will be 350 MW (Existing 100 MW and Proposed 250 MW for expansion) which will be sourced from existing co-generation power plant and State Grid. NOC for power requirement from State Grid has been obtained vide letter no. 04-01/CRZ/CS-10-W/6876 dated 10/03/2022. Three numbers of CFBC boilers each of 275 TPH and one Utility Boiler of 160 TPH capacity are there in existing refinery. Two Utility Boilers of 180 TPH each will be installed in the proposed project. The CPP shall be Circulating Fluidized Bed Combustion (CFBC) type Boiler based Power plant, generating power through Steam Turbine Generators using Petroleum Coke as main fuel. A stack of height of 65 m will be installed with the proposed boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. Industry will install 6.5 MW DG set, which will be used as standby during power failure and adequate stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

The SOx emission of the existing refinery is 29.25 TPD. There will be additional 5.13 TPD SOx emission from the refinery expansion and Petrochemical complex. The overall SOx emission post expansion cum Petrochemical complex will be 34.38 TPD. However, below mitigation measures will be followed to control the process emissions:

- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- A stack height of 65 meters for utility boilers will be installed for controlling the particulate emissions.

- Low NOx burners will be used in all process heaters, furnaces and boilers.
- Low Sulphur Fuel Oil and Fuel Gas will be used as fuel in Process fired heaters and Boilers.
- Adequate stacks height will be provided for better dispersion of flue gases.
- Online stack analyzers for monitoring of SOx, NOx, CO and PM emissions from furnaces/boilers.
- Installation of internal floating roof with double seals in all Class-A tanks for reduction of fugitive emissions.
- Provision of mechanical seals in all the hydrocarbon pumps for reduction of fugitive emissions.
- LDAR surveys will be carried out periodically.

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

- Used Lubricating oil will be collected in metal drums kept in secured area and will be recycled/disposed through authorized recyclers.
- Discarded containers/barrels/ liners contaminated with hazardous waste - Will be disposed as per Hazardous Waste Rules, 2016.
- Spent catalyst will be disposed through authorized recyclers.
- Hazardous waste and salt from ZLD plant from proposed project will be disposed off to nearest Treatment, Storage and Disposal Facility (TSDF).
- Oily chemical sludge will be routed to Delayed Coker Unit (DCU)/bio-remediated/co-processed.
- Salts from ZLD plant will be disposed to nearest TSDF facility.

During deliberations, PP informed that there is a structured greenbelt around the existing Bina Refinery and minimum number of trees will be cut during expansion. Approx. 197 numbers of trees will be cut for expansion of existing refinery. Further, greenbelt of minimum 33% of the total project area will be developed. EAC discussed following issues:

- Details regarding greenbelt. PP informed that at present 28.5% i.e. 290 Ha has already been developed which shall be maintained by industry. Remaining percentage is proposed outside for which MOU

has been signed with State Forest Department and area allotted is 10 km from plant site. EAC noted that tree density is very low in existing plant premises. PP has finally proposed that additional 90 ha shall be developed instead of 65 Ha in the land identified by State Forest Department. EAC desired that PP shall submit the detailed action plan for the same.

- It was observed that fresh water requirement for the expansion project is around 101640 CMD, which seems to be on higher side. Accordingly, the Committee desired that PP shall submit detailed water conservation plan to reduce the fresh water requirement which shall also include recycle, reuse of treated effluent. PP shall also take measures by increasing COC between 6-8% to reduce the above evaporation loss.
- PP shall commit that existing and proposed refinery is being/will be based on ZLD concept and no treated water/waste water shall be discharged outside premises.
- Maximum incremental GLC for SO2 & NOx emissions are on higher side. EAC suggested to submit details of sulphur balance for existing as well as proposed unit. PP shall also submit details of pollution control measures to be undertaken for reducing incremental SO2 and NOx emissions. Accordingly, PP shall also submit revised GLC for SO2 & NOx emissions considering various pollution control measures.
- Details of existing as well as proposed sulphur recovery unit to be submitted.
- PP shall ensure that threat zone of identified hazard shall not be beyond the boundary level of plant premises. Societal risk from existing facilities, perceived risk from proposed facilities and cumulative risk shall be studied and submitted. PP shall commit that OISD 244 shall be implemented.
- Ground water and surface water has very high fluoride concentration as submitted in EIA/EMP Report. Clarification regarding the same shall be submitted.
- Detailed traffic management plan shall be submitted.
- In the public hearing, it has been noted that many issues have not been addressed/implemented as agreed earlier for existing unit. Action plan for the issues still not addressed as reported by public shall be submitted.
- Background concentration of ammonia is very high. Clarification

regarding the same shall be submitted.

- Details of court case, action plan for the court case. PP shall submit action plan to address all issues mentioned in court case.
- Current status of the court case w.r.t. stay by the Hon'ble Court on the existing as well as proposed industry.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 6

Proposed 200 KLPD Grain Based Distillery Plant (Ethanol) located at Gat No. 156, 157, 158 &159, Village Udapur, Tal: Bramhapuri, Dist: Chandrapur, Maharashtra by M/s. RBS Renewables Private Limited - Consideration of Environmental Clearance

[IA/MH/IND2/287386/2022, IA-J-11011/316/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Techno Green Solution (NABET certificate no. NABET/EIA/2124/IA0081 and validity till 05th July, 2024)made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance of Proposed 200 KLPD Grain Based Ethanol Plant along with 5.5 MW Co-generation Power Plant located at Gat No. 156.157,159, Village Udapur, TehsilBramhapuri, District Chandrapur, State Maharashtra byM/s. RBS Renewables Private Limited.

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

The details of products and capacity as under:

Sr No	Name of Unit	Name of the products /by products	Production capacity
1	Distillery	Ethanol	200 KLPD
2	Power Plant	Power	5.5 MW
3	DWGS Dryer	DDGS	98 TPD
4	Fermentation	Carbon Dioxide	150TPD

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

Total land area required is 9.15 hectares. Greenbelt will be developed in total area of 3.16 hectares i.e., 34.52 % of total project area. The estimated project cost is Rs. 227.69 Cr. Capital cost of EMP would be Rs. 23.70 Crores and recurring cost for EMP would be Rs. 0.635 Crores per annum. Industry proposes to allocate Rs. 3.43 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 90 persons as direct & 100 Persons indirect.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Reserve Forest/Protected Forest: Bramhapuri Reserve Forest is at a distance of 4.0 km. Water bodies:, Wainganag River is at a distance of 5.5 Km in East direction from project site.Bhuti nala is adjacent to proposed project site for which No Objection Certificate is obtained from irrigation department dated 25thAugust, 2022 stating that ,"the width of drain is 100 meters and depth is approximately 3.5 m. also the bottom width is 45 m. The flood survey work of the said area was not done through this department but on local enquiry , it was found that flood water came in survey number 159 in 2019-20. The said area does not fall in the benefit area as well as in the loss area of this department. As per the revised map provided to this department, open space and amenity space are provided in the area of Survey Number 159 adjacent to the drain, approximately 300 metres of flood protection wall is required to be constructed on the area adjacent to the drain. NOC is issued subject to the said condition."

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.72 µg/m3, 2.17 µg/m3, 0.11 µg/m3 and 0.15 µg/m3 with respect to PM10, PM2.5 ,SO2 & NOx . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 1131 m3/day which will be met from Bhuti Nala. Application has been submitted to Executive Engineer, Irrigation Project Investigation department, Chandrapur. Effluent (Condensate/ Spent lees /blowdown) of 966 m3/day quantity will be treated through Condensate polishing unit of capacity 1000 m3/day. Raw Stillage (1338 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of 20 KLPD capacity will be installed to treat domestic sewage generated. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 5.0 MW and will be met from proposed 5.5 MW co-generation power plant. 45 TPH biomass/coal fired boiler will be installed. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (6 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (150 TPD) generated during the fermentation process will be collected by proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (98 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (Ash 55.5 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil will be sold to authorized recyclers
- CPU & STP sludge (1.5 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 9.15 Hectares is under possession M/s RBS Renewables Private Limited and Land use conversion application has been submitted to Revenue Department, Government Maharashtra dated 18th April 2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- Commitment that CLU certificate shall be obtained before start of construction activities.
- Connectivity of Highway to project site. PP informed that 12 m village road is present as connecting road. PP shall commit that village road/approach road to plant site shall be maintained by the industry. PP has committed the same.
- Commitment that surface water supply NOC shall be obtained before start of construction activities. EAC suggested that drain will not have adequate supply of water round the year, hence, PP shall apply for ground water withdrawal permission also simultaneously.
- In CER activities, potable water supply shall be included instead of RO water. Revised CER activities including quantitative description of activities shall be submitted. PP has submitted the same.
- Ash management. PP shall commit to install own brick manufacturing unit inside plant premises. PP has submitted the same.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in

writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority for Drain water supply shall be obtained before start of the construction of plant, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. PP shall comply with the condition issued in NOC by State Irrigation department i.e. construction of approximately 300 metres of flood protection wall on the area adjacent to the drain.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from Bhutidrain.No ground water recharge

shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic precipitator (5 field and 99.9% efficiency) with a stack height of 60 meters will be installed with 45 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (55.5 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premise. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO2 (150 TPD) generated during the fermentation process shall be collected by proposed bottling plant.

(x). 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 3.16 hectares i.e., 34.52 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 3.43 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for

uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Village road/approach road to plant site shall be maintained by the industry.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 7

Proposed expansion of grain based distillery from 88.5 KLPD to 485.5 KLPD & co-generation power plant from 2.1 MW to 11.1 MW by establishment of 397 KLPD Grain based Ethanol plant along with 9.0MW Co-generation power plant located at Village Chinnabramadevam, Tehsil Peddapuram, District Kakinada, State Andhra Pradesh by M/s. KBK Biotech Private Limited-Consideration of Environmental Clearance

[IA/AP/IND2/285108/2019, IA-J-11011/525/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. SV Enviro Labs & Consultants (NABET certificate no. NABET/EIA/2124/RA 0240 and validity 24th October, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the proposed expansion of grain based distillery from 88.5 KLPD to 485.5 KLPD & co-generation power plant from 2.1 MW to 11.1 MW by establishment of 397 KLPD Grain based Ethanol plant along with 9.0 MW Co-generation power plant located at Village Chinnabramadevam, Tehsil Peddapuram, District Kakinada, State Andhra Pradesh by M/s. KBK Biotech Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, wherein expansion of existing grain based distilleries 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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/By product	Existing Production capacity as per EC Order	Additional production capacity under EBP	Total production capacity
1	Grain based distillery	RS/ENA/Ethanol	88.5 KLPD	--	88.5 KLPD RS/ENA/Ethanol and 397KLPD Ethanol i.e. total capacity 485.5 KLPD
		Ethanol	--	397 KLPD	
2	Co-generation power plant for distillery/sugar mill	Power	2.1MW	9.0MW	11.1MW
3	DWGS dryer	DWGS/DDGS/Gluten/CDS	118/59TPD	484/223	602/282
4	Fermentation unit	Carbon dioxide	40 TPD	90 TPD	130 TPD

Note: At no time, production capacity shall exceed 485.5 KLPD.

SEIAA has issued Environmental Clearance to the existing Industry for a capacity of 20 KLPD grain/molasses based distillery vide dated 29th June, 2010 and 39 KLPD grain based distillery vide letter no. SEIAA/AP/EG/IND/02/2018/504 dated 24.01.2019 followed by for 29.5 KLPD (under NIPL) vide File No. SEIAA/AP/EG-19/2010 dated23.05.2022.

Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Vijayawada vide File no-IRO/VIJ/EPA/MISC/111-01/2021 dated 21.07.2022. Action Taken Report has been submitted to IRO, MOEFCC, Vijayawada dated 17.08.2022 for observations reported in certified compliance report.
Detailed EC chronology is given below:

S.No	EC order Number & Date	Products as per the EC Order	Quantity
1	SEIAA/AP/EG-19/2010 Dt: 29.06.2010	Rectified spirit/ENA/Ethanol (Molasses/grain based) Cogeneration power plant	20KLPD 1.25MW
2	SEIAA/AP/EG/IND/02/2018/504 Dt: 24.01.2019 and amendment order no: SEIAA/AP/EG/IND/02/2018/504-319 Dt: 31.05.2019	Rectified spirit/ENA/Ethanol (Molasses/grain based) Rectified spirit/ENA/Ethanol - grain based Co-generation powerplant	39 KLPD 39 KLPD 0.85MW
3	NIPL: Consent for Establishment under NIPL vide order no: 318/APPCB/CFE/RO-KKD/HO/2010 Dt: 23.05.2022 Dropping of molasses based and obtained CFE under NIPL for 50% of the production i.e. Increase of 50% grain based product (20+39 KLPD = 59KLPD) i.e., **29.5KLPD** and total production is 88.5KLPD of	Rectified spirit/ENA/Ethanol (grain based) Cogeneration power plant	29.5KLPD 2.1MW

	RS/ENA/Ethanol.		
	Total		88.5 KLPD and 4.2 MW

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

Total plant area after expansion will be 16.04 Ha (existing plant area is 13.38 Hectares and additional land required 2.66 Hectares for proposed capacity) which is under possession of the company and converted to industrial use. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 5.25 Hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained. The estimated project cost is Rs. 189 Crores. Capital cost of EMP would be Rs. 26.79 and recurring cost for EMP would be Rs. 3.4550 Crores per annum. Industry proposes to allocate Rs. 1.05Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 216 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Water bodies: Samarlkota Canal is at a distance of 3.0 Km in South direction.

AAQ modelling study for point source emissions indicates that the maximum predicted GLCs for PM,SO2 and NOX will be 2.0 µg/m^3 ,1.80 µg/m^3 and 1.60 µg/m^3 respectively with respect to PM, SO2 and NOX respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 2668 CMD (Existing 485 CMD &proposed expansion 2183 CMD) which will be met from Ground water and Dowleswaram canal. NOC has been obtained by Office of the Chief engineer, Godavari Delta System, Dowleswaram vide letter no.

CE/GDS/DWM/OT1/AEE1/Water permission/447D Dt: 04.10.2021 and validity 1year. Existing effluent generation is 215CMD from distillery and proposed effluent generation will be 1517 CMD from distillery, which will be treated through proposed Condensate Polishing Unit of capacity 2000 KLPD. In grain-based operation, raw stillage (1113.5 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE followed by dryer to produce DDGS. Domestic waste water is being/will be treated in proposed STP. The plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 11.1MW which will be sourced from 11.1 MW co-generation power plant in distillery. Existing distillery has 20TPH coal and biomass fired boiler. Bag filter with stack height 50 m is installed with existing boiler. 69 TPH coal and biomass fired boiler is under construction in distillery. ESP with stack height of 66 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. Industry has existing 2 x 250KVA & 1 x 500KVA and proposed 2 x 1250 KVA DG set which will be used as standby during power failure and stack height (15 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 66 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (130 TPD) after expansion generated during the fermentation process is being/will be collected by utilizing CO2 scrubbers and sold to authorized vendors/collected in proposed bottling plant.

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

- DWGS/DDGS (602/282 TPD) after expansion is being/will be sold as cattle feed / fish feed / prawn feed.

- Boiler ash (111.5 TPD) after expansion is being/will be supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (150litres per annum) is being/will be sold to authorized recyclers.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 397 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, PP informed that existing distillery is only grain based. EAC discussed following issues:

- PP shall submit an affidavit that EC for 100 KLPD capacity shall be surrendered. PP has also shown the photographs of construction of 69 TPH boiler of the proposed 100 KLPD distillery. The committee was of the view that the proposal may be considered as per the Ministry's OM considering the physical progress of the existing 100 KLPD distillery.
- Fresh water consumption shall be reduced to 4 KL/KL of ethanol production.
- OHS budget shall be increased from Rs. 5 Lakhs to Rs. 1 Crores. PP has committed the same.
- CER budget shall be increased from Rs. 1.04 Crores to Rs. 2.0 Crores. PP has committed the same.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 397 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The present Environmental Clearance shall supersede the existing EC for expansion of the project vide order no. SEIAA/AP/EG/IND/02/2018/504-831 dated 18.12.2020 for 100 KLPD grain based distillery.

(iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement after expansion shall not exceed 4 KL/KL of ethanol production i.e. 1942 m^3/day which will be met from Ground water and Dowleswaram canal. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic precipitator (5 field and 99.9% efficiency)with a stack height of 66 meters will be installed with 69 TPH biomass andcoal fired

boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (111.5 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (130 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

(x). PP shall allocate at least Rs. 1 Crores/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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 5.25 Hectares i.e. 33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 2.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 8

Proposed 200 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant located at Village Hamira, Tehsil Dhilwan, District Kapurthala, Punjab by M/s. Jagatjit Industries Limited - Consideration of Environmental Clearance

[IA/PB/IND2/290477/2022, IA-J-11011/340/2022-IA II (I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt Ltd. (NABET certificate no. NABET/EIA/2023/RA 0186 and validity 7th February, 2023) 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 200 KLPD Grain based Ethanol Plant along with 6.0 MW Co-generation power plant (Biomass based) located at Village Hamira, Tehsil Dhilwan, District Kapurthala by M/s. Jagatjit Industries Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/ by-product	Production capacity
1.	Distillery	Ethanol	200 KLPD
2.	Co-generation power plant	Power	6.0 MW
3.	DWGS dryer	DDGS	98 TPD
4.	Fermentation unit	Carbon di-oxide	154 TPD

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

Total land area required is 10.12 hectares. Greenbelt will be developed in total area of 3.44 hectares i.e., 33.9 % of total project area. The estimated project cost is Rs. 219.77 Crores. Capital cost of EMP would be Rs. 24.2 Crores and recurring cost for EMP would be Rs. 2.2 Crores per annum. Industry proposes to allocate Rs. 2.2 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 140 persons as direct.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Reserved Forest, Wildlife Corridors etc. within 10 km distance. Reserve forest/Protected Forest: Some small unnamed patches of PF lies in SW direction. Conservation plan for schedule I species (Peafowl (*Pavocristatus*), Shikra (*Accipiter badius*), Sparrow Hawk (*Accipiter nisus*)) has been submitted to DFO (Wildlife Division) dated 26.08.2022 and a budget of Rs. 0.27 Crores has been earmarked for the same. Water bodies: West or Black Bein is at a distance of 2.7 km in WNW direction, Akbi Nala is at a distance of 4.5 km in SW direction &Hambowal Nala is at a distance of 6.5 km in WNW direction from project site.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.428 µg/m3, 0.642 µg/m3 and 0.909 µg/m3 with respect to PM, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 900 CMD (800 m3/day for distillery and 100 m3/day for domestic purpose) which will be met from Ground water. NOC has been obtained from Punjab Water Regulation and Development Authority, Chandigarh vide NOC No. PWRDA/07/2022/L3/399 dated 11.07.2022. Effluent (Condensate/spent lees/blowdown etc.) of 1101 CMD will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 1350 CMD. Raw stillage (1296 KLPD) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 4.0 MW and will be met from proposed 6.0 MW co-generation power plant. 45 TPH biomass/coal fired boiler will be installed. ESP with a stack height of 52 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 2x 1000 kVA DG sets will be used as standby during power failure and stack height (7 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 52 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (154 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (98 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (47 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.35 TPD) and STP Sludge (0.01 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 10.12 Hectares is completely under the possession of the

company. The total land is under the possession of the company & is industrial in nature since inception due to existing infrastructures at the site. M/s Jagatjit Industries Limited is sole owner of the said land as per latest Jamabandi of revenue department. The same has also been certified by Naib Tehsildar, Dhilwan.EAC found the information satisfactory.

During deliberations, PP informed that Jagatjit Industries Limited was set up by Sh. L. P. Jaiswal in the year 1944 which is spread over approximately 320 acres of land. At present the company is having two divisions viz., Food & Alcohol which manufactures MMF, Ghee, SMP, WMP, Mex (237 Metric tonnes/day) & Alcohol (135.02 KLPD) respectively. The Industry has been operating on the basis of NOC/CTO obtained from Punjab Pollution Control Board since inception. Copies of latest CTO for Air & Water obtained by the company vide Consent no. CTOA/Renewal/KPR/2018/7063339 & CTOW/Renewal/KPR/2018/7063745 dated 23.03.2018 valid till 31.03.2023.The company has obtained certified CTO compliance report of the exiting unit from Punjab Pollution Control Board vide letter no 2268 dated 12.08.2022. PP informed that proposed project is separate entity and not interlinked with the existing unit. Further, EAC discussed following issues:

- PP has shown board resolution stating that M/s. Jagatjit Industries Limited (Proposed 200 KLPD grain based ethanol project) is separate entity and submitted the undertaking stating that the proposed project will not be interlinked with existing unit. However, PP has submitted certified compliance report of CTO vide letter no 2268 dated 12.08.2022. Further, the Committee was satisfied with the response that the proposed project is a separate entity and may be treated as an independent unit.
- Fresh water consumption shall not exceed 4 KL/KL. PP has reduced the fresh water requirement to 800 m3/day for distillery operations.
- Industry shall install own brick manufacturing plant in plant premises/adjacent areas. Also, PP shall ensure that MOU with brick manufacturers are obtained.
- Greenbelt shall be developed by December, 2023. PP has committed the same.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). 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. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 800 m3/day which will be met from Ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the

accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic precipitator(5 field ESP & 99.9% efficiency) with a stack height of 52 meters will be installed with 45 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. NOx and SO2 emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (47 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (154 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(x). 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 3.44 hectares i.e., 33.9 %of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(xvi). PP proposed to allocate Rs. 2.2 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms,

playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 9

Proposed Expansion of Distillery from 60 KLPD to 90 KLPD under EBP located at Plot No. 3, Additional Latur MIDC, Tehsil- Latur, District- Latur , State- Maharashtra by M/s. Alkoplus Producers Pvt. Ltd.-Consideration of Environmental Clearance

[IA/MH/IND2/283935/2022, IA-J-11011/84/2005-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. sd engineering services pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0166 and validity 12th August, 2023) 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 existing molasses/grain based distillery unit from 60 KLPD to 90 KLPD located at Additional Latur MIDC, Tehsil Latur, District Latur , StateMaharashtra by M/s. Alkoplus Producers Pvt. Ltd.

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 2021, a special provisionin the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for allapplications made for expansion/proposed grain based distilleries with Zero Liquid Discharge producingethanol; solely to be used for Ethanol Blended Petrol Programme of the Government ofIndia shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file anotarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	Name of unit	Name of Product/ By-Product	Existing Production Quantity	Additional production capacity	Total production capacity
1	Distillery (Grain/Molasses)	Ethanol	60 KLPD	30 KLPD	90 KLPD
2	DWGS Dryer	DDGS (Multigrain)	33 TPD	17 TPD	50 TPD
3	Fermentation Section	Carbon di-oxide	46 TPD	24 TPD	70 TPD

Ministry has issued Environmental Clearance to the existing Industry for a capacity of 60 KLPD Distillery plant vide File No. J-11011/84/2005-IA II (I) dated 20th March, 2006. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File no- EC-1609/RON/2022-NGP/9806 dated 03rd June, 2022. Action Taken Report has been submitted to IRO, MOEFCC, Delhi dated 25-07-2022 for one partial compliance and one non-compliance.

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

Total land area required is 4.90 hectares. (Existing area will be used for proposed activity by minor modification & up gradation) which is under possession of the company. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 1.64 Hectares i.e. 33.53% will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 42 Crores. Capital cost of EMP would be Rs. 4.2 Crores and recurring cost for EMP would be Rs. 0.15 Crores per annum. Industry proposes to allocate Rs. 0.50 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 37 persons as direct & indirect.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Water bodies: Manjra River is at a distance of 8.5 Km in North direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.24µg/m3, 0.31µg/m3, 2.66µg/m3 and 3.09µg/m3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 581 CMD which will be met from Maharashtra Industrial Development Corporation, Latur (MIDC). After proposed expansion, total effluent generation will be 396 CMD from distillery which will be treated through existing Condensate Polishing Unit cum Effluent Treatment Plant of Capacity of 400 CMD. In molasses based operation, spent wash generated from the Analyser column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be burnt in incineration boiler. In grain based operation, raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. Domestic waste water will be treated in STP of capacity 10 KLPD. The plant is being/will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total Power requirement of distillery after expansion will be 2 MW which will be met from 2.2 MW co-generation power plantby up-gradation of turbine system &state grid. Existing Distillery unit has 18 TPH (slop + bagasse/coal) fired boiler. 23 TPH (slop + bagasse/coal) will be installed. Multi-cyclone & bag filter with a stack height of 50m is installed with existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. Multi-cyclone &bag filter will be replaced by ESP with existing stack height of 50m during up gradation of existing boiler. Proposed New Thermic fluid oil heater of 1500000 Kcal/hr will be installed (based on Bagasse & Coal).Bagfilter will be installed with thermic fluid oil heater. Industry has 2 No’s of 350 kVA DG set which will be used as standby during power failure and stack height is provided as per CPCB norms.

Details of Process emissions generation and its management:

- Multi-cyclone &bag filter with a stack height of 50m is installed with existing boiler for controlling the particulate emissions within the

statutory limit of 50 mg/Nm3. Multi-cyclone &bag filter will be replaced by ESP with existing stack height of 50m during up gradation of existing boiler.Bag filter will be installed for proposed Thermic Fluid Heater which is bagasse/coal fired.

- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- After proposed expansion, CO2 (70 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and proposed bottling plant.

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

- Concentrated spent wash (80 CMD) is being/will be burnt in incineration boiler.
- DDGS (Distilled Dried Grains Stillage) (70 TPD) will be sold as cattle feed / fish feed/ prawn feed.
- Boiler ash (9 TPD) will be used for brick manufacturing in proposed own brick manufacturing plant inside plant premises/supplied to brick manufacturers.
- Used oil will be sold to authorized recyclers.
- ETP/CPU sludge (0.04 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 30 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, PP informed that existing unit of 60 KLPD is not operational since February, 2013 due to financial and managerial constraints. Now, PP has proposed expansion from 60 KLPD to 90 KLPD under EBP so that distillery will start its operations. EAC discussed following issues:

- Undertaking that PP shall convert conventional boiler into incineration boiler. PP has submitted that separate incineration boiler of 23 TPH capacity will be installed.

- Undertaking that DDGS will be manufactured after expansion. PP has committed the same.
- OHS budget shall be increased from Rs. 15 Lakhs to Rs. 25 Lakhs. PP has increased the cost as desired by EAC.
- Revised cost of CER. CER budget has been increased from 0.42 Cr to 0.50 Cr.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 30 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). NOC from the Concerned Local authority shall be obtained before start of the construction of plant, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(iv). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from Maharashtra Industrial Development Corporation, Latur (MIDC). No ground water recharge shall be permitted within the premises. Industry shall construct a rain water

storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(v). Spent wash shall be dried to form DDGS to be used as cattle feed in grain based operation and in molasses based operation, concentrated spent wash is being/will be burnt in incineration boiler. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vi). ESP with existing stack height of 50m will be provided with separate 23 TPH slop & biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. Bag filter shall be installed with proposed Thermic fluid oil heater of 1500000 Kcal/hr.

(vii). At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (9 TPD) will be used for brick manufacturing in proposed own brick manufacturing plant inside plant premises/supplied to brick manufacturers. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (70 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 25 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 1.64 Hectares i.e. 33.53%of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 0.50 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall

be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

28th September, 2022 (Wednesday)

Agenda No. 1

Proposed establishment of Grain based Ethanol Distillery of capacity 500 KLD along with Co-gen power plant 13.5 MW at khasra no. 401/Min, 429/Min, 431/Min, 433/Min, 443/Min, 441/1, 445/Min, 446, 354/1, 355, 356, 357, 358, 361, 361/Min, 362, 362/Min, 362/1 Min, 363, 364, 364/Min, 365, 366/Min, 367/Min, 368/Min, 369/2, 369/3, 369/3 Min, Village: Dilra Raipur, Tehsil & Distt – Moradabad, U.P. by M/s Maa Sheetla Ventures Limited – Consideration of Environmental Clearance

[IA/UP/IND2/290696/2022, IA-J-11011/349/2022-IA-II(I)

The project proponent and the accredited Consultant M/s. Environmental and Technical Research Centre (NABET certificate no.NABET/EIA/1922/IA0050 and validity 01st November, 2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 500 KLPD Grain based Ethanol Plant 13.5 MW Co-generation power plant (biomass based) located at khasra no. 401/Min, 429/Min, 431/Min, 433/Min, 443/Min, 441/1, 445/Min, 446, 354/1, 355, 356, 357, 358, 361, 361/Min, 362, 362/Min, 362/1 Min, 363, 364, 364/Min, 365, 366/Min, 367/Min, 368/Min, 369/2, 369/3, 369/3 Min, Village Dilra Raipur, Tehsil & District Moradabad, State Uttar Pradesh by M/s Maa Sheetla Ventures Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 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.

The details of products and capacity as under:

S.No	**Name of unit**	**Name of the product / by -product**	**Production capacity**
1.	Distillery	Ethanol	500 KLD
2.	Co-generation power plant	Power	13.5 MW
3.	DWGS dryer	DDGS	236 TPD
4.	Fermentation unit	Carbon di-oxide	350 TPD

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

Total land area required is 7.08 hectares. Greenbelt will be developed in total area of 2.34 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 528 Crores. Capital cost of EMP would be Rs.53.41 Crores and recurring cost for EMP would be Rs. 4.74 Crores per annum. Industry proposes to allocate Rs. 5.28 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 200 Nos persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Water bodies: Ram Ganga River is at a distance of 3.96 Km in South West direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.85 µg/m^3, 0.52 µg/m^3, 0.45 µg/m^3 and 0.56 µg/$m^3$with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 2453 m^3 /day, which will be met from ground water. Application for NOC has been submitted to Uttar Pradesh Ground Water Department on 13/09/2022.Effluent (Condensate/spent lees/blowdown etc.) of 2588 m3 /day quantity will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 3000 KLPD. Raw stillage (2900 KLPD :quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 100 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 7.214 MW and will be met from proposed 13.5 MW cogeneration power plant. 95TPH biomass fired boiler will be installed. ESP with a stack height of 80 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1250 kVA DG set will be used as standby during power failure and stack height (7 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electrostatic Precipitator with a stack height of 80 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (350 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (236 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (12.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (1.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.5 TPD) and STP Sludge (0.35 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 500 KLPD will be used for manufacturing fuel ethanol only.

Total land of 7.08 Hectares (17.48 Acre) is under possession of the company and land use conversion has been completed vide letter no.5859/2022 dated 04/07/2022.

During deliberations, EAC noted that land documents for proposed land were not under possession of company. They have made unregistered lease agreement only for 15 years instead of 30 years and registered ownership of land with Revenue Department is not with the PP as reported. EAC also advised that the same should not be repeated in future as such activities are treated as concealment of facts. EAC suggested to submit valid & duly registered land ownership documents for further consideration.

Accordingly, proposal was returned in present form.

Agenda No. 2

Proposed Fuel Ethanol plant, of production capacity of 1 x 120 KLPD and 1 x 3.4 MW of captive power plant located at Survey No: 331, 332, 338, 339 & 340, Porda Village, Dasada Tehsil, Surendranagar District, Gujarat. by M/s Raghuvir Biofuels And Energy LLP – Consideration of Environmental Clearance

[IA/GJ/IND2/289510/2022, IA-J-11011/333/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148

valid 16th December, 2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 120 KLPD Grain based Ethanol plant and 3.4 MW co-generation power plant located at Survey No: 331, 332, 338, 339 & 340, Village Porda, Tehsil Dasada, District Surendranagar, State Gujarat by M/s Raghuvir Biofuels And Energy LLP.

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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product	Production capacity
1	Grain based Distillery	Ethanol	120 KLPD
2	Co-generation power plant	Power	3.4 MW
1	DWGS dryer	DDGS	96 TPD
2	Fermentation unit	CO_2 recovery	91 TPD

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

Total land required is 11.53 Ha. Greenbelt will be developed in total area of 5.55 Hai.e. 48.2% of total project area. The estimated project cost is Rs. 227.8 crores. Capital cost of EMP would be Rs. 23.7 crores and recurring cost of EMP would be Rs. 3.41 Crores per annum. Industry proposes to allocate Rs. 2.3 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 120 persons as direct & indirect.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger / Elephant reserves, Wildlife corridors etc. within 10 Km radius. Water bodies:Narmada canal is passing through the site. PP has obtained NOC from Sardar Sarovar Narmada Nigam Limited stating that "no irrigation is being done through this canal and PP shall construct bridge or culvert over the canal." Stream is flowing at a distance of 2.6 Kms. Few tanks/ ponds are present within 10 Kms radius.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.1 $\mu g/m^3$, 0.1 $\mu g/m^3$, 3.3 $\mu g/m^3$, and 0.7 $\mu g/m^3$ with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 480 m^3/day which will be met from Ground water. Application has been submitted to Department of Water Resources, Central Ground Water Authority (CGWA) dated 06-07-2022. Effluent (Condensate/spent lees/blow down etc.) of 710 m^3/day quantity will be treated through Condensate Polishing Unit of capacity 750 KLPD. Raw stillage (720 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 3.4 MW and will be met from the proposed 3.4 MW co-generation power plant. 28 TPH biomass/coal fired boiler will be installed. Electro Static Precipitator with a stack height of 47 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets

Details of Process emissions generation and its management:

- Electro Static Precipitator with a stack height of 47 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler.

- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 generated (91 TPD) during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (96 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (30.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.3 TPD) and STP Sludge (0.5 Kg/day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 120 KLPD will be used for manufacturing fuel ethanol only.

Total land of 11.53 Ha is under possession of the company. Land use conversion application has been submitted to Revenue Department, Government of Gujarat dated 30-05-2022.

During deliberations, EAC discussed following issues:

- PP informed that a minor canal is passing through the site and canal is passing through the private land owned by industry not Government land. Moreover, canal is not active since years. EAC suggested to do least construction towards the canal and PP shall submit affidavit that canal is passing through the land which belongs to the PP. EAC desired that 10 m wide greenbelt shall be developed along the canal and PP shall ensure to protect the canal. Also, PP shall commit that no treated water/waste water shall be discharged in the canal. EAC also suggested that PP shall obtain Gram Panchayat NOC for canal passing through the site.

- Details of CO2 recovery. PP has submitted that CO2 recovery plant will be established and will be given to dry ice manufacturers/ beverage industry.
- Revised CER activities including villages and quantitative targets shall be submitted. PP has submitted the same.
- Greenbelt development shall be completed by 30th September, 2023. PP has committed the same.
- PP shall ensure that detailed risk and damage assessment shall be performed.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 120 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). PP shall ensure that no treated water/waste water shall be discharged in the canaland PP shall construct bridge or culvert over the canal as per NOC issued by Sardar Sarovar Narmada Nigam Limited. PP shall obtain Gram Panchayat NOC for canal passing through the site before start of construction activities.

(iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 480 m3/day which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic precipitator (5 field and 99.9% efficiency) with a stack height of 47 meters will be installed with 28 TPH biomass/coal fired boilerfor controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO2 emissions and NOx emissions shall be below 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (30.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used.PP shall

meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated (91 TPD) during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

(x). 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 5.55 Hai.e. 48.2%of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant

species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed by PP, Greenbelt development shall be completed by 30th September, 2023. Also, 10 m wide greenbelt shall be developed along the canal.

(xvi). PP proposed to allocate Rs. 2.3 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road to project site shall be maintained.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous

monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 3

Establishment of 400 KLD Multi feed (Juice/Grains) Based Distillery unit within the existing premises of M/s. Belgaum Sugars Pvt. Ltd. located at Sy. Nos. 56/2, 59/1, 59/2, 59/3, 59/4, 59/5, 59/6, 60/1, 60/2, 60/3, 60/4, 60/5, 65/1, 65/3, 65/6, 68/3, 68/6+5B, 68/5B, 68/10, 68/7,68/4A, 68/4B, 68/4C, 68/4D, 69/1, 69/2, 69/3, 69/4, 69/5, 69/7, 69/9 of Hudali Village, BelagaviTaluk, Belagavi District, Karnataka by M/s. Belgaum Sugars Pvt. Ltd. – Consideration of Environmental Clearance

[IA/KA/IND2/289824/2021,IA-J-11011/409/2021-1A-II(I)]

The Project Proponent and the accredited Consultant M/s. Environmental Health & Safety Consultants Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/RA0241 and validity 22/08/2024) 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 400 KLD Multi feed (Juice/Grains) Based Distillery unit within the existing premises of M/s. Belgaum Sugars Pvt. Ltd. located at Sy. Nos. 56/2, 59/1,

59/2, 59/3, 59/4, 59/5, 59/6, 60/1, 60/2, 60/3, 60/4, 60/5, 65/1, 65/3, 65/6, 68/3, 68/6+5B, 68/5B, 68/10, 68/7,68/4A, 68/4B, 68/4C, 68/4D, 69/1, 69/2, 69/3, 69/4, 69/5, 69/7, 69/9 of Hudali Village, BelagaviTaluk, Belagavi District, Karnataka by M/s. Belgaum Sugars Pvt. Ltd.

All categories are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee(EAC).

The details of products and capacity as under:

Sl.No.	Product	Capacity	
A. Products			
1	Ethanol	400 KLD	
B. By-products			
2	Spent wash powder or Potash derived from spent wash	75 TPD (Juice mode)	77.65 TPD (Grain mode)
3	CO_2	320 TPD	
4	Yeast Sludge	30 MT/day	
5	DDGS (Dried Distillers Grains Soluble)	193 TPD (Grain mode)	

The proponent has also obtained the EC for Expansion of the existing Sugar unit from 3500 TCD to 7500 TCD & Co-generation unit from 14 MW to 36 MW vide letter no: No.SEIAA6 IND 2017 dated 02.03.2018, but the expansion project is not yet executed.Existing Sugar Manufacturing Unit with 3500 TCD Crushing & 14 MW Cogeneration Unit with CFE obtained from KSPCB vide letter no. PCB/357/HPI/2015-16/0B-1763 dated 31.12.2015 and further with the Consent for Operation vide letter no: AW-326851 dated 17.09.2021 valid up to 30.06.2026. Certified CTO compliance report has been obtained by RO, SPCB dated 22nd July, 2022.

The Standard ToR has been issued by Ministry vide letterNo.IA-J-11011/409/2021-1A-ll(l)dated: 05th October, 2021. It was informed that no litigation is pending against the proposal.

Public Hearing for the proposed project has been conducted by the Karnataka Pollution Control Board on 25th May, 2022. The main issues raised during the public hearing are related to local employment opportunities. PP informed that total employment will be 200 persons as direct and indirect and local people will be given preference.

Total land area required is 6.07 hectares. Greenbelt will be developed in total area of 6.07 hectares i.e., 33.33% of total project area. The estimated project cost is Rs. 198 Crores. Capital cost of EMP would be Rs.33.49 Crores and recurring cost for EMP would be Rs. 5.52 Crores per annum. Industry proposes to allocate Rs. 2.97 Crores towards extended EMP (Corporate Environment Responsibility).Total Employment will be 200 persons as direct and indirect.

There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/elephant Reserves, Wildlife corridors etc. within 10 km distance. Reserve forest is adjacent to project site. Water bodies: River Markandeya is at the distance of 4.4 km from the plant in North West direction for which NOC has been obtained from KARNATAKA NEERAVARI NIGAM LIMITED vide letter no. KNNLL/GRBCC Div No.2/PB/Belgaum Sugar/2022-23/ 1525 dated 14th September, 2022 stating that,"Belgaum Sugars Pvt. Ltd., Hudali industry is at distance of 3 Km in downstream of Bellary nala dam and Bellary nala (Gorge Valley Portion) is at distance 500 m. The issue of NOC for the said project does not arise since it is far away from the Bellary nala and the same is being submitted for reference".

Ambient air quality monitoring was carried out at 8 locations during October 2021 to December 2021 and the baseline data indicates the ranges of concentrations as: 55.48 µg/m^3 to 69.22 µg/m^3), PM2.5 (20.39 µg/m^3 to 31.13 µg/m^3), SO_2 (4.91 µg/m^3 to 7.37 µg/m^3), NO_2 (14.88 µg/m3to 22.76 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.95 µg/m3, 0.98 µg/m3 and 1.96 µg/m3 with respect to PM10, SO2 and NO2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1637.63 m3/day for Syrup Based Ethanol Production and 1987.6 m3/day for Grain Based Ethanol Production

which will be sourced from Markandeya River. In sugar unit, 780 KLPD ETP is already installed. The effluent from distillery unit will be treated in CPU of capacity 2400 KLD. In cane juice based operation, spent wash generated during the process of distillation will be passed through Bio-digester followed by concentration in MEE, and dried through spray driers to remove about 92 – 95 % moisture content & then packed and sold out in local market as a spent wash powder. In grain based operation, raw stillage will be concentrated in MEE followed by dryer to produce DDGS. The generated domestic sewage will be treated in proposed STP of capacity 10 KLD (SBR Technology). The plant will be based on Zero Liquid discharge system and treated effluent/water will not be discharged outside the factory premises.

Power requirement for proposed project will be 4.655 MW for Cane Juice/Syrup based ethanol production and 6.325 MW for grain based ethanol production and will be met from existing 14 MW co-generation power plant in sugar mill. Proposed project will be provided with existing 80 TPH bagasse/coal fired boiler. Electro Static Precipitator with a stack of height of 85 m is installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the boiler. DG sets 1250 KVA is used as standby during power failure. Stack (height 30m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electro Static Precipitator with a stack height of 85 m is installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the boiler.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2(320 TPD) will be recovered by installing CO_2 recovery Plant.

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

- In molasses based operation, concentrated spent wash will be dried by spray dryer and powder will be sold as manure.
- In grain based operations, DDGS (193 TPD) will be sold as cattle feed.
- Bottom ash (32 TPD) will be supplied to brick manufacturers in covered

trucks.

- CPU and STP sludge (0.015 TPD) will be reused as manure.
- Used oil (100 Litres /annum) will be used as lubricants for Conveyor chains and sprockets within the industry to avoid use of fresh oil.

The proposed distillery division will be established in existing premises of M/s Belgaum Sugars Pvt. Ltd.

During deliberations, PP informed that M/s. Belgaum Sugars Pvt. Ltd., is operating existing Sugar Complex with 3500 TCD sugarcane crushing capacity and 14 MW cogeneration unit at Hudali Village, Belagavi Taluk, Belagavi District, Karnataka with CFE obtained from KSPCB vide letter no. PCB/357/HPI/2015-16/0B1763 dated 31.12.2015. Later, the management has decided to go for capacity expansion of cane crushing from 3500 TCD to 7500 TCD of sugarcane and capacity expansion of co-gen unit from 14 MW to 36 MW/Hr.BSPL has already obtained Environmental Clearance for 7500 TCD of sugarcane, 36 MW Co-generation unit from Karnataka State Level Environmental Impact Assessment Authority (KSEIAA) on 02.03.2018. The implementation of 7500 TCD Sugar unit and 36 Co-gen unit is not yet started at site. Certified CTO compliance report has been obtained by RO, SPCB dated 22nd July, 2022.Further, EAC discussed following issues:

- Commitment that condensate of sugar mill shall be used for distillery and reduce fresh water requirement of distillery. Revised water balance shall be submitted for distillery by reducing fresh water requirement to 2.5 KL/KL of alcohol production. PP has submitted that fresh water consumption will be 1000 m3/day for alcohol production.
- There are 7 non-compliances in certified CTO compliance report. PP shall submit action taken report along with time bound action plan for the same to Ministry. Accordingly, PP has submitted action taken report for non-compliances reported. Flow meter installation, storage of bagasse yard with GI sheet, preparation of comprehensive Agriculture Management Plan for discharge of treated water, submission of storm water management plan, commissioning of STP etc. will be completed before starting of crushing season 2022-23.
- PP shall commit that existing sugar unit shall be ZLD after

establishment of distillery.

- In PH proceedings it is mentioned that written opinions were received from public whereas no attachment is submitted by PP. PP shall submit the same. PP has submitted the written opinions/suggestions from the public supporting the proposed project.
- CER activities shall be completed within 1 year.
- Reserve forest is adjacent to project site 20 m wide greenbelt towards Reserve Forest shall be developed.
- Greenbelt development shall be completed in 1 year.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 the 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 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. All public hearing issues shall be properly addressed as per timeline and budget submitted.

(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). NOC from the Concerned Local authority for surface water supply shall be obtained before start of the construction of plant, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(iv). Total Fresh water requirement shall not exceed 2.5 KL/KL of alcohol production i.e. 1000 m3/day which will be met from Markandeya River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(v). Spent wash shall be concentrated to form DWGS in grain based operations and in cane juice based operations, concentrated spentw ash will be spray dried to form powder. The condensate, spent lees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water from integrated unit of sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for both the units. STP shall be installed to treat sewage generated from factory premises.

(vi). Electro Static Precipitatorwithastackofheightof85 m is installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the 80 TPH bagasse fired boiler. At no time, the emission shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vii). Bottom ash (32 TPD) generated from the existing boiler shall be supplied to nearby brick manufacturers in closed vehicles only.PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(viii). CO_2 generated shall be collected by CO2 recovery plant.

(ix). Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly

basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.

(x). 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.

(xi). 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.

(xii). 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.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 6.07 hectares i.e., 33.33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be

developed. Records of tree canopy shall be monitored through remote sensing map. Reserve forest is adjacent to project site, 20 m wide greenbelt towards Reserve Forest shall be developed. Greenbelt development shall be completed in 1 year.

(xvi). PP proposed to allocate Rs. 2.97 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night

vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Managing Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 4

Proposed 100 KLPD Grain Based Distillery along with 2.5 MW Co-generation Power Plant under Ethanol Blended Petrol Programme (EBP) at Survey No. 148 and 149, Village-Malkhed (bk), Taluka Ner, District Yavatmal, Maharashtraby Chintamani Agrotech (I) Ltd. – Consideration of Environmental Clearance

[IA/MH/IND2/291037/2022; IA-J11011/357/2 022-IA-II(I)]

TheProjectProponentandtheaccreditedConsultant M/s. Technogreen Environmental Solutions (NABET certificate No. NABET/EIA/2124/IA0081 (Rev.01) and validity 5th July, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100 KLPD Grain based Ethanol Plant & 2.5 MWCo-generation power plant located at Survey No. 148 and 149, VillageMalkhed (bk), TehsilNer, District Yavatmal, State Maharashtra, by M/s. Chintamani Agrotech (I) Ltd.

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

provision in the EIA Notification, 2006-(Schedule5(ga),CategoryB2)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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery	Ethanol	100 KLPD
2	Power generation	Power	2.5 MW
3	DDGS dryer	DDGS	51 TPD
4	Fermentation unit	Carbon di-oxide	78 TPD

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

Total land area required is 9.86 hectares.Greenbelt will be developed in total area of 3.451 hectares i.e.,35% of total project area. The estimated project cost is Rs.148.38 Crores. Capital cost of EMP would be Rs.29.482 Crores and recurring cost for EMP would be Rs.2.4642 Crores per annum. Industry proposes to allocate Rs.2.2257 Crores towards Extended EMP(Corporate Environment Responsibility).Total Employment will be 100 persons as direct &indirect.

There are no national parks,wildlife sanctuaries,Biosphere Reserves,Tiger/ElephantReserves, Wildlife Corridors, protected forest etc. within 10 km distance. Reserve forest:Patch near Indrathana is at distance of

3.3 km in West direction, Reserve forest near Pachwad is at distance of 3.35 km in South direction and Lonadi Reserve Forest is at distance of 4.02 km in NNE direction. Water bodies: Ner Reservoir is at distance of 4.55 km in NNW direction, Milmili Nala is at distance of 5.67 km in NNW direction, KapsiTalav is at distance of 5.80 km in SE direction, Goki river is at a distance of 8.71 km in SSE direction and Aran river is at a distance of 9.82 Km in SSW direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.06 µg/m^3,0.03 µg/m^3,3.06 µg/m^3and1.26 µg/$m^3$with respect to PM10,PM2.5,SO2 and NOX.The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).

Total fresh water requirement will be 499.23 CMD which will be met from Ground water. Application has been submitted to CGWA Vide application number: 21-4/8882/MH/IND/2022 dated 30.08.2022. Effluent (Condensate/spent lees/dryer process condensate, sealing water etc.) of 515 m3/day quantity will be treated through Condensate Polishing Unit of capacity 600 CMD and Effluent (Boiler & Cooling tower blowdown/Domestic sewage/DM reject/CIP water) of 221.6 m3/day quantity will be treated through Effluent Treatment Plant of capacity 250 CMD. Raw stillage (561 KLPD) will be sent to decanter followed by MEE and dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 2.195 MW and will be met from proposed 2.5 MW Co- generation power plant. 22 TPH biomass/coal fired boiler will be installed. ESP (5 field) with 99.9% efficiency with a stack height of 50m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/$Nm^3$for the proposed boiler.500 kVA DG set will be used as stand by during power failure and stack height (4.5m)will be provided as per CPCB norms to the proposed DGsets.

Details of Process emissions generation and its management:

- ESP (5 field) with 99.9% efficiency with a stack height of 50 meters

will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2(78TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (51 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash(8.36TPD coal ash/ 20 TPD biomass ash) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.1 Kilolitres per annum) will be sold to authorized recyclers.
- Sludge from Waste water treatment (0.05 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 100 KLPD will be used for manufacturing fuel ethanol only.

PP informed that total land of 9.86 Hectares is under possession of company (on a lease basis) and land use conversion application has been submitted to Revenue Department, Govt. of Maharashtra. Vide application No: CAIL/NGP-YTM/NA-001 dated 25.08.2022.

During deliberations, EAC noted that land documents for proposed land were not under possession of company instead lease deed with sister company was shown by PP which was only for 59 months whereas registered ownership of land with Revenue Department is not with the PP as reported. EAC also advised that the same should not be repeated in future as such activities are treated as concealment of facts. EAC suggested to submit valid & duly registered land ownership documents for further consideration. **Accordingly, proposal was returned in present form.**

Agenda No. 5

Expansion of Grain based Distillery from 85 KLPD to 285 KLPD and Co-generation Power Plant from 1.5 to 9 MW by new installation of 200 KLPD Grain based Ethanol Plant at Plot no. 1 & 1A, Industrial area, Phase III, Sansarpur Terrace, Tehsil Jaswan, District Kangra, Himachal Pradesh by M/s. Premier Alcobev Private Limited- Consideration of Environmental Clearance

[IA/HP/IND2/136785/2018, J-11011/550/2 008-IA II(I)]

The Project Proponent and the accredited Consultant M/s. JM EnviroNetPvt. Ltd. (NABET/EIA/2023/RA 0186 and validity till 7th February, 2023) 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 Grain based Distillery from 85 KLPD to 285 KLPD and Co-generation Power Plant from 1.5 to 9 MW (biomass based) by new installation of 200 KLPD Grain based Ethanol Plant at Plot no. 1 & 1A, Industrial area, Phase III, Sansarpur Terrace, Tehsil Jaswan, District Kangra, Himachal Pradesh by M/s. Premier Alcobev Private Limited.

As per MoEFCC Notification S. No. 2339(E) 16th June, 2021, a special provision in the EIA Notification, 2006 has been introduced where establishment/expansion of grain based distilleries shall be appraised as category 'B2' projectsand appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file anotarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/byproduct	Existing Production capacity	Additional Capacity	Total production capacity
1	Distillery (Grain based)	Ethanol (AA)/Extra Neutral Alcohol/ Rectified Spirit	85 KLPD	200 KLPD (Ethanol)	285 KLPD Ethanol (AA)/Extra

					Neutral Alcohol/ Rectified Spirit
2	Co-generation Power Plant for distillery	Power	1.5 MW	7.5 MW	9.0 MW
3	DWGS dryer	DDGS	34 TPD	110 TPD	144 TPD
4	Fermentation unit	Carbon di-oxide	60 TPD	142 TPD	202 TPD

Ministry has issued Environmental Clearance to the existing 85 KLPD Grain Based Distillery and 1.5 MW Co-Generation Power Plant vide letter no. J-11011/550/2008-IA-II(I) dated 30thJune, 2020. Certified Compliance report of Existing EC has been obtained from Integrated Regional Office, MoEFCC, Dehradun vide F. No: IRO/DDN/Misc-HP/2021/781 dated 27.09.2021. Action taken report has been submitted to RO, MoEFCC, Dehradun dated 10.10.2021for two observations as reported by IRO.

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

Total plant area after expansion will be 4.45 Ha (existing plant area – 4.05 Hectares and additional land required – 0.40 Hectares for proposed capacity) which is under possession of the company and already industrial in nature. After expansion, out of the total plant area 1.48 hectares i.e. 33% of the total plant area has been developed/will be developed as greenbelt & plantation and the same will be maintained in and around plant premises. The estimated project cost is Rs. 175.0 Crores. Capital cost of EMP would be Rs. 16.68 Crores and recurring cost for EMP would be Rs. 4.30 Crores/annum. Industry proposes to allocate Rs 2.0 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 205 persons as direct.

There are no National Parks, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Reserved Forests/Protected Forests: Sansarpur RF is at a distance of 0.5 km in NE direction, Karanpur RF is at a distance of 3.0 km in West direction, Sambalian RF is at a distance of 5.5 km in North direction, Lojang RF is at a distance of 8.5 km in NNE direction, Panjal RF is at a distance of 9.2 km in SE direction, Dadhoa PFis at a distance of 4.5km in ESE direction, Rajeli PF is at a distance of 6.0km in ENE direction, Upper Kalot PF is at a distance of 8.5 km in East direction, Lower Kalot PF is at a distance of 8.5km in ENE direction, Chalan PF is at a distance of 9.5 km in ESE direction. Pong Dam Lake Wildlife Sanctuary area lies at a crow fly distance of 4.85 kms from plant site. Draft ESZ Notification for the same was published by MoEFCC S.O. 3099(E) dated 16th Nov. 2015 and recently on 28th April, 2022 revised draft Notification has been published. NBWL clearance for the same has been obtained from APCCF Wildlife vide letter no. HPFT-WL0MISC (24)/1/2022-WILDLIFE WING-HIMACHAL PRADESH FOREST DEPARTMENT vide No. WL(Misc.)/Road-NBWL/1/15734/2022 dated 15.09.2022. Conservation plan for schedule I species has been submitted to DFO, Hamirpur Division dated 07.01.2020 and a budget of Rs. 0.20 Crores has been earmarked for the same. Water bodies: SoanNadiis Adjacent in SW direction, Beas River is at a distance of 4.4 km in NNW direction, Pong Dam Lake is at a distance of 4.85 Km in NNEdirection, Kamahi Devi Khadis at a distance of 9.0 km in WSW direction, Shah Nehar Barrage Lake is at a distance of 4.0 Km in NNW direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.682 µg/m3, 0.273 µg/m3, 1.02 µg/m3 and 1.36 µg/m3 with respect to PM10, PM2.5, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total proposed fresh water requirement for expansion will be 800 CMD which will be met from groundwater. The company has already obtained NOC from Jal Shakti Vibhag, Himachal Pradesh vide NOC no. vide No. EE/JSD/Pragpur/GWA Certificate/Logging report/2021-22-7393 dated 10.09.2021. Existing effluent generation is 206 CMD from distillery which is treated through Condensate Polishing Unit of capacity 250 CMD. After expansion effluent generation will be 1167 CMD from distillery which will be

treated through Condensate Polishing Unit of capacity 1500 CMD. Raw stillage (2042 KLPD) will be sent to decanter followed by MEE followed by dryer to produce DDGS. Domestic waste water will be treated in STP of 15 KLPD. The plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

Total power requirement of distillery mill after expansion will be 7.0 MW which will be sourced from 9.0 MW Co-Generation Power Plant. Existing distillery has 14 TPH biomass fired boiler having 52 meters stack height and Bag filter as air pollution control device. A new 60 TPH biomass fired boiler will be installed in distillery. Bag filter with a stack of height of 52 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. ESP with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler.

Details of Process emissions generation and its management:

- Bag filter with a stack height of 52 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. ESP with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (202 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and sold to vendors as per local demand.

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

- DDGS (144 TPD) is being/ will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash (80TPD) is being /will be supplied to nearby brick manufacturers in covered vehicles.

- Used oil & grease (0.5 KL/annum) is being/will be sold out to the CPCB authorized recyclers.
- CPU sludge (1.5 TPD) and STP Sludge (5 kg/day) is being/will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed expansion capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

- Affidavit that complete 33% greenbelt with tree density 2500 trees per hectares shall be developed during construction activities. PP also committed that existing greenbelt will be made denser and native species will be planted.
- PP shall commit that total fresh water consumption shall be 4 KL/KL of ethanol production for proposed expansion capacity. PP has submitted that fresh water consumption has been reduced to 4.0 KL/KL i.e. 800 m3/day from 5.9 KL/KL.
- Revised CER activities shall be submitted. PP has increased CER cost from Rs. 1.75 CR. To Rs. 2 Cr.
- Covered storage of rice husk shall be provided. PP has committed the same.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed expanded capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the

project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The environmental clearance for the proposed expansion project is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken. PP shall also strictly follow the conditions mentioned in existing NBWL clearance.

(iii). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.

(iv). 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.

(v). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(vi). Total Fresh water requirement for expansion project shall not exceed 4 KL/KL of ethanol production i.e. 800 m3/day which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days

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

(vii). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(viii). Electrostatic precipitator with a stack height of 55 meters will be installed with 60 TPH biomass fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(ix). Boiler ash (80TPD) is being /will be supplied to nearby brick manufacturers in covered vehicles. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(x). CO2 (202 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and sold to vendors as per local demand.

(xi). 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.

(xii). 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.

(xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiv). 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. Filter press shall be installed for drying of sludge.

(xv). 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.

(xvi). The green belt of at least 5-10 m width shall be developed in nearly 1.48 hectares i.e. 33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. No trees shall be cut as part of expansion. Complete 33% greenbelt with tree density 2500 trees per hectares shall be developed during construction activities and it shall be complete before commissioning of the plant.

(xvii). PP proposed to allocate Rs. 2.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable

drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road to project site shall be maintained.

(xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 6

Proposed expansion of sugarcane crushing from 3,500 TCD to 10,000 TCD and distillery capacity from 50 KLPD to 200 KLPD to produce Ethanol using sugarcane syrup/ molasses/ grains and install captive power plant of capacity 1.5 MW for sugar plant by M/s. Shree Halasidhanatha Sahakari Sakkare Kharkhane Limited- Consideration of Environmental Clearance

[IA/KA/IND2/282844/2022; IA-J-11011/334/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s.(NABET certificate no. NABET/EIA/1992/SA 0138 (Rev. 01) and validity 20th October 2022) 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 sugar mill from 3500 TCD to 10,000 TCD, distillery unit from 50 KLPD to 200 KLPD, &proposed1.5 MW co-generation power plant for distillery (slop/biomass) located at Village Kodani an Yamagarni, Tehsil Nippani, District Belgaum, State Karnataka by M/s. Shree Halasidhanatha Sahakari Sakkare Kharkhane Limited.

As per EIA Notification 2006 Schedule 5 (g) Category A; however, as per the MoEFCC Notification S.O. 345(E), dated the 17th January, 2019, notification number S.O. 750(E), dated the 17th February, 2020, S.O. 980 (E)dated 02nd March, 2021 & S. No. 2339(E) 16th June, 2021, a special provision in the EIA Notification, 2006 "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Existing Production capacity	Additional production capacity	Total production capacity
1	Sugarmill	Sugar	3500TCD	6500 TCD	10,000 TCD
2	Co-generation power plant for sugar factory	Power	15MW	-	15 MW
3	Co-generation power plant for sugar mill	Power	-	1.5 MW	1.5 MW
4	Distillery(Sugarcane syrup/Molasses/ Grain)	Ethanol	50 KLPD	150 KLPD	200 KLPD
5	Co-generation power plant for distillery	Power	1.5 MW	-	1.5 MW
6	DWGS dryer	DDGS	-	131 TPD	131 TPD
7	Fermentation Unit	Carbon-Di-oxide	38 TPD	115 TPD	153 TPD

Existing sugar industry is operational on the basis of Consent to Operate. As the capacity of the sugar mill is 3,500 TCD i.e. less than 5,000 TCD so, it does not attract prior EC as per the EIA Notification 2006.Latest CTO has been issued on 21/05/2022 and is valid till 30/06/2026. Certified CTO compliance report has been issued by Karnataka State Pollution Control Board dated 14th September, 2022 and the report indicates that the most of the consent conditions have been complied, except for housekeeping, rain water harvesting and green belt is 29% which are partially complied. SEIAA has issued Environmental Clearance to the existing distillery for a capacity of 50 KLPD vide File No. SEIAA 11 IND 2021 dated 12/01/2022. As per OM F. No. IA3-22/10/2022-IA.III (E 177258) dated 8/06/2022 this application for EC is made within six months of grant of previous EC and hence self-

certified compliance report for the EC dated 12/01/2022 is submitted along with the application. It is noted that the work of installation of 50 KLPD plant is in progress.

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

Total plant area after expansion will be 41.68 Ha which is under possession of the company and converted to industrial use. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 12.10 Hectares i.e. 29% of the total plant area has already been developed as greenbelt & plantation and additional 1.65 Hectares of land is earmarked for further development of greenbelt and plantation to achieve 33% in and around plant premises. The estimated project cost is Rs. 288.92 Crores. Capital cost of EMP would be Rs. 9.326 Crores and recurring cost for EMP would be Rs. 4.40 Crores per annum. Industry proposes to allocate Rs. 3.0 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 398 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forest/Protected Forest: Unnamed Reserve forest is located adjacent to project site in North direction. Water bodies: Vedganga river is at a distance of 2.8 Km in North direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.95 µg/m^3, 0.138 µg/m^3 and 0.205 µg/m^3 with respect to PM_{10}, SO_2 and NO_X respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1208m^3/day(sugar mill 467 m3/day and distillery 741 m3/day)which will be met from back water of Jatrat Barrage of Vendganga river. The industry has NOC dated 10/02/2017 from Minor irrigation department, Belgaum for water

withdrawal. Further, application has been submitted dated 11/08/2021 to extend the permission period.

After expansion, total effluent generation from the sugar mill will be 1512 m3/day. Process effluent from sugar mill will be treated in ETP of capacity 1000 KLD and used for gardening and irrigation within the industry.Other effluents from sugar mill such as boiler bleed, sugar mill and co-generation cooling tower bleed will be treated in Condensate Polishing Unit of capacity of 1000 KLD.

Effluent generated from distillery will be 3179 m3/day when C-Heavy molasses (worst case) is used as feedstock. In molasses based operation, concentrated spent wash is being/will be incinerated in 32 TPH boiler. In grain-based operation, thick slop is being/will be decanted and dried to get 131 TPD DDGS which will be sold as cattle feed. Other effluents from distillery such as spent lees, MEE condensate, boiler blowdown, DM plant reject, CPU reject, scrubber reject, cooling tower bleed, lab and washings will be treated in Condensate Polishing Unit of capacity 1000 KLD. Domestic waste water will be treated in modular anaerobic baffle reactor and provided with filter press for dewatering the sludge. The treated domestic water will be reused in gardening. The plant is being based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

Total power requirement of distillery and sugar mill after expansion will be 18.7 MW which will be sourced from existing 15 MW co-generation power plant in sugar mill, 1.5 MW co-generation power plant in distillery and proposed 1.5 MW co-generation power plant. Existing sugar mill has 80 TPH bagasse fired boiler. During the present expansion,2x20 TPH boilers will be upgraded to 2x30 TPH bagasse fired boiler in sugar mill and 32 TPH biomass/slop fired boiler in distillery will be installed. ESP with a stack height of 85 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. Wet scrubbers with mechanical dust collector with a common stack of height of 65m will be installed for 2x30 TPH boilers and ESP with a stack height of 65m will be installed for 32 TPH slop/biomass fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. Industry has 2 no. 750 KVA

DG and 1 no. 160 KVA DG set which will be used as standby during power failure and stack height (7m ARL and 5m ARL with acoustic enclosures) is provided as per CPCB norms to the existing DG sets.

Details of process emissions generation and its management:

- ESP with a stack height of 85 m is installed with the existing boiler of 85 TPH for controlling the particulate emissions within the statutory limit of 50mg/Nm3.Wet scrubbers with mechanical dust collector with a common stack height of 65mare installed for 20 TPH boilers which will be upgraded to 30 TPH boilers and bag filter as APCE and ESP with a stack height of 65m will be installed for 32 TPH slop/biomass fired boiler for controlling the particulate emissions within the statutory limit of 50mg/Nm^3 for the proposed boiler.
- Online Continuous Emission Monitoring System is to be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (153TPD)generated during the fermentation process will be collected by CO2 scrubbers and sold to authorized vendors/collected in installed bottling plant.

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

- Concentrated spent wash (249 m^3/day)is being/will be burnt in incineration boiler.
- DDGS (Distilled Dried Grains Stillage) (131 TPD) is being/ will be sold as cattle feed.
- Boiler ash (60 TPD)is being/will be mixed with press mud and used in organic manure making. Incineration Boiler ash (6 TPD) is being/will be given to farmers to be used as Potash rich fertilizer.
- ETP sludge (0.80 TPD) is being/will be used as manure.Yeast sludge (54 TPD) is mixed with press mud and used in making organic manure.Lime sludge (400 TPD) is being/will be used in construction activities
- Bagasse (3000 TPD) is being/will be used as fuel in boilers.

- Press mud (400 TPD) is being/will be used as raw material for organic manure preparation.
- Used oil (0.37 Kiloliters per annum) is being/will be sold to authorized recyclers.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed expanded capacity of sugarcane crushing of 6500 TCD and 150 KLPD distillery and will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

- PP shall submit current status of 50 KLPD distillery along with photographs.PP has submitted that they have started the civil works on 04/03/2022. Work is under progress and completed about 50% of the civil works and erection of plant and machineries. Further, industryis planning to commission the plant by December 2022. Photographs of the work in progress has been submitted.Also, company has achieved the financial progress of Rs.51.00 Cr. as against the estimated cost of Rs.81.00 Cr.

- Justification for considering this project under B2 category. PP has submitted that The proposed expansion of distillery is to produce ethanol and sugar mill is to augment the feedstock (molasses and sugar syrup) requirement of the distillery. The ethanol produced is under EBP program for supplying it to oil companies. This proposed expansion of sugar mill and distillery is in the existing area in which sugar mill is established and operating with consents from Karnataka State Pollution Control Board. Distillery has prior Environmental Clearance for 50 KLPD to produce Ethanol. EC is granted by SEIAA, Karnataka on 12.01.2022. The proposal is submitted under category B2 as per the notification S.O 2339(E) dated 16.06.2021 which says quote - "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects…."The

above criteria is met for the proposed expansion. We have submitted the affidavit stating that the ethanol produced will be for supplying it to oil companies for blending ethanol with petrol under EBP programme failing which we are open for cancellation of environmental clearance granted. Hence the proposal qualifies for appraisal under B2 category.

- PP shall revise CER budget from Rs. 1.6 Crores to Rs. 3.0 Crores. PP has submitted the revised cost and CER activities of Rs. 3.0 Cr.
- Affidavit that complete greenbelt will be developed within 1 year. 33% Greenbelt shall not include landscape area. PP shall commit that no trees will be cut as part of expansion.PP has submitted that trees will not be cut during the execution of the expansion project.Regarding green belt development, out of 103 acres of total land area at present 28% i.e., 28.56 acres is utilized for the green belt development. As per the guidelines, 2500 trees per hectare will be planted. Accordingly, 34000 numbers. trees to be planted in the industry as greenbelt development. At present there are 19090 nos. trees including horticulture species. It is planned to strengthen the green belt to reach 33% by planting 16,900 nos. trees including additional plantations as replacement for existing horticulture species. The Committee suggested that greenbelt should be developed in 12.10 Hectares and additional 1.65 Hectares of land as proposed by PP.

- PP shall ensure that Integrated complex consisting of sugar and distillery unit shall be ZLD.

- Detailed regarding fresh water consumption per KL of ethanol for each raw material shall be submitted. PP informed during EAC meeting that raw material and fresh water consumption per KL: Syrup is 1.6 KL/KL, B-heavy molasses is 1.03 KL/KL, C heavy molasses is 0.58 KL/Kl, Grain is 2.88 KL/KL.

- While upgrading boiler from 20 TPH to 30 TPH, APCE shall also be upgraded from wet scrubbers with mechanical dust collectorto Bag filter. PP has committed the same.
- Submit calculations for GLC and stack height determination. Also, reverify the values of baseline concentration of PM, SO2 and NOx emission. Transportation emissions shall also be considered for GLC

prediction. PP has submitted the revised GLC values.

- Revised traffic load shall be submitted.Revised traffic load has been submitted.
- OHS budget shall be increased from Rs. 50 Lakhs to Rs. 70 Lakhs. PP has committed the same during EAC.
- Revised cost of EMP including cost of bag filter, CEMS etc. STP shall be installed instead of septic tank and include the cost of STP in EMP also. PP has increased the capital EMP cost to Rs. 100.036 Crores and recurring cost per annum as Rs. 7.44375 Cr.
- Native species shall be planted as part of greenbelt. Revised list of greenbelt species shall be submitted. PP has submitted the same.
- The committee from the photographs shown noted that the existing parking area is unpaved. Therefore, the committee suggested that parking area should be paved to avoid dust emissions. PP has submitted that The vehicular parking area will be increased to 20% of the total area i.e., 20.4 acres and the earmarked area will be paved and well maintained to prevent dust to reduce air pollution.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed expansion capacity of 150 KLPD &6500 TCD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). Expanded capacity of 6500 TCD shall only be used for production of sugarcane juice to be supplied to distillery and no sugar shall be manufactured as product.

(iv). NOC from the Concerned Local authority for surface water supply shall be obtained before start of the construction of plant, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from back water of Jatrat Barrage of Vendganga river. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be concentrated in MEE and incinerated in molasses based operations and in grain based operations, concentrated spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water from integrated complex (sugar and distillery unit) shall be discharged outside the premises and based on Zero Liquid Discharge. STP shall be installed to treat sewage generated from factory premises.

(vii). ESP with a stack height of 85 m is installed with the existing boiler of 80 TPH bagasse fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. Wet scrubbers with mechanical dust collector with a common stack of height of 65m is installed for 20 TPH boilers and ESP with a stack height of 65m will be installed for 32 TPH slop/biomass fired boiler for controlling the

particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Wet scrubbers with mechanical dust collector shall be replaced by bag filter for 2x30 TPH boilers while upgradation.

(ix). Boiler ash (60 TPD)is being/will be mixed with press mud and used in organic manure making. Incineration Boiler ash (6 TPD) is being/will be given to farmers to be used as Potash rich fertilizer. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(x). Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.

(xi). CO2(153TPD) generated during the fermentation process will be collected by CO2 scrubbers and sold to authorized vendors/collected in installed bottling plant.

(xii). PP shall allocate at least Rs. 70 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xiii). 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.

(xiv). 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.

(xv). 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. Filter press shall be installed for sludge drying.

(xvi). 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.

(xvii). The green belt of at least 5-10 m width shall be developed in 13.75 Ha i.e. nearly 33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Complete 33% greenbelt shall be developed within 1 year. No trees shall be cut as part of expansion.

(xviii). PP proposed to allocate Rs. 1.6 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be

completed before the commissioning of the plant in consultation with District Administration.

(xix). 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, 20% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road shall be maintained by industry.

(xx). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xxi). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Managing Director/CEO as per company hierarchy.

(xxiii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of

Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 7

Establishment of 100 KLPD grain-based distillery to produce 95 KLPD Ethanol along with 4.0 MW co-generation power plant at Village Shirala, Taluka and District – Latur by M/s. Greenative Petrochem Pvt. Ltd (GPPL) –Consideration of Environmental Clearance

[IA/MH/IND2/289246/2022, IA-J-11011/332/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Sustainera Solutions Private Limited (NABET certificateno. NABET/EIA/2225/IA 0095 and validity 20th February, 2025) made a detailed presentation on the salient features ofthe project and informed that the proposal is for environmental clearance to the project for 95 KLPD Grain based Ethanol Plant & 4.0 MW Co-generation power plant (biomass/coal) located at Village Shirala, Tehsil Latur, District Latur, State Maharashtra by M/s. Greenative Petrochem Pvt. Ltd (GPPL)

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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery (Broken rice/corn/maze/bajra/	Ethanol	95 KLPD

	sorghum/wheat Raw material)		
2	Co-generation power plant	Power	4.0 MW
3	DWGS dryer	DDGS	47.93 TPD
4	Fermentation unit	Carbon di-oxide	74.67 TPD

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

Total land area required is 5.98808 hectares. Greenbelt will be developed in total area of 2.1646 hectares i.e., 36% of total project area. The estimated project cost is Rs. 128.90 Crores. Capital cost of EMP would be Rs 21.69 Crores and recurring cost for EMP would be Rs. 0.99 Crores per annum. Industry proposes to allocate Rs. 2.578 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 166 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. No major water body is present within study area.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 9.95 µg/m3, 5.58 µg/m3, 13.28 µg/m3 and 1.01 µg/m3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 723 CMD which will be met from MIDC Latur water supply. Application has been submitted to MIDC Sub-division Latur dated 21.04.2022. Effluent (Condensate/spent lees/blowdown etc.) of 730.9 CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 850 CMD. Raw stillage (538.10 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.75 MW and will be met from proposed 4.0 MW co- generation power plant. 30 TPH biomass/coal fired boiler will be installed. Electrostatic Precipitator with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler.250 kVA DG set will be used as standby during power failure and stack height (6.0 m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electrostatic Precipitator with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (74.67 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors

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

- DDGS (Distilled Dried Grains Stillage) (47.93 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (4.91/32.8/46 TPD based on bagasse/coal/rice husk as fuel) will be supplied to brick manufacturers.
- Used oil will be sold to authorized recyclers.
- CPU sludge (0.5 TPD) and STP Sludge (0.005 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 100 KLPD will be used for manufacturing fuel ethanol only.

Total land of 5.98808 Hectares is under possession of the company and land use conversion has been completed vide letter no. 2019/Mahsul/NA/jmb-1/desk-1/CR-21 dated 22.04.2019.

During deliberations, PP informed that existing unit of dehydration plant of ethanol of 100 KLPD capacity is in operation. The Committee noted that the

existing plant does not fall under the purview of EIA Notification, 2006. However, this plant is operational on the basis of CTO. CTO has been issued by MPCB vide dated 22nd January, 2021 which is valid till 31st October, 2023. Apparently, there is no linkage of proposed unit with the existing unit. However, it was suggested to submit certified compliance report of CTO & the EC for the proposed project will be subject to the submission of satisfactory certified compliance report. Further, EAC discussed following issues:

- Fresh water consumption shall be reduced to 4 KL/KL of ethanol production.
- The Committee noted that incremental GLC is on higher side for SO2.Therefore, it was suggested to use coal with low sulphur content of less than 0.5%. It was also suggested to explore use of lime dosing with dry desulfurization processes to reduce SO2 emission.
- Uniform greenbelt shall be developed along the plant periphery.
- Background concentration of pollutant is very high. PP has informed that reason for high concentration is because of placement of AAQ stations in vicinity of either State Highways or Major District Roads. Also, AAQ monitoring was performed in month of May, 2022 i.e. dry season resulting in addition of fugitive emissions.
- CER activities shall be completed before the commissioning of plant. Only 2-3 activities shall be included in CER. PP has submitted the same.
- PP has also procured additional land of 0.2546 Ha adjacent to proposed project site for parking purposes. PP has submitted copy of land documents along with plant layout of the proposed parking area.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP

Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). EC for the proposed project will be subject to the submission of satisfactory certified compliance report.

(iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iv). NOC from the Concerned Local authority for MPIDC Water Supply shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from MPIDC Water Supply. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii). Electrostatic precipitator with a stack height of 60 meters will be installed with 30 TPH biomass/coal fired boiler for controlling the

particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (4.91/32.8/46 TPD based on bagasse/coal/rice husk as fuel) will be supplied to brick manufacturers. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall explore use of lime dosing with dry desulfurization processes to reduce SO2 emission. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO2 (74.67 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(x). PP shall allocate at least Rs. 1.2 Crores/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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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. Filter press shall be installed for drying of sludge.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 2.1646 hectares i.e., 36% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi). PP proposed to allocate Rs. 2.578 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road to project site shall be maintained.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles

should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 8

Grain Based 180 KLD Fuel Ethanol Plant & 5.0 MW Co- Generation Power Plant (By Product: 110 TPD of CO_2 Generation & DDGS : 73 TPD at Plot no 35,36 Banmore industrial Area (MP) by M/s. Amba

Shakti Bio Energy Pvt Limited – Consideration of Environmental Clearance

[IA/MP/IND2/ 291379/2022, IA-J11011/359/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services (NABET certificate no. NABET/EIA.1922/RA-0176 and validity 22nd October, 2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 180 KLPD Grain based Ethanol Plant & 5.0 MW Co-generation power plant (biomass/coal based) located at Plot no 35,36,Banmore Industrial Area , AB Road, Tehsil Bamour, District Morena, State Madhya Pradesh by M/s. Amba Shakti Bio Energy Pvt Limited

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 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.

The details of products and capacity as under:

Sr No	Name of Unit	Name of the product/by product	Production Capacity
1	Grain Based distillery	Ethanol	180 KLPD
2	Co-Generation Power Plant	Power	5 MW
3	DWGS Dryer	DDGS	73 TPD
4	Fermentation Unit	Carbon Di Oxide	110 TPD

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

Total land area required is 8.09 Ha. Greenbelt will be developed in total area of 2.84 Ha i.e., 35% of total project area. The estimated project cost is Rs. 242.29 Crores. Capital cost of EMP would be Rs. 30.6505 Crores and recurring cost for EMP would be Rs. 1.02 Crores per annum. Industry proposes to allocate Rs. 2.50 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 123 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests/ Protected Forest: Unnamed Reserve forest is at a distance of 250 m, Kulaith RF is at a distance of 6.50 km in SW direction, Bamur Basai RF is at a distance of 6.25 km in West direction, Sainchara RF is at a distance of 3.50 km in ENE direction, Susera PF is at a distance of 6.25 km in SSE direction, Nurabad RF is at a distance of6.25 km in NNW direction respectively. Water bodies: Sank River is at a distance of 0.75 Km in West direction, River Sonrekha is at a distance of 3.50 km which is a seasonal river.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.65 µg/m3 ,0.496 µg /m3, 5.51 µg/$m^3$and 5.50µg/m3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 724 m3 /day which will be met from MPIDC Water Supply for which consent has been obtained vide no MPIDC ROGWL/Banmore/2022/3198 dated 26.08.2022. Effluent (Condensate/spent lees/blow-down etc.) of 1024 m3 /day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1200 KLPD. Raw stillage (969 KLPD:quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPDwill be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid

discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 4.5 MW and will be met from proposed 5 MW cogeneration power plant. 40 TPH coal/biomass fired boiler will be installed. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 750 KVA and 500 KVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data. will be transmitted to CPCB/SPCB servers.
- CO2 (110 TPD) generated during the fermentation process will be collected by utilizing. CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (73 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (28-30 TPD) will be used for brick manufacturing in proposed brick manufacturing plant.
- Used oil (1 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.15 TPD) and STP Sludge (0.05 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16thJune, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 180 KLPD will be used for manufacturing fuel ethanol only.

Total land of 8.09 Ha is allocated to industry by MPIDC dated 28th July, 2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- Trees existing in project site shall be relocated and made part of greenbelt. No trees shall be cut during construction activities.
- Reserve forest is at 250 m. 20 m wide greenbelt shall be developed towards RF.
- Recheck cost of EMP as it seems less as per the facility proposed and emissions to be achieved. PP has increased the EMP cost to Rs. 30.6505 Cr including all facilities.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 180 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). NOC from the Concerned Local authority for MPIDC Water Supply shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate

(CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(iv). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from MPIDC Water Supply. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(v). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vi). Electrostatic precipitator with a stack height of 60 meters will be installed with 40 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vii). Boiler ash (28-30 TPD) will be used for brick manufacturing in proposed brick manufacturing plant. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(viii). CO_2 (110 TPD) generated during the fermentation process will be collected by utilizing. CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(ix). 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.

(x). 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.

(xi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xii). 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. Filter press shall be installed for drying of sludge.

(xiii). 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.

(xiv). The green belt of at least 5-10 m width shall be developed in nearly 2.84 Ha i.e., 35% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed.

Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant. Trees existing in project site shall be relocated and made part of greenbelt. No trees shall be cut during construction activities. Reserve forest is at 250 m so 20 m wide greenbelt shall be developed towards RF.

(xv). PP proposed to allocate Rs. 2.50 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road to project site shall be maintained.

(xvii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xviii). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous

monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xix). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xx). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 9

Greenfield Grain Based Ethanol Plant of 150 KL/Day Capacity and 4.5 MW co-generation power plant located at Plot No. 16, 17, 23 & 12, Village-Haripur, PO/PS -Kiakata, Tehsil Athmalik, District-Angul, Odishaby M/s ASVA Distillers LLP–Consideration of Environmental Clearance

[IA/OR/IND2/290888/2022 & IA-J-11011/356/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd (NABET certificate no. NABET/EIA/2124/RA0213 and valid till 15th February, 2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project 150 KLPD Grain Based Ethanol Plant along with 4.5 MW co-generation power plant located at Plot No.16, 17, 23 & 12, Village Haripur, PO/PS Kiakata, Tehsil Athmalik, District Angul, State Odisha by M/s ASVA Distillers LLP.

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

The details of products and capacity as under:

S. No.	Name of Unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	150 KLPD
2	Co-generation power plant	Power	4.5 MW
3	DWGS dryer	DDGS	71 TPD
4	Fermentation unit	Carbon di-oxide	105 TPD

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

Total land area required is 12.14 hectares. Greenbelt will be developed in total area of 4.0Ha i.e., 33% of total project area. The estimated project cost is Rs. 194.57Crores. Capital cost of EMP would be Rs.41.36 Crores and recurring cost for EMP would be Rs. 3.90 Crores per annum. Industry proposes to allocate Rs. 2.26 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 100 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve Forests/Protected Forests: East Barni Reserve Forest is at a distance of 3 km in NE direction, Nuagan Reserve Forest is at a distance of 8.6 km in ESE direction, Mangalpur Reserve Forest is at a distance of 3.2 km in N direction, West Barni Reserve Forest is at a distance of 6.6 km in NW direction, Guja Reserve Forest is at a distance of8.15 km in N direction and Bijmalia Protected Forest is at a distance of7.2 km in N direction. Water bodies: Mahanadi River is at a distance of 1 Km in SW direction, Rodh River

is at a distance of 8 km in SW direction, Manjour Reservoir/Dam is at distance of 6.7 km in East direction, Salunki Sub river is at a distance of 9.3 km in West Direction, Gadgadi River is at a distance of 9.5 km in North West Direction, Sarubali River is at a distance of 10.6 km in North West Direction, and Bauda Main Canal is at a distance of 12.8 km in SSW Direction. River Mahanadi is at a distance of 1 km for which NOC has been obtained from Angul Irrigation Division, Angul vide letter no. 3944 dated 15.09.2022 stating that the proposed plant is not coming under the flood prone area.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.002µg/m3, 0.001µg/m3, 0.09 µg/m3, 0.34µg/m3 and 2.1µg/m3 with respect to PM10, PM2.5, SO2, NO2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 885 KLD which will be met from Mahanadi River. Application has been submitted to water resource department vide letter no. 2021091341000294 dated 17.09.2021. Effluent (Condensate/spent lees/blow down etc.) of 729 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 880 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP capacity of 10 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 4.5 MW and will be met from proposed 4.5 MW cogeneration power plant. 35 TPH biomass/coal fired boiler will be installed. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 750 kVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler
- Online Continuous Emission Monitoring System will be installed with

the stack and data will be transmitted to CPCB/SPCB servers.

- CO2 (105 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (71 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (57.63 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (2 Kilolitres per annum) will be sold to authorized re-cycler.
- CPU sludge (100 TPD) and ETP Sludge (0.30 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 150 KLPD will be used for manufacturing fuel ethanol only.

Total land is 12.14 Hectare, and land has been allotted to M/s Asva Distillers LLP from Orissa Industrial Infrastructure Development Corporation vide letter no. HO/P&A-LA-E-8396/2022/21301 dated 20.08.2022.

During deliberations, EAC discussed following issues:

- Revised species of greenbelt shall be submitted. PP has submitted the revised list of native tree species to be developed as greenbelt.
- Situation of control room shall be clarified w.r.t threat zone in plant layout. PP has submitted the plant layout showing the location of control room.
- Fresh water consumption shall not exceed 4 KL/KL of ethanol production. PP has reduced the fresh water requirement to 885 m3/day.
- PP shall maintain the existing village road. PP has committed the same.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments 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 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 the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(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). NOC from the Concerned Local authority for surface water supply shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(iv). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 885 m3/day which will be met from Mahanadi River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(v). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated

effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vi). Electrostatic precipitator with a stack height of 60 meters will be installed with 35 TPH biomass/coal firedfor controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vii). Boiler ash (57.63 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(viii). CO2 (105 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(ix). 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.

(x). 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.

(xi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire

fighting system shall be as per the norms. PESO certificate shall be obtained.

(xii). 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. Filter press shall be installed for drying of sludge.

(xiii). 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.

(xiv). The green belt of at least 5-10 m width shall be developed in nearly 4.0 hectares i.e. 33% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant. No trees shall be cut as part of construction.

(xv). PP proposed to allocate Rs. 2.26 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project

area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road to project site shall be maintained.

(xvii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xviii). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xix). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xx). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

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ANNEXURE 1

GENERIC TERMS OF REFERENCE

1) Executive Summary

2) Introduction

i. Details of the EIA Consultant including NABET accreditation

ii. Information about the project proponent

3) Project Description

i. Cost of project and time of completion.

ii. Products with capacities for the proposed project.If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.

iii. List of raw materials required and their source along with mode of transportation.

iv. Other chemicals and materials required with quantities and storage capacities

v. Details of Emission, effluents, hazardous waste generation and their management. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)

vi. Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.

vii. Hazard identification and details of proposed safety systems.

viii. Expansion/modernization proposals:

a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.

b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units

operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)

iii. Co-ordinates (lat-long) of all four corners of the site. Google map-Earth downloaded of the project site.Layout maps indicating existing unit as well as proposed unit indicating storage area, plantarea, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layoutof Industrial Area indicating location of unit within the Industrial area/Estate.

iv. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

v. Land use break-up of total land of the project site (identified and acquired), government/ private – agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area).

vi. A list of major industries with name and type within study area (10km radius) shall be incorporated.

vii. Details of Drainage of the project up to 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects).

viii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

ix. R&R details in respect of land in line with state Government policy.

5) Forest and wildlife related issues (if applicable):

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon

v. Wildlife Conservation Plan duly authenticated bythe Chief Wildlife Warden of the State

Government for conservation of Schedule I fauna, if any exists in the study area

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6) Environmental Status

i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and

endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

i. Assessment of ground level concentration of pollutants from the stack emission based on site specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modeling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modeling - in case of discharge in water body

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum- rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be

around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

8) Occupational health

i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.

iii.Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.

iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

9)Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the

company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.

10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11)Enterprise Social Commitment (ESC)

i.Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details alongwith time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

11) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13) A tabular chart with index for point wise compliance of above TOR.

ANNEXURE 2

5(C)SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR PETRO-CHEMICAL COMPLEXES (INDUSTRIES BASED ON PROCESSING OF PETROLEUM FRACTIONS & NATURAL GAS AND/OR REFORMING TO AROMATICS)

1. Details on requirement of raw material (naphtha/gas feed stock),its source of supply and storage at the plant.
2. Complete process flow diagram for all products with material balance.
3. Brief description of equipments for various process (cracker, separation, polymerization etc)
4. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
5. Details on VOC emission control system from vents, stacks, fugitive emissions and flare management, etc.
6. Details on proposed LDAR protocol.
7. Ambient air quality should include hydrocarbon (methane and non methane), VOC and VCM (if applicable).
8. Action plan to meet the standard prescribed under EPA for petrochemical complex.
9. Risk Assessment & Disaster Management Plan

- Identification of hazards
- Consequence Analysis
- Measures for mitigation of risk.

ANNEXURE 3

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, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(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	Position
1.	Shri S. C. Mann	Chairman
2.	Dr. J.S. Sharma	Member
3.	Prof. Y. V. Rami Reddy	Member
4.	Dr. Onkar Nath Tiwari	Member
5.	Shri J. S. Kamyotra	Member
6.	Dr. Rahul RameshraoMungikar	Member
7.	Dr.Seshagiri Rao Ambati (27.09.2022 to 28.09.2022 – 2 days present)	Member
8.	Dr. Sanjay V Patil	Member
9.	Dr. Siddhartha Singh (IMD)	Member
10.	Shri A.N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
11.	Dr.MahendraPhulwaria	Scientist 'C'
12.	Mr. Kanaka Teja	Research Assistant
13.	Ms. Meetika Gupta	Research Associate

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