GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 13.03.2023

Meeting ID: IA/IND2/13456/09/03/2023

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 09th -10th March, 2023

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

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

(ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its Meeting (ID: IA/IND2/13448/23/02/2023) held on 23rd February, 2023 conducted through Video Conferencing (VC), confirmed the same. After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

(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: -

09th March, 2023 (Thursday)

Agenda No. 01

Establishment of 10,000 TCD Sugar Factory (scrapping of existing 800 TCD plant), 60 MW Co-gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD molasses based Distillery at Ganesh Tekadi, Nabhi (Bk.), Kopergaon, Satara, Maharashtra by M/s. Shivneri Sugars Ltd – Re-consideration of Environmental Clearance.

[IA/MH/IND2/78167/2018, IA-J-11011/277/2018-IA-II(I)]

The proposal was initially considered in 14 meeting of EAC held on 30th December 2019 to 01st January 2020 wherein project proponent vide email dated 31.12.2019 informed their inability to attend the EAC meeting and requested to defer the proposal. Based on the request of the project proponent, the Committee has decided to defer the proposal. The proposal was again considered by the EAC (Ind-2) in its 17th Meeting held during 25th - 27th February 2020 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

No.	ADS by MoEFCC	Reply by PP
1.	PH is not concluded / valid, the same shall be conducted again following the procedure mentioned in EIA Notification, 2006.	▪ The PH was re-conducted by MPCB on 03.11.2022 at Project Site; as per the provision of EIA Notification 2006. ▪ Details of PH - Newspaper advt. copy, PH attendance copy, dully signed Minutes of Meeting, PH Minutes forwarding letter to Ministry by MPCB are presented at the time of ADS Submission. ▪ Issues raised during PH, action plans and their budgetary provision is submitted in ADS Letter.
2	Surface water permission in true / attested English copy clearly mentioning validity and quantity of water withdrawal permitted.	▪ Industry has applied to Irrigation Dept (ID)., Maharashtra for grant of permission to lift Fresh Water to the tune of 1,81,000 M^3/Year from Krishna River vide Letter No. 02/2022-23 dated 27.04.2022. ▪ The same is scrutinized & processed by Executive Engineer, Krishna Irrigation Division Satara & recommended to Superintendent

No.	ADS by MoEFCC	Reply by PP
		Engineer, Satara Irrigation Board, Satara. ▪ The Superintendent Engineer has recommended & forwarded the application to Chief Engineer; Mantralaya, Mumbai. The application is under processing at Chief Engineer, Mumbai & it is expected that the final permission will be awarded within next 2 Months. ▪ Copy of application made to ID for withdrawal of fresh water and subsequent letters of recommendation for approval by EE & SE, Krishna Irrigation Division Satara are enclosed.
3	Air quality impact prediction: incremental concentrations need to be revised / rechecked.	▪ Initially, in the EIA Report submitted, incremental GLCs were derived for one 200 TPH bagasse-based boiler (Sugar Factory & Cogen Plant) & 75 TPH Spentwash Incineration Boiler (Molasses Distillery). ▪ Model runs were presented for '3-field' ESPs (2 Nos.), 90 M Stack (200 TPH Boiler) and 82 M Stack (75 TPH Boiler) as APC equipment. ▪ During earlier EAC meeting; Hon. Committee Members suggested to go for '5-field' ESPs instead of the 3-field planned and conduct a revised GLC run for the new scenario. ▪ Also, now as per CPCB latest guidelines to achieve 50 mg/NM^3 & 30 mg/NM^3 for stack emissions, management planned to go for '5-field' ESPs instead of the 3-Field and revised GLC presented below. ▪ Before going for re-conducting of Public Hearing as directed by Hon. Committee during previous EAC meeting, it was observed that the earlier baseline data of 'October - November - December 2018' was going to get expired. As such, the data was validated by collecting fresh one season monitoring data which was presented during Public Hearing**.**
4	Schedule 1 species are present in study area, kindly prepare a conservation plan and submit to DFO and upload both the documents in Form 2.	▪ WCP report submitted on 23.08.2021 in hard copy to 'PCCF; Nagpur'. ▪ Subsequently, during follow-up; as desired, WCP report forwarded tho' e-mail on 03.01.2023. ▪ Presently same is under scrutiny & evaluation. Industry will follow all directions that will be issued by PCCF & lower offices w.r.t. implementation of provisions in the WCP report.
5	Land and land conversion documents to be	▪ Copy of land ownership documents like 7/12 & NA submitted with ADS**.**

No.	ADS by MoEFCC	Reply by PP
	uploaded.	
6	Site visit report from IRO; MoEFCC for status of existing project, activities started etc	▪ As per direction by Hon. Committee regarding site visit report from the Regional Office of Ministry, Project Site Inspection was carried out on 15.10.2020 & report received on 07.12.2020. ▪ Following observations made during Site Inspection : ▪ It was observed that no equipment pertaining to 800 TCD is existing on the project site. ▪ At present only foundation of equipment, columns & old administration bldg. remained on site. ▪ No activities pertaining to current proposal were initiated at the project site.
7	Water balance and effluent management scheme shall be revised reducing the fresh water requirement (viz. zero fresh water requirement utilizing the water from sugar crushing) and with ZLD scheme (treatment system, incineration, etc).	▪ As per the direction by Hon. Committee Members regarding ZLD of industry complex. We hereby commit the same.

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/SA 0177 and validity 10.10.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for Environmental Clearance to the Establishment of 10,000 TCD Sugar Factory (scrapping of existing 800 TCD plant), 60 MW Co-gen Plant (50 MW from Co-gen plant & 10 MW from distillery) and 200 KLPD molasses based Distillery located Ganesh Tekadi, Jaipur (Nhavi Bk.), Tal.: Koregaon, Dist.: Satara, Maharashtra State by M/s. Shivneri Sugars Ltd. (SSL).

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amended vide Notification No S.O. 3067 (E); dated 13.06.2019, the proposed project is listed as activity 5(g)(i)-Distillery at Centre Level & 5 (j)& 1(d) – Sugar Factory & Co-generation Plant respectively; Category 'B' at State Level. As the Sugar Factory, Co-generation Plant & Distillery projects are located in same premises as an integrated project complex, the entire proposal of establishment of Sugar Factory, Co-generation Plant & Distillery is being

submitted at 'Ministry of Environment, Forests and Climate Change (MoEFCC); New Delhi' for grant of EC.

The details of products and capacity as under:

Industrial unit	Product & By-product	Quantity (MT/ M)
Sugar Factory (10,000 TCD)	Sugar (12%)*	36,000
	By-product	
	Molasses (4%)*	12,000
	Bagasse (30%)*	90,000
	Press Mud (4%)*	12,000
Co-Gen (60 MW)	Electricity (MW)	60
Distillery (200 KLPD)	RS **/** ENA / Ethanol	6,000
	By-product	
	CO_2 Gas (MT/M)	4500
	Fusel Oil	12

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/277/2018-IA-II(I) dated 12th October 2018. PP was informed that there is no litigation is pending against the project. As per SO 751 (E) dated 17.02.2020 the validity of ToR for the proposal is four years and considering SO 221 (E) dated 18.01.2021 validity of ToR issued is till 11.10.2023.

Public Hearing for the proposed project had been conducted by the Maharashtra Pollution Control Board on 03.11.2022 at Project Site chaired by SDM Satara. The main issues raised during the public hearing and their action plan:

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
1	*Shri Bharat Ghorpade; Khojewadi , Koregaon, Dist.: Satara.* After listening to all information in Presentation, it seems that there should be such a factory in other places also because there is no action that will have an adverse effect on environment. Everyone should note that said project is in the interest of the farmers.	▪ **Response:** Appreciation of proposed project. The suggestion is noted.	--

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
2	*Shri Shankar Kense; Pimpri Koregaon, Dist.: Satara.* Now according to information given about environmental plans regarding proposed project in presentation, there will be no pollution problems here, hence this factory should be started asap. The commissioning of factory has been unnecessarily delayed. Sugarcane in this area is drying up & local people will get employment here. However, the factory should be started as soon as possible by giving immediate approval to factory.	▪ **Response:** Appreciation of proposed project. The suggestion is noted.	--
3	Mrs. Ranjana Vasant Bhosale; Pawarwadi, Tal: Koregaon, Dist.: Satara. I am APJ Abdul Kalam Teacher Award winning teacher. This factory should be started immediately because running of factory is the need of the people here	Response: Appreciation of proposed project. The suggestion is noted.	--
4	Shri Rahul Shivaji Nikam; Jaipur (Bk.), Tal.: Koregaon, Dist.: Satara. We are farmers staying next to the factory. Our 40-50 acre of agriculture land is adjacent to the factory compound. Although the Env. consultant here says there will be	Response: Env. Consultant said that the fear and concern expressed by you is valid as you live next door. Env. study is carried in radius of 10 km of project as mentioned in the Presentation. After granting consent, MPCB inspects factory from time to time. In every 6 months after	A Budget of Rs. 236 Cr. is prepared for EMP and will be implemented before commissioning of the Project, i.e. prior to procurement

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
	no pollution, our wells are downstream of the factory. Hence Company Management should be careful. We request District Administration that we should not suffer any pollution from the factory in future. The road is being constructed on the side where our agriculture farm is. Due to movement of vehicles all the dust will spread. It will fly because of vehicles. So it should be taken care of.	obtaining EC, industry has to submit an up to date report to MoEFCC & MPCB. It will also be available on the internet. Similarly, it is mandatory to place a digital board on the door of the factory with the pollution standards showing the level of pollutants in the factory from time to time. OCMS will be connected to the CPCB server in New Delhi and at the MPCB board server. So, if there is a slight change in the pollution levels, there comes a notice from MPCB & CPCB. The entire project will be a ZLD Complex. So, the level of pollutants also has to be maintained within limits. Environment consultant further said that Environment Management cell will be established in the factory & similarly Environment Redressal cell will be made formed. Two days in a week will be fixed at which time the citizens have to submit written suggestions or objections in the box provided and a meeting will be held once every month at which time the suggestions raised will be considered & consulted. The entire project will be a ZLD Complex. Environmental consultant said that we are going to build paved roads in the premises and approach to Industry.	of CTO from MPCB. For approach road construction & maintenance Rs. 2 Cr. will be spent.

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
5	Shri Vishnudas Madhavrao Kanasa; Pimpri Koregaon, Tal.: Koregaon, Dist.: Satara. This Factory has full support of all farmers in our village of Pimpri, Jaipur (Nhavi Bk) & all farmers in the area. But downstream of Project there is drinking water supply scheme of Pimpri village. Also there are many agricultural areas and small hamlet / bastis. However care should be taken not to have any adverse effect of pollution on water resources & agriculture in the future. Similarly the farmers of the villages of Pimpri here have given land to the project by taking a negligible price. Hence while providing job opportunities people from the family of affected villages should be given priority in employment	Response: Env. consultant said that your previous experience might not be good. But present Project Management firmly follows the promises as well as performance. 640 people can get direct employment in the project as shown in PPT & 90% will be local people given job opportunities in all cadres i.e. skilled, semiskilled & unskilled. Water from well of your family will not be polluted. MPCB representative do collect the water samples from wells from time to time. Also Env. Consultant do collect the water samples from different wells & do keep strict vigil on the activities of the project. Hence the well water will not be polluted. In this project the treated industrial effluent and domestic effluent will be recycled and reuse in the process. The proposed project is ZLD – Zero liquid Discharge. **Action plan:** Sp.wash of 1600 CMD will be concentrated in MEE @ 320 M^3/D and incinerate in incineration boiler. Spent lees (274 CMD), condensate (1280 CMD) & Cooling & Boiler blow downs, DM backwash & lab & washing (172 CMD) will be treated in CPU. Treated effluent (1736 CMD) will be reused in process for achieving ZLD. Sugar Factory & Co-gen Plant effluent (692 CMD) & Domestic effluent (28 CMD) shall be treated in ETP & STP respectively and reused for GB there by achieving ZLD. Two separate ESPs as APCS will be provided to 200 TPH bagasse boiler (90 M stack) & 75 TPH incineration boiler (82 M stack).	A Budget of Rs. 236 Cr. is prepared for EMP and will be implemented before commissioning of the Project, i.e. prior to procurement of CTO from MPCB.

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
		Under proposed project, about 640 new workers will be appointed. Preference will be given to local peoples.	
6	Shri Dayanand Arjun Nikam; Jaipur, Tal.: Koregaon, Dist.: Satara 1. How the water supply of your factory and distillery is planned? 2. There is molasses based distillery Ethanol will be produced of 200 KLPD. How many litres of fresh water will be required per day in the project. 3. Do you have any data prepared regarding usage of water i.e. five lakh litres per day fresh water will be lifted? Then how much fresh water will be used per day in the project, how much spent wash will be generated from it, how much water will be removed from spentwash and how much treated water will be reused? 4. If the project is ZLD then whether written commitment will be given to Gram Panchayat office? Whether this condition will be included in the Environment	Response: 1. Env. consultant informed that the project needs water. Prior permission of Irrigation Dept. will be obtained for lifting water. Sugarcane contains 70% water & same will also be used. Treated effluent in project will be recycled & reused in process. CPU will make recycle wastewater available & 75% water will be recycled. Hence requirement of fresh water is very less. 2. Env. consultant informed that in distillery unit, for production of 200 KL /Day, the requirement of fresh water is 550 M^3/Day, which means around 5 Lakh Liters / Day fresh water will require. He informed that for the whole activities of the project the requirement of water is 25 Lakh Litres / Day. But only 5 lakh litres per day fresh water will be lifted. Requirement of remaining water will be fulfilled through water in sugarcane crop, treated effluent which will be recycled & reused in process. 3. At this moment MD of the project informed that this project is ZLD. Not a drop of water will be sent outside the factory. 4. Env. Consultant answered that ZLD condition is specified in the EC itself. Its copy will be made available to the Gram Panchayat Office. Similarly, the	---

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
	Clearance? 5. Project Proponent is going to bring water from outside for production activities So whether you are going to dig wells or bores and will use the water in the project area. 6. Local 2-3 Gram Panchayats should be given written assurance that the project will not deplete water by digging new wells or taking bores from existing wells in the project. Because the villages of Pawarwadi, Pimpri, Velu, Jaipur in this area have suffered drought for the last 2-3 years till 2017. Afterwards all these four villages took lot of efforts in 2017-18 by using their own diesel the machines provided by the Government pumped the water. So the factory should not use the water here and the loss of the government and the people of the village should not suffer from drought again	said ZLD condition is added to the online monitoring system. Its every moment report will be connected to CPCB & MPCB server. 5. Env. Consultant informed that for lifting of Gr. water prior permission of CGWA; an agency of GoI is mandatory. We will not use ground water. The Rainwater Harvesting will be implemented in the project for which storage tank will be provided. The water of 25,060 M^3 will be stored by roof top RWH & 42,976 M^3 will be by surface harvesting; total 68,073 M^3 rain water will be stored in storage tank. 6. Environmental consultant said that the suggestions have been noted. The factory will not use / pump any ground water. **Action plan:** After implementation of new project total water requirement will be 7,565 CMD, out of these 6,803 CMD (90%) will be recycled water from sugar cane condensate, Distillery CPU treated effluent & ETP & STP treated effluent, Harvested Rain Water and 752 CMD (10%) will be Fresh water. Fresh water requirement will be taken from Krishna river. Please refer reply under point No. 5 for the effluent generation & disposals.	
7	Shri Shankar Eknath Thorat Residence Velu Tal Koregaon Dist.	Response: Appreciation of proposed project.	

No	Person's Name & Issue	Response & Action Plan	Budget & Timeline
	Satara Environmental Consultant of the project has given the presentation. Our only request is that what is shown in the presentation should be implemented. Gram Panchayat Velu supports this project and supporting letter will be submitted by the Gram Panchayat Velu.	The suggestion is noted.	
8	Shri Vishnu Shitole Residence Ambewadi Tal Koregaon Dist. Satara. This project should be started at the earliest	Response: Appreciation in respect of proposed project. The suggestion is noted.	
9	Shri Laxman Krishna Ghorpade Residence Khojewadi Tal Koregaon Dist. Satara. The last five years have been a headache for the farmers. However this factory should be started as soon as possible the problem of farmers should be removed. It is a request that the people here should get employment and everyone should cooperate for that	Response: Appreciation in respect of proposed project. The suggestion is noted.	
10	Shri Vilas Vithal Bhosale Residence Velu, Tal Koregaon Dist. Satara. We support the project	Response: Appreciation in respect of proposed project. The suggestion is noted.	

Total land area required is 20.64 hectares. Greenbelt will be developed in total area of 6.88 hectares i.e., 33% of total project area. The estimated project cost is Rs. 620 Crores. Capital cost of EMP would be Rs. 236 Crores and recurring cost for EMP would be Rs. 23.5 Crores per annum. Industry proposes to allocate Rs. 8.00 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 640 persons as direct & indirect.

There is no presence of national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors. Reserve forests is at a distance of 1.45 Km from project site. Water bodies: Krishna River is at a distance of 9 Km in North to South direction.

Ambient air quality monitoring was carried out again at 8 locations during December – 2021- January – February 2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (53.2-64.9 µg/m^3), $PM_{2.5}$ (16.1-29.9 µg/m3), SO_2 (13.7-24.7 µg/m^3) and NO_X (16.1-29.8 µg/m^3) and CO (0.01-0.90 mg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.164 µg/m^3, 0.039 µg/m^3, 6.59 µg/m^3 and 1.75 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 613 M^3/day which will be met from Krishna River (Application has been submitted to Irrigation Department, Satara, Maharashtra dated 27.04.2022). Effluent generated from Sugar & Co-gen unit will be 692 M^3/day quantity will be treated through Proposed Effluent Treatment Plant of capacity 1000 KLPD. Raw spentwash generated after establishment of distillery will be @ 1600 CMD will be concentrated in MEE. Concentrated spentwash @320 CMD will be incinerate in incineration boiler. Other effluent generated after distillery establishment will be @ 1726 CMD in the form of lees, MEE condensate, cooling & boiler blowdown, lab & wash effluent. Same will be treated in CPU. Treated effluent will be fully recycled in process; ZLD will be achieved. STP of capacity 30 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 23 MW and will be met from proposed 60 MW cogeneration power plant. 200 TPH bagasse fired boiler & 75 TPH Spentwash & Coal fired boiler will be installed. APCE as 2 separate ESPs with a stack of height of 90 M & 82 M will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 & 30 mg/Nm3 for the proposed 200

TPH & 75 TPH boiler respectively. 1000 KVA (2) 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:

- Process emissions in the form of CO_2 shall be generated.
- After establishment of distillery, CO_2 @ 140 MT/D will be bottled and supplied to manufacturers of beverages /secondary uses.

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

a. Solid Waste:
- Sugar & Co-gen- Solid waste generated in the form of ETP sludge 20.7 MT/M; used as manure. Boiler ash 1800 MT/M; Used as manure.
- Distillery- Yeast sludge 1260 MT/M & CPU sludge 49.8 MT/M; used as manure, Boiler Ash 2760 MT/M; Brick making / Potash Recovery.

b. Hazardous Waste:

- Spent Oil - 0.5 MT/Yr,; to Forwarded to authorized re-processor.

Total land of 20.64 Hectares is under possession of the company and land use conversion has been completed vide letter no. Jamin/Bi-She /SR/02/2021 dated 02.02.2021. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

No	Description	Cost Component (Rs. Lakhs)	
		Capital	Annual O & M
1	APC : ESP for Co-gen boiler – 1 Nos. (Stack Ht. 90 M) & Distillery incineration boiler along with ESP - 1 Nos. (Stack height 82 M), OCMS	Rs.7,000	Rs.700
2	WPC – Sp.wash Storage Tanks, MEE, CPUs, ETP, STP, OCMS	Rs.16,220	Rs.1600
3	Noise Pollution Control	Rs.50	Rs.10
4	Environmental Monitoring & Management	Rs.50	Rs.25
5	Occupational Health & Safety	Rs.100	Rs.20
6	Green Belt Development & Rain Water Harvesting	Rs.250	Rs.15
7	Fugitive Emissions Control: Approach Road Asphalting / Concreting (Commitment of PH)	Rs.200	Rs.5

	Total	**Rs.23,870**	**Rs. 2,375**

Details of CER with proposed activities and budgetary allocation:

No	CER Activity Details	Amt. (Lakhs)
1	**Solar Photovoltaic Electricity Generation Systems (Total 1 MW)** at Grampanchyat, School & PHC Buildings. 1000 KW X Rs.0.50 Lakh / KW = Rs. 500 Lakhs	Rs.500
2	**Educational Infrastructure : Distance education infrastructure** (Computers, Camera, Speakers, Wi-Fi connections and wiring; 5 Nos; Rs. 10 Lakhs), **Safe Drinking Water supply infrastructure** with water Filtration, RO & Disinfection (5 Nos.; Rs.15 Lakhs), **Sanitary Facilities** with Toilet Blocks (8 Seater), water tanks with all piping & fixtures, lighting & STP (3 Nos.; Rs. 50 Lakhs).	Rs. 75
3	**Providing Solar Street Lights in nearby Villages** with Gadget – 1 MS Pole, 18-20 W LED Lamp, Battery, Solar Panel, Wiring etc.= 350 Nos. X Rs.50,000/Nos. = Rs. 1,75,00,000/-	Rs. 175
4	Training to Local Youth for Skill & Knowledge Development for making them eligible as employees for the proposed project.	Rs. 50
	Total Amount (1.3% of CI Rs.620 Cr.)	**Rs. 800 lakh**

During deliberations, EAC discussed following issues:

- PP informed that NOC vide letter No SSV/Admin/1/546/2020 dated 13.02.2020 was obtained from Executive Engineer, Satara Irrigation Department, Satara for canal road crossing, NOC vide letter No SID/Admin-1/385/2023 dated 06.02.2023 was obtained from Deputy Executive Engineer, Satara Irrigation Department, Satara for natural stream & NOC vide letter RS/A-2/7762/2019 dated 19.09.2019 was obtained from Executive Engineer, Public Works Department, Satara for the junction road or service road for the proposed construction.
- PP shall meet 15% (3.5 MW) of the total power requirement from solar power by generating power inside plant premises.
- Industry shall install air cooled condensers for the proposed 200 TPH boiler for reducing net fresh water requirement.
- EAC suggested to conduct periodic training sessions for the local youth who can be taken as employees. Accordingly, the PP agreed to allocate Rs. 50 Lakhs and the revised CER Plan informing that employment generation due to the proposed project will be 640 and out of this about 90% workers will be taken from residents of nearby villages.
- PP informed that the variation in results of parameters (TDS, Turbidity, Calcium, Magnesium, Hardness, Fluorides, Iron, Chlorides & Sulphates) observed during the two monitoring seasons (2018 & 2022) is quite obvious due to changes in stream flow rates, dilution in nalla discharge,

ingress of polluting discharges from the habitations & seasonal variations in the agricultural runoffs.

- PP informed that the reason for getting BOD detected in all the groundwater samples were collected from open dug wells which receive discharges through percolation & infiltration from nearby habitations, cattle sheds in the farms & agricultural runoffs. Moreover, at some wells; cloth washing, cattle washing and similar domestic activities were noticed. The discharges from said activities got mixed in the well water directly / indirectly which is the reason for organic pollution reflected through BOD.
- The Committee advised to increase Green Belt along plot boundary on South East owing to presence of human habitation in that direction. Accordingly, PP submitted revised layout incorporating 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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental Clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iii). PP shall ensure compliance of the conditions stipulated in NOC obtained vide letter No SSV/Admin/1/546/2020 dated 13.02.2020 from Executive Engineer, Satara Irrigation Department, Satara for canal road crossing, NOC obtained vide letter No SID/Admin-1/385/2023 dated 06.02.2023 from Deputy Executive Engineer, Satara Irrigation Department, Satara for natural stream & NOC obtained vide letter RS/A-2/7762/2019 dated 19.09.2019 from Executive Engineer, Public Works Department, Satara for the junction road or service road for the proposed construction. PP shall construct RCC wall and 30 m thick greenbelt along natural drain and canal.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the distillery 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. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 613 m^3/day, which will be sourced 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.

(vi). The spent wash shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three stage RO. The treated permeate will be reused in cooling tower water makeup and for molasses dilution. The RO rejects will be taken back to MEE. Treated effluent will be recycled/reused for make up water of cooling towers/process etc. No wastewater 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 all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall ensure to implement Zero Liquid Discharge (ZLD) in existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

(vii). 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.

(viii). ESP (5 field) with a stack of height of 90 M will be installed with the 200 TPH bagasse fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/$Nm^{3.}$ ESP (5 field) with a stack of height of 82 M will be installed with the 75 TPH Spentwash & 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/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 (2760 MT/M) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% (3.5 MW) of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(x). CO_2 generated (140 MT/D) during the fermentation process will be bottled and supplied to manufacturers of beverages /secondary uses.

(xi). PP shall allocate at least Rs. 1.0 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xii). Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.

(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. Fire fighting 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.

(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 has already been developed in 6.88 hectares i.e., 33.0 % of total project area shall be maintained 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.

(xviii). PP proposed to allocate Rs. 8.00 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. 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, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(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/ 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 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. 02

Proposed Grain Based Distillery Capacity of 200 KLPD Fuel Ethanol along with 4.5 MW Co-Gen Power Plant located at Sy. Nos. 230, 231 & 232 of Gandepalli Village, Kanchikacherla Mandal, NTR District, Andhra Pradesh by M/s. Sentini Bio-Spirit Private Limited - Consideration of Environmental Clearance.

[IA/AP/IND2/418437/2023, IA-J-11011/126/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmplEnviron Private Limited(NABET CERTIFICATE No. NABET/EIA/2023/IA0061 valid till 23-10-2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 200KLPD Grain based Ethanol plant and 4.5MW of cogeneration power plant (Fuel to be used as Coal/Biomass), to be installed in Sy. Nos. 230, 231 & 232 of Gandepalli Village, Kanchikacherla Mandal, NTR District, Andhra Pradesh by M/s. Sentini Bio-Spirit 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 g(a), 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 (Grains as Raw material) plant	Ethanol	200 KLPD
2	Co-generation power	Power	4.5 MW

	plant		
BY-PRODUCTS			
1	DWGS dryer	DDGS	160 TPD
2	Fermentation unit	Carbon di-oxide	113 TPD

Environmental clearance for 150 KLPD Fuel Ethanol along with 4.5 MW Co-Gen Power Plant in Sy. Nos. 230, 231 & 232 of Gandepalli Village, Kanchikacherla Mandal, NTR District, Andhra Pradesh was obtained from Hon`ble Ministry vide EC Identification Number: EC22A060AP171583 and file No: IA- J-11011/126/2022-IA-II(I) Dated: 22nd July, 2022.

Consent For Establishment for 150 KLPD Fuel Ethanol along with 4.5 MW Co-Gen Power Plant was obtained from A.P. Pollution Control Board vide Order No. 512/APPCB/CFE/RO-VJAHO/2022 22/11/2022.

Now, PP intends to surrender the EC granted for the 150 KLPD Plant vide EC Identification No. - EC22A060AP171583 dated 22/07/2022 and requested for grant of an EC for 200 KLPD Fuel Ethanol along with 4.5 MW Co-Gen Power due to following reasons:

1. Rising costs of equipment, machinery and inputs
2. Need for optimising production and utilisation of steam and capacities of equipment's
3. Increasing cost of grain and coal
4. Make the project economically and financially feasible with marginal increase in costs.
5. Ideal to have a 200 KLPD plant without increase in any of the utility capacities.

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

Total land area required is 9.12 Ha. (22.56 acres). Greenbelt will be developed in total area of 3.03 Ha. (7.5 Acres) i.e.,33.5% of total project area. The estimated project cost is Rs.155.0 Crores. Capital cost of EMP would be Rs. 23.85 Crores and recurring cost for EMP would be Rs. 2.10 Crores per annum. Industry proposes to allocate Rs.2.00 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 150 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. No forest with 10 Km radius from the project site. Water bodies Muniyeru river – 2.0 Kms. (W Direction), Wyra river – 1.5 Kms. (N Direction) and Nagarjuna sagar left bank canal – 1.3 Kms. (E Direction) are flowing.

AAQ modeling study for point source emissions indicates that the maximum Incremental GLCs after the proposed project would be 0.41 µg/m^3, 0.7 µg/m^3, 12.6 µg/m^3 & 2.0 µg/m^3 with respect to $PM_{2.5}$, PM_{10}, SO_2 and NO_x.The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 800 m^3/day which will be met from Muniyeru River. Water Application has been submitted to Water Resource Department Govt. of Andhra Pradeshdated 02-12-2022. Effluent (Condensate/spent lees/blow down etc.) of 1310 m^3/day quantity will be treated through Condensate Polishing Unit of capacity 1400 KLPD. Raw stillage (1200 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 4.5 MW and will be met from the proposed 1 x 4.5 MW co-generation power plant. 1 x 45 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator with a stack height of 63 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 1 x 1010 KVA DG set will be used as standby during power failure and stack height (4.5 m from roof top) will be provided as per the CPCB norms to the proposed DG set.

Details of Process emissions generation and its management:

- APCE ESP with a stack height of 63 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 generated (113 TPD) 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) (160TPD) will be sold as cattle feed

/ fish feed / prawn feed.

- Boiler ash (140 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.3 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.15 TPD) and STP Sludge (1.0 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 1 x 200 KLPD will be used for manufacturing fuel ethanol only.

The total land of 9.12 Ha. (22.56 acres) available for the proposed project. Out of 22.56 acres, 20.84 acres of land was taken on lease from Sentini Bioproducts Private Limited to Sentini Bio Spirit Private Limited through Registered Lease deed bearing No. 2064/2022 and 3063/2022 for a period of 20 years. 20.84 acres land which was already converted to Non-Agricultural Land. The balance 1.72 acres of land was registered in Sentini Bio Spirit Private Limited and application is submitted to Govt. of Andhra Pradesh for conversion of Land use from Agriculture to non-agriculture. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

S.NO	DESCRIPTION	CAPITAL COST (RS.INCRORES)	RECURRING COST (RS. IN CRORES/ANNUM)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	3.50	0.30
2.	CEMS	0.25	0.03
3.	Ash handling & management	1.20	0.30
4.	Effluent Treatment Plant	15.00	1.00
5.	Online Effluent Monitoring System	0.50	0.20
6.	Occupational Health Management & Safety	2.00	0.05
7.	Greenbelt development	0.50	0.10
8	Rainwater Harvesting Systems	0.30	0.02
9	Environment Monitoring	0.10	0.05
10	Brick plant	0.5	0.05
TOTAL		**23.85**	**2.10**

Details of CER with proposed activities and budgetary allocation:

S.NO.	PROPOSED ACTIVITY	PROPOSED BUDGET (Rs. In Crores)
1	Establishment of Solar Power Plant nearby village	2.00
2	Portable water supply to nearby village	
3	Development in schools and colleges in nearby villages (Construction of class rooms in schools, providing library, computers, furniture, sports equipment, etc others as per need base)	

During deliberations, EAC discussed following issues:

- PP informed that the total land available for the proposed project of 200 KLPD is 9.12 Ha. (22.56 acres). The earlier proposed land is 20.84 acres while obtaining Environmental clearance for 150 KLPD. An additional 1.72 acres of land has been purchased by Sentini Biospirit Pvt. Ltd. The detailed breakup given below:

S.No.	Extent	On lease basis	Purchased land	Land conversion done	Land conversion not done
1	17.25 acres	17.25 acres land on lease for 20 years	--	17.25 acres	--
2	3.59 acres	3.59 acres land on lease for 20 years	--	3.59 acres	--
3	1.72 acres	--	1.72 acres of Land Purchased in the company name	Not done	Application is submitted to Govt. of Andhra Pradesh for conversion of Land use from Agriculture to non-agriculture of 1.72 acres and same is under process
Total	**22.56 acres**	**20.84 acres**	**1.72 acres**	**20.84 acres**	**1.72 acres**

- PP shall establish a Fly ash brick manufacturing plant within the plant

premises for effective ash management.

- PP shall provide a budget of CER Rs 2.0 Crores which shall be spent before commissioning of the plant. This budget will be spent on establishment of Solar power, Portable water supply, Plantation in Villages, and Rain water harvesting in the adjoining villages of Gandepally, Keesara, Nandaluru, Bodavada and Perakalapadu village and development of school in Gandepally, Keesara, Nandaluru, Bodavada and Perakalapadu village such as construction of class rooms, providing facilities like library, furniture, computers, sports equipment, etc.
- Industry shall develop plantation in 7.5 acres (3.03 Ha) in proposed project with following species as recommended by the forest department:

S.NO.	COMMON NAME	SCIENTIFIC NAME
1	Sapota tree	Achras sapota
2	Mango tree	Mangifera indica
3	Neem tree	Azadirachta indica
4	Badami tree	Prunus dulcis
5	Manila tamarind tree	Pithecellobium dulce
6	Jambolan tree	Syzygiumcumini
7	Guava tree	Psidium guajava
8	Gulmohar tree	Delonix regia
9	Kadamba tree	Neolamarckiacadamba
10	Conocarpos	Conocarpus erectus
11	Royal palm	Roystonea regia
12	Ganuga	Pongamia pinnata

- PP revised the budget for environmental monitoring in the proposed project of Rs. 10.0 Lakhs for annum as per suggestion of Committee.
- Industry shall ensure that the particulate matter in the exhaust flue gases to less than 30 mg/Nm^3
- PP informed that sludge drying bed shall be replaced by filter press in ETP.

It was noted that incremental GLCs for the proposed project would be 12.6 µg/m^3 with respect to SO_2 which is abnormally high. The committee suggested to reduce the incremental GLCs for SO_2 by taking various pollution control measures. However, PP has not provided the desired information to the EAC.

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. 03

Proposal for On shore Oil & Gas development drilling and production in Tengakhat-Kathaloni-Dikom area, Dibrugarh Aassam by M/s. Oil India Limited- Re-consideration of Environment Clearance.

[IA/AS/IND2/212735/2007, J-11011/1257/2007- IA II (I)]

The proposal was earlier considered by the EAC (Ind-2) in its 45th meeting/meeting held during 30.11.2021 wherein EAC recommended the proposal for EC. Further ADS raised by MOEF&CC as mentioned below. Information desired by the EAC and responses submitted by the project proponent is as under:

S No.	ADS by MoEF&CC	Reply by PP
1	ATR on non/partial compliance reported by IRO to be submitted.	ATR on non/partial compliance reported by IRO and time bound action plan is submitted by PP.
2	The response is not inconsonance with ADS raised dated 21.01.2022. Pl. submit comments of IRO on ATR after due evaluation of all the non-complied & partially complied points	OIL submitted the latest IRO report dated 25.01.2022 , wherein after due evaluation of ATR submitted by OIL the partial compliance point has been reduced from 19 nos to 9 nos. Further, for remaining 09 Nos of partially complied observations OIL has also submitted the time bound. action plan to IRO Guwahati vide letter dated O1.O9-2O22 attached PP informed that all wells were drilled outside the forest area. At the time of drilling of 31 wells, no flaring system was required. OIL carried out ambient air quality monitoring as per the EC's conditions. However, PP will install continuous montoring station near flaring. Since there is no TSDF in the State, drill cutting is stored in

		lined pit.

The Committee felt that the matter may be refered to DGH (Directorate General of Hydrocarbons) and Ministry of Petroleum and Natural Gas regarding poor implementation of project as well as compliance to environmental conditions. PP has submitted ADS reply almost after 2 years but did not submit overall satisfactory reply. Therefore, the Committee suggested that a dedicated environmental cell of Oil India Ltd. shall examine the situation and come out with some SOP/inhouse guidelines for implementation of environmental norms while executing the project in future.

The Committee also suggested that PP shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.

The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd. (NABET certificateno. NABET/EIA/1922/RA 0177_Rev 01 and validity 30.06.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the projectOnshore Oil & Gas development drilling and production in Tengakhat-Kathaloni-Dikom area- Environmental Clearance located at Villages Ronapuria, Dikom Sessa, Niz Chabua, Mohabir Bari, BamuHiloidhari, Tengakhat, Tamuli Khat, Charaihabi Gaon No.3, Dhomon No. 1, Ghogulani, Dighali Bill No.1, Dhunda Nar etc. District Dibrugarh, Assam by M/s. Oil India 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).

The details of products and capacity as under:

S No	Unit	Product/by product	Existing quantity	Proposed Quantity	Total Quantity
1	Wells	Wells	31	167	198
2	Production Installations	Production Installations	0	7	7

Ministry has issued Environmental Clearance to the existing capacity of 31wells vide J-11011/1257/2007-IA-II(I); dated 1st November 2011. Certified Compliance report of existing EC hasbeen obtained from Integrated Regional

Office, MoEFCC, Guwahati vide RO-NE/E/IA/AS/MI/57/1106-1108 dated 9thSeptember 2021. Action Taken Report has been submitted to IRO, MOEFCC, by Oil India dated 27.10.2021 for partial compliances or CertifiedAction Taken Report has been obtained by IRO, MOEFCC, No. RO-NE/E/IA/AS/MI/57/1866-1888 dated 25th January 2022.

The ToR has been issued by Ministry vide F. no. J-11011/1257/2007-IA.II (I); dated 14th January 2019. PP was informed that there is no litigation is Pending against the proposal.

Public Hearing for the proposed project had been conducted by the Pollution Control Board of Assam on 5th September 2019 at Tengakhat Public Hall, Dibrugarh district, The Public Hearing was chaired by Additional Deputy Commissioners of Dibrugarh district. The main issues raised during the public hearing and their action plan:

Dibrugarh District

Issue in Brief	**Action Plan in brief**	**Budget allocated and timeline**
Installation of soundless DG sets	DG sets complaint to CPCB norms will be procured at site Regular monitoring of the DG sets will be conducted.	-
Movement of OIL hired vehicles and concerns on safety	Adequate training on traffic and road safety operations is being imparted to the drivers of project vehicles. Road safety awareness programs organized in coordination with concerned authorities to sensitize target groups *viz*. School children, commuters on traffic safety rules and signage. Signage will be provided at transport route. Traffic personnel will be deployed near sensitive areas	Signage in the transport route & its maintenance per well (@Rs. 100,000 + Rs. 10,000 Deployment of traffic personnel in sensitive area – 5 persons (@ Rs. 6000 per month x 6 months) for each well Safety related training for OIL drivers (@ 1 lakh per year for 7 years)
Development of the area	• Fund for flood protection • Mobile health services	• 70 lakhs (@ 10 lakhs per year 7 years) or flood protection to district administration • Mobile health

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	• Providing scholarships to economically backward students for pursuing higher education • Infrastructure improvement work across schools in 50 schools • Sponsoring for local sports and cultural events • Plantation at abandoned drill sites • Repair of local roads • Provision for solar street light in the area	services-Rs. 2 lakhs per year for 7 years= Total 14 lakhs • Rs. 0.1 lakh per student x 20 students per year x 7 years= Total Rs. 14 lakhs • Rs. 1 lakh per school x 50 schools= Total Rs. 50 lakhs • Rs. 1 lakh per year for 7 years= Total Rs. 7 lakhs • Rs. 2 lakh per year for 7 years= Total Rs. 14 lakhs • Rs. 50 lakhs • Rs. 5 lakhs per year for 7 years= Total 35 lakhs
Environmental monitoring to be conducted in the area	OIL will engage NABL/PCBA approved laboratory in consultation with PCBA for testing of water samples	Surface Water Quality Monitoring (@ Rs. 8000 x 4 samples from natural drainages once during site construction, once during drilling, once after decommissioning)= Total 0.96 lakh per well Ground Water Quality Monitoring (@ Rs. 8000 x 3 sites, once during site construction, once

Issue in Brief	Action Plan in brief	Budget allocated and timeline
		during drilling, once after decommissioning)= Total 0.72 lakh per well ETP Treated water quality (@ Rs. 8000 x 2 samples of ETP treated water per month for 3 months))= Total 0.48 lakh per well Sample from Oily water separator(Rs. 5000 per samples x 1 sample after drilling)= Total 0.05 lakhs per well
Exposed pipeline of OIL often cause accidents	OIL have dedicated team for management of safety issues of pipeline operations Regular patrols and inspections of pipelines conducted. Pressure testing and inspection of equipment and pipelines conducted regularly.	-
Grant fund for the repair of the Tengakhat Public Hall	Funds for repair of Tengakhat Public Hall	INR 6.0 lakhs
Concerned authorities to keep the pollution levels to the minimum.	Environmental Management Plan will include • Air Quality Management Plan • Noise Management Plan • Soil Quality Management Plan • Surface Water Quality Management Plan • Ground Water Quality Management Plan • Waste Management Plan • Greenbelt Plan • Wildlife Conservation Plan • Road Safety & Traffic Management Plan	Detail of cost breakup of implementation of Environmental Conservation measures for each well would be INR 14.185 lakhs and for each production installation would be INR 6.30 lakhs per annum.

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	• Occupation Health & Safety Management Plan • Blowout Management Plan • Emergency Response Plan Regular monitoring of environmental parameters will be conducted.	

Total area after expansion will be 643 Ha (existing plant area 93 Hectares andadditional land required 550 Hectares for proposed capacity). Land for the drill sites will be procured prior to drilling.Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 122500 m^2.The estimated project cost is Rs5655 Crores. Capital cost of EMP would be Rs. 2.11 Crores and recurring cost forEMP would be Rs. 3.94 Crores per annum (which includes CER budget also). Industry proposes to allocate Rs. 2.60Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 180 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ElephantReserves, Wildlife Corridors etc. within 10 km distance of proposed wells and production installations. Namdang RF and Telpani RF located within the Block, however, no wells or production installation are located in forest land. Podumoni segment of Bherjan-Borjan Podumoni Wildlife Sanctuary is located at a distance of 10.1 km of nearest proposed well. The notified ESZ of Dibru-Saikhowa National Park (DSNP) is approximately 9.7 km from the nearest well.Conservation plan for Schedule I species has been submitted to PCCF & Chief Wildlife Warden Assamdated 22.07.2020 and a budget of 0.195 Crores has been earmarked for the same. Buri Dehing River is present within the Block, however, the nearest well is located at a distance of 0.04 km from Burhi Dehing River. Brahmaputra River is locatedwithin the Block, nearest well is located at a distance of 1.5 km from Brahmaputra River.

Ambient air quality monitoring was carried out at 8 locations during 05.10.2017 to 31.12.2017 and the baseline data indicates the ranges of average concentrations as: PM10 (59.21 - 81.38 µg/m3), PM2.5 (29.88-43.50 µg/m3), SO2 (5.44-6.14 µg/m3) and NO2 (17.72-21.73 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 16.71 µg/m3, 0.64 µg/m3, 0.009 µg/m3 and 0.12 µg/m3 with respect to NOx, SO2, PM10 and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 50CMD for each well which will be met from groundwater. NOC has been obtained from CGWA vide letter no. CGWA/NOC/MIN/ORIG/2021/11459 dated 26.03.2021. Existingeffluent generation is 21.8 CMD (8 CMD domestic wastewater and 13.8 CMD drilling and wash wastewater). Drilling and wash wastewater will be treated through effluent treatment plant. Domesticwaste water will be treated in septic tank and soak pits. The project will be based on Zero Liquid discharge system.

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

Details of Process emissions generation and its management:

- Operation of DG sets,
- Movement of vehicles and machineries during construction and drilling,
- Flaring of natural gas will result in the generation of air pollutants,
- Stacks will be used with DG sets and flare system as per CPCB norms.

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

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

Production Installations

At the production installation the well fluid would be processed where oil, associated gas and water would be separated. Planned oil storage and handling capacity at each production installation based on anticipated production from proposed drilling wells in vicinity of respective production installations. The formation water generated in production installation would be treated in an ETP and would be reused in the system or injected in water injection/water disposal wells. Flare system shall be installed as per the recommended practices of OISD and CPCB guidelines.

Coordinates of Proposed wells and production installations

S No	Name of proposed well	Latitude	Longitude
1	CF	27° 27' 0.954" N	95° 11' 58.702" E
2	HSG	27° 25' 53.428" N	95° 6' 33.675" E
3	HSL	27° 26' 35.940" N	95° 6' 31.066" E
4	HSD	27° 26' 35.927" N	95° 6' 30.496" E
5	HSM	27° 25' 53.361" N	95° 6' 34.259" E
6	HSJ	27° 23' 4.566" N	95° 5' 57.270" E
7	HIS	27° 22' 48.105" N	95° 4' 13.548" E
8	HSQ	27° 26' 22.456" N	95° 5' 59.389" E
9	HSN	27° 26' 22.815" N	95° 5' 59.778" E
10	HSE	27° 26' 35.896" N	95° 6' 29.969" E
11	HSF	27° 26' 36.185" N	95° 6' 29.967" E
12	HTX	27° 25' 41.341" N	95° 9' 42.736" E
13	HTI	27° 24' 31.355" N	95° 4' 22.624" E
14	HTJ	27° 25' 3.112" N	95° 5' 8.705" E
15	HOR	27° 25' 49.317" N	95° 7' 5.792" E
16	HTY	27° 25' 41.620" N	95° 9' 42.751" E
17	HTH	27° 22' 29.651" N	95° 3' 35.008" E
18	CS	27° 15' 59.529" N	95° 1' 42.425" E
19	CN	27° 27' 23.324" N	95° 11' 56.839" E
20	CP	27° 28' 29.228" N	95° 12' 54.498" E
21	CR	27° 27' 26.273" N	95° 12' 52.531" E
22	HUQ	27° 26' 5.301" N	95° 10' 10.233" E
23	HWL	27° 23' 37.130" N	95° 5' 20.310" E
24	HWH	27° 24' 52.565" N	95° 6' 12.689" E
25	HWK	27° 24' 29.642" N	95° 7' 35.675" E
26	HWJ	27° 25' 4.608" N	95° 7' 4.427" E
27	HUP	27° 26' 2.682" N	95° 9' 28.399" E
28	HSW	27° 25' 41.527" N	95° 9' 43.316" E
29	HSH	27° 26' 36.811" N	95° 7' 18.275" E
30	HXK	27° 26' 35.911" N	95° 7' 17.156" E
31	HSW	27° 25' 41.527" N	95° 9' 43.316" E
32	CW	27° 28' 58.278" N	95° 7' 29.021" E
33	CX	27° 28' 57.383" N	95° 7' 29.062" E
34	HTM	27° 26' 0.033" N	95° 8' 23.637" E
35	HXL	27° 26' 37.081" N	95° 7' 18.717" E
36	HXJ	27° 26' 14.602" N	95° 7' 22.413" E
37	HWG	27° 24' 52.978" N	95° 6' 11.042" E
38	CU	27° 28' 57.913" N	95° 7' 29.197" E
39	CAC	27° 29' 0.858" N	95° 14' 39.593" E
40	HZC	27° 23' 3.288" N	95° 11' 52.100" E
41	DIC-H	27° 15' 49.618" N	95° 7' 15.767" E
42	HWF	27° 25' 16.620" N	95° 6' 44.819" E

S No	Name of proposed well	Latitude	Longitude
43	HWI	27° 24' 35.437" N	95° 5' 46.413" E
44	HWM	27° 23' 38.269" N	95° 4' 31.059" E
45	HXM	27° 26' 18.227" N	95° 7' 19.060" E
46	CAB	27° 29' 11.559" N	95° 7' 2.573" E
47	801	27° 25' 59.612" N	95° 9' 54.925" E
48	802	27° 21' 17.069" N	95° 7' 6.615" E
49	803	27° 27' 52.409" N	95° 6' 29.069" E
50	804	27° 25' 12.910" N	95° 5' 57.242" E
51	805	27° 24' 1.021" N	95° 6' 44.713" E
52	806	27° 22' 16.424" N	95° 11' 5.393" E
53	807	27° 25' 40.744" N	95° 13' 59.389" E
54	808	27° 16' 41.600" N	95° 5' 46.159" E
55	809	27° 27' 1.353" N	95° 7' 44.319" E
56	810	27° 25' 30.208" N	95° 8' 28.454" E
57	811	27° 24' 42.839" N	95° 10' 6.841" E
58	812	27° 22' 12.775" N	95° 5' 30.919" E
59	813	27° 29' 12.839" N	95° 12' 8.083" E
60	814	27° 30' 13.935" N	95° 9' 6.381" E
61	815	27° 31' 18.254" N	95° 3' 14.661" E
62	816	27° 22' 27.998" N	95° 9' 39.208" E
63	925	27° 19' 26.469" N	95° 2' 2.928" E
64	926	27° 17' 24.297" N	95° 3' 12.498" E
65	927	27° 19' 40.097" N	95° 3' 29.945" E
66	928	27° 20' 6.170" N	95° 1' 42.623" E
67	929	27° 20' 29.887" N	95° 1' 35.355" E
68	930	27° 20' 27.337" N	95° 1' 36.430" E
69	931	27° 19' 19.590" N	95° 7' 6.551" E
70	932	27° 16' 49.138" N	95° 4' 12.904" E
71	933	27° 29' 47.349" N	95° 9' 18.344" E
72	934	27° 19' 34.174" N	95° 7' 24.237" E
73	935	27° 28' 40.245" N	95° 8' 40.307" E
74	936	27° 19' 51.593" N	95° 7' 34.718" E
75	937	27° 17' 23.689" N	95° 7' 20.097" E
76	938	27° 17' 16.941" N	95° 6' 42.276" E
77	939	27° 16' 42.420" N	95° 6' 57.740" E
78	940	27° 29' 53.402" N	95° 7' 53.062" E
79	941	27° 29' 44.656" N	95° 8' 42.932" E
80	942	27° 16' 18.289" N	95° 6' 26.449" E
81	943	27° 19' 54.376" N	95° 8' 2.101" E
82	944	27° 28' 30.862" N	95° 13' 27.474" E
83	945	27° 20' 44.046" N	95° 9' 19.737" E
84	946	27° 28' 17.216" N	95° 12' 34.755" E
85	947	27° 25' 13.249" N	95° 8' 35.001" E
86	948	27° 25' 6.302" N	95° 9' 12.443" E
87	949	27° 28' 34.943" N	95° 8' 17.047" E
88	950	27° 25' 43.999" N	95° 9' 5.721" E

S No	Name of proposed well	Latitude	Longitude
89	951	27° 16' 54.674" N	95° 7' 25.162" E
90	952	27° 28' 53.632" N	95° 6' 58.721" E
91	953	27° 25' 59.762" N	95° 6' 56.377" E
92	954	27° 25' 37.413" N	95° 6' 53.318" E
93	955	27° 25' 26.495" N	95° 6' 44.450" E
94	956	27° 24' 55.166" N	95° 5' 35.933" E
95	957	27° 27' 48.388" N	95° 13' 27.540" E
96	958	27° 28' 5.838" N	95° 13' 24.637" E
97	959	27° 25' 1.910" N	95° 5' 57.235" E
98	960	27° 28' 58.465" N	95° 6' 21.857" E
99	961	27° 28' 51.866" N	95° 12' 56.996" E
100	962	27° 28' 43.612" N	95° 7' 55.353" E
101	963	27° 27' 53.690" N	95° 12' 20.896" E
102	964	27° 25' 25.341" N	95° 6' 23.427" E
103	965	27° 28' 42.873" N	95° 7' 31.856" E
104	966	27° 25' 25.690" N	95° 7' 7.466" E
105	967	27° 28' 25.229" N	95° 11' 58.842" E
106	968	27° 29' 20.449" N	95° 8' 5.661" E
107	969	27° 29' 37.620" N	95° 6' 51.602" E
108	970	27° 29' 41.021" N	95° 9' 45.545" E
109	971	27° 24' 53.565" N	95° 9' 29.423" E
110	972	27° 29' 8.142" N	95° 9' 27.338" E
111	973	27° 28' 40.769" N	95° 9' 16.310" E
112	974	27° 25' 51.325" N	95° 9' 10.239" E
113	975	27° 26' 2.389" N	95° 9' 14.923" E
114	4	27° 25' 41.488" N	95° 9' 19.726" E
115	103	27° 16' 49.187" N	95° 6' 36.398" E
116	106	27° 22' 12.666" N	95° 8' 44.755" E
117	107	27° 17' 54.792" N	95° 11' 19.564" E
118	108	27° 19' 24.615" N	95° 5' 28.801" E
119	112	27° 22' 22.531" N	95° 7' 2.561" E
120	113	27° 16' 9.705" N	95° 4' 21.864" E
121	116	27° 17' 32.828" N	95° 3' 46.276" E
122	206	27° 19' 36.471" N	95° 7' 33.434" E
123	207	27° 18' 15.980" N	95° 11' 21.417" E
124	301	27° 19' 17.754" N	95° 11' 33.421" E
125	306	27° 17' 25.388" N	95° 4' 9.378" E
126	107	27° 31' 19.093" N	95° 7' 25.079" E
127	102	27° 22' 41.897" N	94° 59' 4.453" E
128	103	27° 27' 30.875" N	95° 0' 19.310" E
129	104	27° 22' 30.841" N	95° 1' 4.180" E
130	105	27° 20' 6.892" N	95° 2' 6.109" E
131	106	27° 18' 32.881" N	95° 2' 10.027" E
132	106D	27° 19' 30.404" N	95° 3' 1.561" E
133	107	27° 23' 45.939" N	95° 3' 8.582" E
134	110	27° 19' 43.285" N	95° 7' 6.145" E

S No	Name of proposed well	Latitude	Longitude
135	403	27° 17' 19.283" N	95° 4' 0.515" E
136	403D	27° 20' 8.119" N	95° 5' 34.735" E
137	CAA	27° 28' 11.753" N	95° 5' 59.676" E
138	CI	27° 27' 16.847" N	95° 8' 23.236" E
139	DYB	27° 16' 49.696" N	95° 6' 21.849" E
140	DYD	27° 17' 19.283" N	95° 4' 0.515" E
141	HXQ	27° 19' 58.690" N	95° 1' 57.250" E
142	HXR	27° 19' 43.285" N	95° 7' 6.145" E
143	HXS	27° 22' 30.841" N	95° 1' 4.180" E
144	TBC	27° 30' 37.990" N	95° 7' 15.200" E
145	HZF	27° 24' 53.995" N	95° 14' 5.205" E
146	HSK	27° 25' 41.273" N	95° 9' 43.485" E
147	HSB	27° 21' 39.592" N	95° 3' 25.170" E
148	HTN	27° 23' 3.276" N	95° 11' 51.254" E
149	HQF	27° 26' 0.209" N	95° 8' 22.563" E
150	HSC	27° 22' 38.644" N	95° 2' 22.323" E
151	HWA	27° 21' 35.969" N	95° 13' 54.642" E
152	HVY	27° 21' 22.861" N	95° 12' 52.979" E
153	HVV	27° 21' 7.839" N	95° 8' 22.522" E
154	HVX	27° 21' 0.540" N	95° 3' 59.933" E
155	HVT	27° 19' 42.147" N	95° 11' 56.528" E
156	NLB	27° 20' 46.640" N	95° 14' 28.060" E
157	HVS	27° 20' 53.000" N	95° 11' 48.845" E
158	HVU	27° 21' 30.474" N	95° 9' 38.007" E
159	CH	27° 28' 59.347" N	95° 7' 29.111" E
160	HVZ	27° 18' 3.440" N	95° 12' 34.260" E
161	CG	27° 29' 59.081" N	95° 4' 4.504" E
162	CJ	27° 27' 1.879" N	95° 10' 2.862" E
163	HXN	27° 26' 21.638" N	95° 12' 25.304" E
164	HZE	27° 26' 21.415" N	95° 12' 24.895" E
165	DEW	27° 15' 52.480" N	95° 3' 8.060" E
166	DIBC	27° 19' 10.375" N	94° 59' 49.566" E
167	DIBB	27° 19' 7.493" N	94° 58' 17.865" E

S No	Name of proposed production installation	Latitude	Longitude
1	HSX	27° 22' 30.605" N	95° 1' 12.008" E
2	HXQ	27° 19' 57.966" N	95° 1' 59.457" E
3	CI	27° 27' 16.667" N	95° 8' 25.563" E
4	HXR	27° 19' 42.359" N	95° 7' 6.578" E
5	DYD	27° 17' 19.185" N	95° 4' 11.805" E
6	Sologuri	27° 19' 8.096" N	94° 59' 53.404" E
7	Nadua	27° 29' 0.663" N	95° 8' 54.784" E

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Capital Cost in crores	Recurring Cost in Crores /Annum
1.	Wildlife Conservation Plan	-	0.0279
2.	Greenbelt Plan	-	0.0175
3.	EMP Cost Well drilling	-	3.3851
4.	EMP cost production installation	-	0.4412
5.	CER Cost	2.11	0.0700
	Grant Total	**2.11**	**3.9416**

Details of CER with proposed activities and budgetary allocation: Dibrugarh District

S No.	Proposed Activity	Proposed Budget
1.	Fund for flood protection	70 lakhs (@ 10 lakhs per year 7 years) or flood protection to district administration
2.	Mobile health services	Mobile health services-Rs. 2 lakhs per year for 7 years= Total 14 lakhs
3.	Providing scholarships to economically backward students for pursuing higher education	Rs. 0.1 lakh per student x 20 students per year x 7 years= Total Rs. 14 lakhs
4.	Infrastructure improvement work across schools in 50 schools	Rs. 1 lakh per school x 50 schools= Total Rs. 50 lakhs
5.	Sponsoring for local sports and cultural events	Rs. 1 lakh per year for 7 years= Total Rs. 7 lakhs
6.	Plantation at abandoned drill sites	Rs. 2 lakh per year for 7 years= Total Rs. 14 lakhs
7.	Repair of local roads	Rs. 50 lakhs
8.	Provision for solar street light in the area	Rs. 5 lakhs per year for 7 years= Total 35 lakhs

During deliberations, EAC discussed following issues:

S NO.	Issues discussed by EAC Industry-2 on 09.03.2023	Response
1.	As baseline data provided is for 2017. Baseline monitoring data conducted for last 1 year at Dibrugarh district to be provided	Air quality monitoring conducted by OIL in Dibrugarh district, including monthly AAQ monitoring carried out at 8 no of Installations (namely GCS Kathaloni, OCS Jaipur, Power Station Duliajan, OCS Bhogpara, OCS Kathaloni, GCS Ushapur, GCS Tengakhat, OCS Tengakhat) located in Dibrugarh District during the year 2022 were analyzed and compared with the 2017 data collected as part of the EIA study. The comparative data is presented below. The maximum values collected during 2017 were higher for PM compared to 2022. However, only 4 samples out of 192 samples collected during 2017 showed values beyond 100 µg/m^3. As mentioned earlier, the higher values were recorded at 2 stations *viz*. Daman Tiniali (in proximity to Tingkong Road) and Tingrai NC/Bosajan (in proximity to Dibrugarh-Duliajan Road). Both the roads at certain stretches are in bad condition and dust generated from plying of vehicles could had resulted in higher PM values at the aforementioned stations. Maximum and minimum NO_x values in NDBN area were recorded as 28.6 µg/m^3 and 10.2 µg/m^3 respectively. Existing sources of NOx emissions in the NDBN area are represented below: i. Vehicular emission ii. Emission from household cooking (within semi-urban/rural habitats) iii. There are other industrial /commercial activities in the area, though limited in number, but contributing to air emissions in the area viz. OIL exploration and production facilities, small & medium scale industries, tea gardens etc.

S NO.	Issues discussed by EAC Industry-2 on 09.03.2023	Response
2.	Photographs of restored area in the Block to be provided	Photographs submitted
3.	Design of HDPE lined pits to be provided	Design details of HDPE lined drill pits shared as Appendix 3 . Drilling cuttings are disposed in HDPE lined pits. Specifications of the pit and liner used in the pits is given below: ○ **Size of Pit :** 30 Mtr X 35 Mtr ○ **Depth of Pit :** 1.5 Mtr to 1.8 Mtr ○ **Size of HDPE lining :**45 Mtr X 50 Mtr
4.	Modelling results indicate that NOx values are very high. Modelling values to be rechecked	The 24 hourly values, when averaged across the 90-day prediction period, shows an incremental value of 6.73 µg/m3 which is significantly lesser than the max value of 16.71 µg/m3 and is therefore anticipated to result in much lesser adverse impact on local air quality in the vicinity of the drill site, over the drilling period - as a result, the impact on air quality has been rated as 'moderate'
5.	Undertaking to be provided as no activity for the projects will be undertaken within forest areas or within 10 km of ESZ of national parks or wildlife sanctuaries	PP informed that no drilling will be carried out in forest land and protected area.
6.	Details of the production facilities to be provided	The details are given below
7.	Nearest waterbody from the wells	• Nearest well is located 0.04 km from Burhi Dehing River • Nearest production installation is more than 0.5 km from waterbody (Undertaking in this aspect is shared as Appendix 6)
8.	CER plans to be implemented within 2 years from the date of commencement of the project	P has submitted the Undertaking
9.	Modified PH action plans with details of management plans to be shared	Details are goven below
10.	New CTO to be shared	PP has shared latest CTO dated 13 Feb 2023 of the existing production set up.

Comparison of AAQ monitoring value recorded during 2017 and 2022

Criteria Pollutants	Unit	Baseline Data		Monthly AAQ monitoring carried out at 8 no of Installations (namely GCS Kathaloni, OCS Jaipur, Power Station Duliajan, OCS Bhogpara, OCS Kathaloni, GCS Ushapur, GCS Tengakhat, OCS Tengakhat) located in Dibrugarh District during the year 2022	
		2017 data		2022 data	
		Maximum	Minimum	Maximum	Minimum
PM_{10}	$\mu g/m^3$	133	34	95	48.1
$PM_{2.5}$	$\mu g/m^3$	69	16	52.8	23.6
SO_2	$\mu g/m^3$	9.6	4	11.3	6
NO_2	$\mu g/m^3$	28.6	10.2	27.8	14.2
CO	mg/m^3	1.06	0.12	1.04	0.36

Public Hearing Action Plan and budgetary allocation at Dibrugarh District

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
1.	Ranjit Tamuli, Tengakhat Tailokhetro Surakhsa Samity	Adverstisement and bannering of this meeting has not been upto satisfaction. He wished more public could attend this hearing so that locals could express their views to the authorities	Mr. Dipen Deka, ADC, president of the hearing requested Mr. Tamuli to give his opinions and suggestions or complaints if any to PCBA, RO Dibrugarh in writing	-	-	-

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
2.	Arjun Chetry, Tengakhat AASU	Installation of soundless DG sets Kathaloni and Tengakhat wells as its noise disturbs students during exam.	DG sets as per CPCB norms will be used at sites.	DG sets complaint to CPCB norms will be procured at site Regular monitoring of the DG sets will be conducted.	CGM-Drilling; CGM- Safety& Environment	Ambient noise monitoring and workplace monitoring budget provided in section 10.3 of the EIA report
3.		Hired vehicles drivers of OIL have became unruly and requested them to give strict instructions to the drivers	OIL will implement Road Safety and Traffic Management Plan for management of the issue	Adequate training on traffic and road safety operations will be imparted to the drivers of project vehicles. Road safety awareness programs will be organized in coordination with concerned authorities to sensitize target groups *viz*. school children, commuters on traffic safety rules and signage. Road Safety and Traffic Management Plan included in section 10.1.10. Signage will be provided at transport route. Traffic personnel will be deployed near sensitive areas Signage in the transport route & its maintenance Deployment of traffic personnel in sensitive area	CGM- Safety& Environment	Training programs for drivers; traffic Signage: devlopment; salary of traffic personnel salary- budget provided in section 10.3 of the EIA report
4.		Thanked OIL for the developmental projects they have undertaken for the well being of the locals. There could be other grounds too which requires OIL support like for the flood affected areas. Welcomed OIL for the new projects which they have taken in these new sites	OIL will implement social development programs which will aid in social development of the area	Funds will be provided to the District Administration for Flood protection. Other social development activities will be undertaken in the Block	GM-CSR	**Fund for flood protection** 70 lakhs (@ 10 lakhs per year 7 years) or flood protection to district administration **Health Initiatives** Mobile health services= Rs. 2 lakhs per year for 7 years= Total 14 lakhs **Educational Initiatives** Providing scholarships to economically backward students for pursuing higher education Rs. 0.1 lakh per student x 20 students per year x 7 years= Total Rs. 14 lakhs Infrastructure improvement work across schools in 50

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
						schools Rs. 1 lakh per school x 50 schools= Total Rs. 50 lakhs **Social Initiatives** Sponsoring for local sports and cultural events Rs. 1 lakh per year for 7 years= Total Rs. 7 lakhs **Plantation Initiatives** Plantation at abandoned drill sites Rs. 2 lakh per year for 7 years= Total Rs. 14 lakhs **Other initiatives** Repair of local roads=Rs. 50 lakhs for 7 years Provision for solar street light in the area Rs. 5 lakhs per year for 7 years= Total 35 lakhs
5.	Anut Bora, Tengakhat Tribal Development	PCBA to collect water samples from few locations in Kathaloni for test as he doubts that pumps or wells in these areas were affected due to OIL OCSs.	Regular testing of water samples as per the Environnemental monitoring programme of OIL	OIL will engage NABL/PCBA approved laboratory in consultation with PCBA for testing of water samples	CGM- Safety& Environment	Surface Water Quality Monitoring; Ground Water Quality Monitoring Treated water quality- budget provided in section 10.3 of the EIA report
6.		Exposed pipeline of OIL often cause accidents	OIL have dedicated team for management of safety issues of pipeline operations	Regular patrols and inspections of pipelines conducted. Pressure testing and inspection of equipment and pipelines conducted regularly.	CGM- Safety& Environment	Only management time required. Details presented in 7.1.5 Disaster Management Plan and Annexure 7.1
7.		He expressed happiness about the fact that many development and pre-caution measures undertaken by OIL and PCBA. He thanked for the Public Hearing which gave platform for expression to the locals.	-	-	-	-
8.	Pranab Phukan, local resident	Grant fund for the repair of the Tengakhat Public Hall	Funds for repair of Tengakhat Public Hall	Funds will be provided for repair of Tengakhat Public Hall	GM-CSR; GM-Civil	6.0
9.	Dipu Deka, ADC, Dibrugarh	Concerned authorities to keep the pollution levels to the minimum.	OIL has EMP for managing the environmental pollution related	Environmental Management Plan will include	CGM- Safety& Environment	Budget for EMP for each drill site and for each production

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
			issues at the drill sites and production facilities.	***Air Quality Management Plan*** Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells. Flare stacks of adequate height would be provided. DG/GG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases Periodic monitoring of DG/GG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards. ***Noise Management Plan*** Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc. All DG/GG sets would be provided with acoustic enclosures. Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment. All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC). ***Soil Quality Management Plan***		installation for 1 year provided in Section 10.3

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
				Drip trays to be used during vehicular/equipment maintenance and during re-fuelling operations. Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately. Dedicated paved storage area will be identified for the chemicals, fuel, lubricants and oils within the drill sites and production facilities. 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings. ***Surface Water Quality Management Plan*** During site preparation and construction, surface water run-off will be channelized through appropriately designed drainage system. Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses. Domestic wastewater generated from drill sites and production facilities will be treated through septic tank and soak pit system. Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites and production facilities. ***Ground Water Quality Management Plan*** Water based mud would be used as a drilling fluid for the		

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
				proposed project. Eco-friendly synthetic based mud if required for deeper sections, will be used after providing intimation to the Pollution Control Board; The drill cutting along with spent mud will be stored in HDPE lined pit. ***Waste Management Plan*** Use of low toxicity chemicals for the preparation of drilling fluid. Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with CPCB Standards. The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016. The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. The sewage generated will be treated through septic tank and soak pit system. Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001. The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon. ***Wildlife Conservation Plan***		

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
				Contributing Forest Departments habitat improvement program Capacity building of forest department staffs Awareness Generation Meetings at villages Engaging a NGO for Identification of Hoolock Gibbon Roosting sites. ***Road Safety & Traffic Management Plan*** The condition of roads and bridges identified for movement of vehicles and drilling rig will be assessed and if required strengthened by OIL to ensure their safe movement. Precautions will be taken by the contractor to avoid damage to the public access routes including highways during vehicular movement. Traffic flows will be scheduled wherever practicable during period of increased commuter movement. ***Occupation Health & Safety Management Plan*** All machines to be used in the construction will conform to the relevant Indian Standards (IS) codes, will be kept in good working order, will be regularly inspected and properly maintained as per IS provisions and to the satisfaction of the site Engineer. Hazardous and risky areas, installations, materials, safety measures, emergency exits, etc. shall be appropriately marked.		

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
				Blowout Management Plan In case of blowout, OIL will engage its own resource along with hired services from organizations of National repute to control blowout related environmental impacts. Actions planned by OIL to mitigate the environmental impacts in case of blowout include: i) Environmental Assessment, ii) Spillage cleaning and bio-remediation, iii) Picking up of spilled oil manually and by turbo pump, iv) Assessment of Environmental Contamination, v) Assessment of impact/ damage to the biodiversity, vi) Assessment of Health Hazard for local public, vii) Vibration assessment. ***Emergency Response Plan*** Drilling rig and related equipment to be used for drilling will be conformed to international standards specified for such equipment. Blow-out preventers and related well control equipment shall be installed, operated, maintained and tested generally in accordance with internationally recognized standards. Appropriate gas and leak detection system will be made available at each of the drill sites and production facility. Adequate fire-fighting equipment shall be		

S. No	Raised by Public	Comments/Suggestion by Public	Response	Action Items	Responsibility	Tentative Budget (INR)
				provided at each site. Regular monitoring of environmental parameters will be conducted.		

Details of production installation:

Seven new production installations are planned within the Block. Each production installation will have approximate 7ha. Area The production installation will include the following facilities.

Considering the size of the oil field and the number of oil/gas wells in the area, it is necessary to have certain facilities at various central locations to collect and handle oil /gas coming from the wells before pumping to the Central Tank Farm(CTF)/Central Processing Facility (CPF)for storage and processing of hydrocarbons. Production installations are built to serve the above purpose. A production installational so facilitates to monitor the flow of oil/gas from wells and the conditions of wells and the flow-lines.

A production installation has a number of oil/gas wells connected to it depending upon the oil / gas handling capacity of the production installation and techno-economics of laying flow-lines from the well to the production installation. Producing fluids from the neighboring wells are collected in a production installation through well flow lines. Fluid from the wells enters the LP manifold and passes through the steam jacket to the Three Phase Separator(TPS). Gas, oil and free water (ifany) are separated here. Then the wet crude is taken to the Emulsion Treater (ET). In the Emulsion Treater, the wet crude is heated up to 600°C and a chemical called 'Oil Soluble Demulsifier is added to it continuously. Inthis process oil and water are separated from each other. Oil from the Emulsion Treater is then taken to the Stabilizer and from the stabilizer it goes. To the crude oil storage tanks. The stored crude oil is dispatched to CTF from time to time with the help of reciprocating pump. Water is collected in formation water storage tanks. There after it is disposed in water disposal wells with the help of centrifugal pumps.

Gas separated in TPS and ET goes to the 30psi Low Pressure Master Separator (LPMS) and then to Booster suction at GCS. The excess gas is flared in the flare pit. Gas separated in the Stabilizer goes to the 10 psi Low Pressure Master Separator (LPMS) from where it is flared in the flare pit.

Storage Facilities

Ingeneralfollowingstoragefacilitiesareprovidedattheproductioninstallation

- Two production tanks (795 KL capacity) for storage of crude oil. Height of the tanksare approximately10 m with safe storage height of 5.7m. Crude is generally stored at1atmospheric pressure and at 60°C.
- Onetesttank(160KLcapacity)forstorageofhydrocarbonsatthetimeoftesting
- Two formation water tanks (160 KL and 40KL) for storage of formation water (produced water)
- One skimming tank (40KL capacity).

Effluent treatment system (ETP)-An ETP of capacity 50KLD will be installed for each production installation.

Water injection wells

Water injection wells will be planned within a production facility to inject excess ETP treated water from the production installation. It is planned to develop 3 new water injection wells at 3 production installations (out of 7 production installation). Water injection wells will be drilled once the installations are in operation.

Formation/Produced water

Formation/produced water will be treated in the production installation to meet the parameters as per MoEF&CC standards for Effluent disposal and the treated formation/ produced water will be disposed off in disposal wells located in the vicinity of the production installation.

Formation/produced water will be treated through:

a) Mobile ETP(s).
b) Central ETP of capacity 5000 KLD at Tengakhat.
c) ETP of capacity 7200 KLD at Madhuban.

Flaring System

Flaring management: In normal conditions, flaring won't be carried out at drilling locations. Hydrocarbon produced/extracted will be sent to nearby production installations/ Group Gathering stations with adequate facility for flaring of the Low Pressure gas like enclosed ground flare/ Non-luminous flare systems as per the prevailing norms of OMR-2017 & OISD guidelines.

DG sets at the drilling locations and Production Installations will be provided with adequate acoustic enclosure and stack height based on the capacity of the DG sets as per the CPCB guidelines and regular monitoring of the stack gas emissions will be carried out.

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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental Clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.

(iii). PP shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.

(iv). Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.

(v). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.

(vi). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.

(vii). The project proponent also to ensure trapping/storing of the CO_2 generated, if any, during the process and handling.

(viii). Approach road shall be made pucca to minimize generation of suspended dust.

(ix). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.

(x). Total fresh water requirement shall be 39 KLPD which will be met from ground water. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.

(xi). Formation/produced water shall be treated in the production installation through Mobile ETP(s)/ Central ETP of capacity 5000 KLD at Tengakhat/ ETP of capacity 7200 KLD at Madhuban to meet the parameters as per MoEF&CC standards for Effluent disposal and the treated formation/ produced water will be disposed off in disposal wells located in the vicinity of the production installation.

(xii). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.

(xiii). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

(xiv). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

(xv). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.

(xvi). The project proponent shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.

(xvii). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.

(xviii). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.

(xix). PP shall allocate Rs. 5.00 Crores towards CER and it shall be spent on installation of solar power in the nearby villages.

(xx). No lead acid batteries shall be utilized in the project/site.

(xxi). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xxii). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.

(xxiii). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All

the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 4

Onshore Oil & Gas development drilling of 73 Nos drilling wells in Tinsukia and Dibrugarh districts under Hugrijan, Naharkatiya & Naharkatiya Extn, Sapkaint and few parts of Dumduma (BlockA & B),Borhat, Moran Ext PMLs Assam by M/s OIL INDIA LIMITED- Re-consideration of Environment Clearance.

[IA/AS/IND2/248260/2016, J-11011/388/2016-IA II (I)]

Earlier proposal was considered in 50 meeting of EAC held on 10th-11th February, 2022.

The proposal was earlier considered by the EAC (Ind-2) in its 50th meeting/meeting held during 11.02.2022 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S No.	ADS by MoEF&CC	Reply by PP
1	A fresh base line data for a period of 15 days shall be submitted. Justification from SPCB shall be furnished for conducting PH with presiding officer below the rank of ADM.	Fresh baseline monitoring was carried out for a period of 15 days during February 2022- March 2022 and data submitted Fresh Public Hearing conducted for Dibrugarh district on 26.08.2022
2	Public Hearing was conducted by an officer below ADM rank. In this regard, it may be informed that PH presided by Circle Officer shall not be considered for appraisal of the project as per the provisions of EIA Notification 2006 and its amendments. Therefore, It is requested to kindly conduct Public Hearing again as per provisions of EIA Notification, 2006 and subsequent amendments. 3. Also, PP shall submit updated Draft EIA/EMP Report to SPCB for conducting Public Hearing followed by submission of final EIA/EMP report along with time-bound action plan for further consideration by the Ministry.4. This issues with the approval of the competent authority.	Public Hearing for the Dibrugarh district freshly conducted on 26.08.2022. The PH meeting chaired by Additional Deputy Commissioner (ADC), Dibrugarh district. Proceedings of fresh public hearing alongwith list of participants and covering letter issued by SPCB to MoEF&CC submitted
3	Please comply with the direction issued vide EDS dated 20.05.2022.	Public Hearing for the Dibrugarh district freshly conducted on 26.08.2022. The PH meeting chaired by Additional Deputy Commissioner (ADC), Dibrugarh district.
4	Proceedings of fresh public hearing have not been uploaded. Please submit proceedings of fresh public hearing alongwith list of participants and covering letter issued by SPCB to MoEF&CC.	Same as above
5.	(i) Please submit the copy of public hearing proceedings alongwith action plan for addressing issues raised during public hearing alongwith budgetary allocation. (ii) Please also check the number of pages mentioned in the public hearing proceedings are uploaded correct.	Proceedings of fresh public hearing alongwith list of participants and covering letter issued by SPCB to MoEF&CC submitted The page numbers of the PH proceedings are checked and are found to be correct. A tabulation of the number of pages in the public hearing proceedings is provided as below:

Sl. No.	Register (S)	Purpose	Total pages in the register	Noted pages in the register
01	**Register 1**	Public Hearing	32	06

			proceedings in English		
		02	**Register 2**	Public Hearing proceedings in Assamese	32	10
		03	**Register 3**	Public Hearing attendance	22	05
		Total noted pages for the Public Hearing proceedings				21

The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA 0177_Rev 01 and validity 20.06.2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh Districts under Hugrijan, Naharkatia & Naharkatia Extn, Sapkaint and few parts of Dumduma (Block A&B), Borhat and Moran Extension PMLs located at Villages Borjan, Chapatali No.4, Gelipung, Borpather, Chapatoli Na Gaon, Balimora Cha Bagicha, Galaibangali, Chariali, Naga Gaon, Usha Gao, Uttar Somdar, Borhat Bagicha under Dibrugarh, Charaideo and Tinsukia districts State Assam by M/s. Oil India 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).

The details of products and capacity as under:

S No	Unit	Product/by product	Existing quantity	Proposed Quantity	Total Quantity
1	Wells	Wells	7	67	74

Ministry has issued Environmental Clearance to the existing capacity of 7 wells vide J-11011/1252/2007-IA-II(I); dated 1st November 2011. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Guwahati RO-NE/E/IA/AS/MI/59/1270-1272 on 06.10.2021. Action Taken Report has been submitted to IRO, MOEFCC, by Oil India dated 27.10.2022 for partial compliances. Certified Action Taken Report provided by IRO, MOEFCC, No. RO-NE/E/IA/AS/MI/59/1744-46 dated 27.12.2021.

The ToR has been issued by Ministry vide F. no. J-11011/388/2016-IA.II (I) dated 29 April 2017. PP was informed that there is no litigation pending against the proposal.

Public Hearing for the proposed project had been conducted by the Pollution Control Board of Assam on 26th August 2022 at Indian Oil Workers Union Office, Duliajan, 13th March 2020 at Sambawana Khetra, Digboi under Digboi Forest Division (JFMC) Assam and 11th December 2020 at Sapekhati Jai Cultural Centre, Sapekhati Charaideo. All the three Public Hearings were chaired by Additional Deputy Commissioners of respective three districts. The main issues raised during the public hearing and their action plan:

Public Hearing Action Plan and budgetary allocation at Dibrugarh District

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
10.	MriduPabanPhukan (Environmentalist) (Naharkaia)	• He said that the venue for the public hearing should have been in same public auditorium rather than in M/S OIL's area. • More public would have attended the hearing had it been in other places. • He resented about the advertisement published in The	Regional Executive Engineer (REE), PCBA (RO Dibrugarh) In regards to the queries above he clarified that public hearing for other blocks	• Venue for PH was selected based on its close proximity to the said EC block. Though it is located in M/S OIL's area, the auditorium is used by the public to conduct meetings and	-	-	-

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
		Time of India as it is not very popular among the masses in these places. • He enquired about the other Blocks in another 2 or 3 districts. • He further said that no information of previously held public hearing is available in website or any other places for information.	were already completed and for this blocks also hearing was done. However, due to some technical reason the hearing had to be reconducted. As per the venue is concerned, though it is within M/S OIL's area but it belongs to Worker's Union. It can be used by common people on rent and has easy accessibility. He also said that, he has taken note of the updation of Public Hearing list in Pollution Control Board site.	it is located in a prime location where public can easily access and attend for PH. • As per EIA Notification, 2006 advertisement regarding PH needs to be published in one major National daily and one Regional vernacular Daily/ Official State Language newspaper. Accordingly, PCBA published the advertisement in Times of India and in a vernacular Daily DainikJanambhumi. Apart from advertisement in the newspaper, announcement was also carried out through mobile vans equipped with Loudspeakers for information to the local public. • PCBA clarified that the information regarding the previous PH details is available in PCBA website.			

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
11.		He added that the analysis period of EIA should have been summer and winter phrases but this EIA is prepared only in two weeks.	-	Representative of EIA consultant ERM India Pvt. Ltd informed that Terms of Reference (ToR) was issued by MoEF&CC on 29.04.2017. As per ToR, one season (non-monsoon) Baseline environmental monitoring data was collected during October-December 2017. As the data was more than three years old, EAC asked to collect additional 15 days of environmental monitoring.	• Fresh Baseline Environmental monitoring was carried out for a period of 15 days during February 2022 – March 2022.	-	-
12.		He further said that the fund allotted for preservation of animal life is not sufficient.		OIL stated that, INR 58 lakhs was allotted for Wildlife Conservation Plan of Schedule-I species in the Block. The plan was submitted to the Chief Wildlife Warden, Assam for approval	As part of Wildlife Conservation Plan for Schedule-I species OIL has allotted INR 58 lakhs for the Block. The plan was submitted to the Chief Wildlife Warden, Assam for approval. Once the approval is obtained, necessary budget will be released from OIL.	-	Budget for Wildlife Conservation Plan for Schedule-I species is INR 58 lakhs
13.		As the EIA preparing agency does not have knowledge about local species of pythons, vulture etc. in the area.	-	Representative of EIA consultant ERM India Pvt Ltd. informed that information on vulture, python and other species is presented in the draft report and the data was collected from various reliable websites.	The data presented in EIA contains primary surveys as well as secondary information obtained through consultation with Forest department & locals and also from relevant veritable Govt. reports (Forest Management Plans) and research articles. The data presented in EIA contains primary surveys as well as secondary information obtained through consultation with		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					Forest department & locals and also from relevant veritable Govt. reports (Forest Management Plans) and research articles. Relevant literature used for reference are mentioned in Section 3.4: Biological Environment Baseline and also included in detailed checklist of fauna presented in Table 3.8- Table 3.11 of the EIA report. The relevant literatures cited are provided below. • Management plan for Bherjan-Borajan-Padumoni Wildlife Sanctuary • Mazedul Islam and Prasanta Kumar Saikia. 2014. A study on the road-kill herpetofauna of Jeypore Reserve Forest, Assam NeBIO I An international journal of environment and biodiversity Vol. 5, No. 1. • Soumyadeep Datta. 2014. Dihing Patkai Abhayarany a. Nature's Beckon. • Anwaruddin Choudhury. 2009. The Hoolock Gibbon		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					(Hoolock hoolock) in Tinsukia and Dibrugarh districts of Assam, India, Asian Primates Journal 1(2). • Right of Passage 2017. Elephant Corridors of India [2nd Edition]. Menon, V, Tiwari, S K, Ramkumar, K, Kyarong, S, Ganguly, U and Sukumar, R (Eds.). Conservation Reference Series No. 3.WIldlife Trust of India, New Delhi. • Saikia PK and Devi OS. 2011. A checklist of avian fauna at Jeypore Reserve Forest, eastern Assam, India with special reference to globally threatened and endemic species in the Eastern Himalayan biodiversity hotspot. J Threatened Taxa 3 (4): 1711–1718. • Rajat Bhattacharjee and Aruna Deb Roy. 2014. Eco - Tourism and Its Socio Economic Effects		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					Tourism and Its Socio Economic Effects - A Study on Jeypore Rainforest, International Journal of Scientific and Research Publications, Volume 4, Issue 2. • Management Plan- Dehing Patkai Wildlife Sanctuary (2011-12-2015-16) Pythons were not recorded during primary survey in proximity to the proposed well site. Information on python species in the area obtained from Datta (2014) and from Management Plan for Dehing Patkai Wildlife Sanctuary (currently Dehing Patkai National Park). Vultures were not recorded during primary survey in proximity to the proposed well site Information on the vulture species in the area obtained from study conducted by Saikia and Devi (2011) and from Management Plan for Dehing Patkai Wildlife Sanctuary (currently Dehing Patkai National Park). Common Leopard was not recorded during primary survey in proximity to the proposed well		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					site. However, their presence was reported by the local villagers. Information on leopard species in the area obtained from Datta (2014) and Management Plan for Bherjan-Borjan Podumoni WLS. The Wildlife Conservation Plan for Schedule I species was prepared and submitted to the Chief Wildlife Warden, Assam for approval		
14.		Also the data produced in the EIA report on the Black Panther and Leopard of this locality is based on very poor facts.		Representative of EIA consultant ERM India Pvt Ltd. informed that data on Leopard presented in the draft report was collected from various reliable websites and community consultation.	Common Leopard was not recorded during primary survey in proximity to the proposed well site (Refer Table 3.12 of EIA report). However, their presence was reported by the local villagers. Information on leopard species in the area obtained from Datta (2014) and Management Plan for Bherjan-Borjan Podumoni WLS.	-	-
15.		He further mentioned about the oil spillage of B-2 rig of which the local people gave a written complain to the Installation Manager of Balimara QPS. But no measures were taken to prevent the oil spillage in nearby areas by M/S OIL. This news was even published in Newspaper and other News medias.	-	OIL took immediate action to prevent the spillage and also remedial measures to collect the spilled oil and disposed the same following the Hazardous and Other Waste (Management and Transboundary) Rules, 2016.	OIL always take preventive measures and follow best practices to avoid/contain any spill of oil as per the Spill Management Plan mentioned in Section 10.1.8 of the EIA report. Planning, Designing and Procurement As best practices to avoid/contain any spill, OIL would ensure: ○ All chemicals will be stored in designated area and to an extent possible	OIL S&E Department	Budget for oil spill management included in the drilling budget

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					○ all such areas would away from drainage channels; ○ The flooring of the area would be impervious (paved or HDPE lining) and bunding to be provide on all sides of the chemical storage areas; ○ The chemical storage area to be covered to ensure it has the minimum runoff; ○ All transfers of chemicals to be done with proper care and under the supervision of the Store Supervisor; Preventive and Mitigative Measures ○ Once a spill incident has occurred, identify the chemical involved and check hazardous property of the chemical from the Material Safety Datasheet (MSDS); ○ Person wearing required PPE will apply necessary absorbent like saw dust for a liquid spill to ensure that the spill does not spread over a wide area or reach any surface water body or drainage channels;		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					○ Thereafter, the substance will be properly collected and stored in a separate labelled container marked "hazardous waste – do not burn"; and dispose in accordance with Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.		
16.		He said that PCBA does not upload the final EIA report, only the draft EIA report is uploaded in the website.	-	Final report will be prepared incorporating the Public Hearing proceedings along with the action plan. Once the Final report is prepared it will submitted to MoEF&CC and PCBA for uploading in their websites.	-	-	-
17.		He also said that better co-operation and commitment is needed to prevent pollution from M/S OIL.		OIL is following best practices and taking adequate steps to prevent pollution.	OIL willtakemeasures as per the as mentionedbelow **Air Quality Management Plan** • Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. • Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning	OIL S&E Department	Cost of air quality management plan, noise management plan, water quality management plan, soil quality management plan, Municipal Solid Waste and Hazardous Waste Management have been presented as part of EMP

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					phase of the wells. • Flare stacks of adequate height would be provided. • DG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases • Periodic monitoring of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards. **Noise Management Plan** • Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc. • Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment. • All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC). • All high noise generating equipment will be identified and subjected to periodic preventive maintenance.		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					• No night time operation of vehicles and construction activities will be undertaken. • Use of noise barriers **Soil Quality Management Plan** • Drip trays to be used during vehicular/equipment maintenance and during re-fuelling operations. • Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately. • Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites. • 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings. Surface Water Quality Management Plan • Levelling and grading operations will be undertaken with minimal disturbance to the existing site contours thereby maintaining the general slope and topographical profile of the site. • Spill kits will be used to contain chemical spillages. • During site		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					preparation and construction, surface water run-off will be channelized through appropriately designed drainage system. • Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses. • Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system. • Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. **Ground Water Quality Management Plan** • Water based mud would be used as a drilling fluid for the proposed project. • Eco-friendly synthetic based mud if required for deeper sections, will be used after providing intimation to the Pollution Control Board; • The drill cutting along with spent mud will be stored in HDPE lined pit. **Waste Management Plan** • Use of low toxicity chemicals for the		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					preparation of drilling fluid. • Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused. • The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016. • The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. • The sewage generated will be treated through septic tank and soak pit system. • Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001. • The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon.		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					Wildlife Conservation Plan • Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; • Appropriate shading of lights to prevent scattering; • Strict no hunting policy to be implemented by contractors. • Sedimentation tank and oil-water separator will be installed at peripheral drains developed along the well pad sites to control any accidental discharge before it reaches any surface water body; • Spill kits to be used for removal of any oil or chemical spillage on site; • Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody. • Contributing to Forest Departments habitat improvement program • Capacity building of forest department staffs • Awareness Generation Meetings at villages • Engaging a NGO for Identification of		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
					Hoolock Gibbon roosting sites.		
18.	Indra Kumar Gupta (Local resident)	He said that in this public hearing, he take the opportunity to express his grievances, like the dust pollution caused due to frequent vehicular movement in the area.	-	All the approach roads to the drilling locations and production Installations are made metalled/pucca roads to minimise dust generation.	As part of Air Quality Management Plan, the following mitigation measures will be undertaken by OIL: • Dust suppression through water sprinkling in the internal unpaved roads • Maintenance of paved internal road and transport route • Ambient Air Quality Monitoring during different phases i.e., site development, drilling and decommissioning. • Stack emission monitoring for DG sets used for drilling.	OIL S&E Department	Cost of air quality management plan has been presented as part of EMP
19.		He suggested that if fire brigade vehicles are used for sprinkling water in the roadways and steps like tree plantation will reduce pollution great extend.	-	OIL is taking adequate measures to prevent dust generation by regularly maintaining roads, water spraying etc., and plantation in the abandoned drill sites.	OIL shall deploy water tankers for dust suppression along the unpaved roads as part of Air Quality Management Plan.	OIL S&E Department	Cost of water sprinkling has been presented as part of EMP
					OIL shall carry out plantation works in the abandoned well sites	OIL S&E Department	Plantation at abandoned drill sites Rs. 2 lakh per site x 7 sites= Total Rs. 14 lakhs
20.	Mr. Joy Sankar Sarmah (ACS, ADS, Dibrugarh)	He hoped that, clarification from M/S OIL have been able to clarify the doubts of the public. He said these projects are of National importance and are profitable projects. Therefore, requested all to co-operate for successful completion of such project. He also said that, as the EIA (draft) has already been prepared, M/S OIL will follow the EIA and other guidelines in future.	-	OIL is committed to comply with all the environmental protection measures and safeguards stipulated by the MoEF&CC and PCBA from time to time.	Development of the local area will be done as per Corporate Environment Responsibility (CER) budget based on the PH action plan	OIL S&E Department, CSR department, Civil Department	• Mobile health services Rs. 0.5 crores per year for 2 years = Total Rs. 1 crore • Drinking water facilities Rs. 0.005 crore per hand pump x 100 pumps=

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
		He observed that, the concerned are related to environment, therefore hoped M/S OIL in future will proceed with following all the environment related guidelines and in this regard common people should also co-operate. He also assured that district administration is always ready to help and do the needful as when required. The hearing ended with vote of thanks from the chair.					Total Rs. 0.5 crore • Infrastructure improvement work across schools in 50 schools Rs. 0.02 crore per school x 80 schools = Total Rs. 1.6 crore • Training support for skill development among women Rs. 0.01 crore per training program x 10 training programs in 2 years = Total Rs. 0.1 crores • Industrial training for students Rs. 0.005 crore per student x 100 selected students = Rs. 0.5 crore • Barricading the abandoned well sites Rs. 0.001 crores per well x 7 wells= Total Rs. 0.007 crores • Provision for street light at major traffic intersections Rs. 1 crore • Plantation at abandoned drill sites

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget (INR)
							Rs. 0.02 crore per site x 7 sites= Total Rs. 0.14 crore • Repair of roads in the area Rs. 1 crore per year for 2 years= 2 crores

Table 2 Public Hearing Action Plan and budgetary allocation at Tinsukia District

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
1.	Mr. Rajen Das, a resident of Balijan	Complained about the publicity of M/S OIL regarding this public hearing as he expected more people to gather in this hearing.		All the advertisements are published in DainikJanmabhumi in Assamese and in Assam Tribune in English one month prior to the public hearing by PCBA.	-	-	-
2.		Expressed concern about the safety of the existing gas gathering centre in the Balijan.	OIL has conducted risk assessment study to take all the safety required. OIL also follows all the guidelines of PCBA and MoEF&CC.	OIL has dedicated team for management of pipeline operations. Regular patrols and inspections of pipelines conducted. Pressure testing and inspection of equipment and pipelines conducted regularly.	CGM-Safety& Environment	-	Only management time required
3.		Complained the land mining done by M/S OIL in forest areas for various purpose.	OIL also follows all the guidelines of PCBA and MoEF&CC.	-	-	-	-
4.		Hoped for the proper implementation of M/S OIL's CSR activities, like developmental works in Health Services and Schools of the local area.	Mr. GaganathCheti, an official of M/S OIL, said that M/S OIL is not only a co-operation / Ltd. but also a responsible PSU. OIL is always ready for developments in areas where projects are laid. OIL is responsible for the cultural, economic and social development of the people. Certain CSR activities sanctioned M/s OIL does take some time but it finally takes place. He hoped for people's co-operation to point out certain specific areas where M/S OIL could contribute.	OIL is playing an important role in Assam economy. OIL is implementing CSR activities for socio-economic development of the area. OIL will continue to invest on CSR activities. M/s OIL has developed a 7 years developmental plan for the area. The developmental plan will utilize the CSR fund for development of the area.	GM-CSR	CSR budget will include 2% of profit Following CER plans will be implemented • Mobile health services Rs. 0.20 crores • Infrastructure improvement work in 10 schools including improvement of latrines Rs. 0.02 lakh per school x 10 schools= Total Rs. 0.2 crore • Plantation at nearby forest area Rs. 0.05 crore per year for 2 years= Total Rs. 0.10 crore • Repair of local	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
						roads Rs. 0.3 crore • Provision for Street light in the area Rs. 0.2 crore • Providing fund to locals villagers for construction of household latrines Rs. 0.01 crore per unit X 20 units= Rs. 0.2 crore	
5.		Praised M/S OIL for its service rendered to the country and the people and also hoped for its longevity.	-	-	-	-	-
6.		Asked M/S OIL to take adequate measures to balance the ecology and environment of the locality.	OIL will prepare an action plan and will try to implement as far as possible to protect the environment.	OIL is committed to preserve the natural resource and environment. OIL has dedicated team for management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary guidelines from PCBA and MoEF&CC. **Air Quality Management Plan** • Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. • Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis	CGM-S&E	OIL will do plantation in the abandoned drill sites Refer Sl. No. 4 of this table	Budget for environmental control measures presented in Table 10.8 of EIA report Budget for Wildlife Conservation plan presented in Table 10.5 of EIA report

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				during construction and decommissioning phase of the wells. • Flare stacks of adequate height would be provided. • DG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases • Periodic monitoring of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards. **Noise Management Plan** • Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc. • Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment. • All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC). • All high noise generating equipment will be identified and subjected to periodic preventive maintenance. • No night time operation of vehicles and construction			

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				activities will be undertaken. • Use of noise barriers **Soil Quality Management Plan** • Drip trays to be used during vehicular/equipment maintenance and during re-fuelling operations. • Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately. • Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites. • 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings. Surface Water Quality Management Plan • Levelling and grading operations will be undertaken with minimal disturbance to the existing site contours thereby maintaining the general slope and topographical profile of the site. • Spill kits will be used to contain chemical spillages. • During site preparation and construction, surface water run-off will be channelized through			

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				appropriately designed drainage system. • Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses. • Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system. • Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. **Ground Water Quality Management Plan** • Water based mud would be used as a drilling fluid for the proposed project. • Eco-friendly synthetic based mud if required for deeper sections, will be used after providing intimation to the Pollution Control Board; • The drill cutting along with spent mud will be stored in HDPE lined pit. **Waste Management Plan** • Use of low toxicity chemicals for the preparation of drilling fluid. • Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in			

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused. • The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016. • The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. • The sewage generated will be treated through septic tank and soak pit system. • Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001. • The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon. OIL will also implement conservation plan for protection of wildlife in the area. Wildlife Conservation Plan for Schedule I species			

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				will include • Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; • Appropriate shading of lights to prevent scattering; • Strict no hunting policy to be implemented by contractors. • Sedimentation tank and oil-water separator will be installed at peripheral drains developed along the well pad sites to control any accidental discharge before it reaches any surface water body; • Spill kits to be used for removal of any oil or chemical spillage on site; • Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody. • Contributing to Forest Departments habitat improvement program • Capacity building of forest department staffs • Awareness Generation Meetings at villages • Engaging a NGO for Identification of Hoolock Gibbon roosting sites.			
7.	Mrs. TrisnaPhukanBoiragi,	Requested M/S OIL to contribute for Swachcha Bharat Abhiyan in	OIL will prepare an action plan and will try	OIL will provide funds for Swachcha Bharat Abhiyan in	GM-CSR	• Infrastructure improvement	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
	President of Gaon panchayat, Balijan	this locality.	to implement as far as possible for development of societies. OIL will provide funds in the CER budget forSwachcha Bharat Abhiyan in the area.	the area		work in 10 schools including improvement of latrines Rs. 0.02 lakh per school x 10 schools= Total Rs. 0.2 crore • Providing fund to locals villagers for construction of household latrines Rs. 0.01 crore per unit X 20 units= Rs. 0.2 crore	
8.		Asked for development in local area through CSR activities like roadways, school development and unskilled employment of the locals.	Refer Sl. No. 4 of this table.	Refer Sl. No. 4 of this table	Refer Sl. No. 4 of this table	Refer Sl. No. 4 of this table	-
9.	ADC, Tinsukia District	ADC told the public about the public hearing held in public/community hall, Baghjan TE, Baghjan on 12.03.2020, there were large public gathering. He expected the same even in today's hearing but is unhappy as only a few public gathering today. He informed that public hearing is necessary as per EIA Notification, 2006 for acquiring Environmental clearance from MoEF&CC. He stressed in his speech the degradation of Environment and Ecosystem in recent years. He wanted each citizen to be responsible to preserve and maintain tranquillity with nature.		OIL is committed to preserve the natural resource and environment. OIL has dedicated team for management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary guidelines from PCBA and MoEF&CC. OIL will also implement conservation plan for protection of wildlife in the area. Greenbelt plantation will also be undertaken at some abandoned wells	CGM-S&E	OIL will do plantation in abandoned drill site - Refer Sl. No. 4 of this table	Budget for environmental control measures presented in Table 10.6 of EIA report Budget for Wildlife Conservation plan presented in Table 10.2 of EIA report
10.		He urged Mrs. Trishna PhukanBoiragi, president Gaon	OIL is always ready for developments in areas	-	-	-	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
		Panchayat of Balijan to create awareness to plant trees and seeks any help necessary from M/S OIL.	where projects are laid.				
11.		He also requested Mrs. Trishna PhukarBoiragi also to create an awareness camp regarding Coronavirus. He urged M/S OIL Authorities to provide necessary help to such measures initiated by public.	-	-	-	-	-

Table 3 Public Hearing Action Plan and budgetary allocation at Charaideo District

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
1.	Mr. Nitul Gogoi, advisor Charaideo District Student Union	Welcomes Oil India Ltd.	-	-	-	-	-
2.		Complains about the appointing private companies by M/S Oil India Ltd.	OIL officials said that OIL never handed over their operations to private sector. OIL officials said to the public to give their complains to OIL office during their operation in	OIL is handling all its operation through its staffs. All the drilling other works done by sub-contractors are performed under the supervision of OIL officials.	CGM-Safety & Environment	Only management time required	

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
			this area and they will take necessary actions regarding public complains.				
3.		Requests not to hand over their activities/operations to private companies.	OIL officials said that OIL never handed over their operations to private sector. OIL officials said to the public to give theirco	Refer Sl. No. 2 of this table	Refer Sl. No. 2 of this table	Refer Sl. No. 2 of this table	

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
			mplains to OIL office during their operation in this area and they will take necessary actions regarding public complains.				
4.		They have many demands to Oil regarding employment and road construction.	OIL is always ready to help common people regarding employment and other	OIL is playing an important role in Assam economy. OIL is implementing CSR activities for socio-economic developm	CGM-Safety & Environment GM-CSR GM-HR	CSR budget will include 2% of profit Local employment initiative will be underta	-

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
			problems	ent of the area. OIL will continue to invest on CSR activities. M/s OIL has developed a 7 years developmental plan for the area. The developmental plan will utilize the CSR fund for development of the area. The construction phase of the project is likely to generate both direct and indirect		ken As per CER plan following activities are planned in the area • Mobile health services Rs. 0.30 crores • Infrastructure improvement work in	

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				opportunities for employment. The estimated direct employment would be approximately 50 un-skilled workers and will be sourced from local area.		schools Rs. 0.02 lakh per school x 20 schools= Total Rs. 0.4 crore • Drinking water facilities Rs. 0.50 crores • Protection Eri Muga production done	

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
						by local people Rs. 0.20 crores • Plantation at abandoned drill sites Rs. 0.02 crore per site x 7 sites = Total Rs. 0.14 crore • Repair of local roads Rs	

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
						. 0.50 crore	
5.		Requested Oil to work smoothly and cooperate with public.	OIL is always ready to help common people regarding employment and other problems	OIL is playing an important role in Assam economy. OIL is implementing CSR activities for socio-economic development of the area. OIL will continue to invest	GM-CSR GM-HR	Only management time required	-

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				on CSR activities. OIL officials are always ready to help and consult with local people to resolve any issues regarding their project.			
6.	Navade epBarua , spoke person Tai Ahom Yuva Students Union	Pointed out the communication gap between OIL and public.	OIL is always ready to help common people regarding employment and other problems	OIL officials are always ready to help and consult with local people to resolve any issues regarding their project.	GM-CSR GM-HR	Only management time required	-

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
7.		Said about the security of the drilling sites regarding the environment.	They are following all the guidelines of EIA, 2006 to protect the environment and they are always ready to help common people regarding employment and other problems	OIL has EMP for managing the environmental pollution related issues at the drill sites. **Air Quality Management Plan** • Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. • Sprinkli	CGM-Safety & Environment	-	Budget for environmental control measures presented in Table 10.8 of EIA report

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				ng of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells. • Flare stacks of adequate height would be provided. • DG set stacks would have adequate height, as per statutory			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				requirements, to be able to adequately disperse exhaust gases • Periodic monitoring of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards. **Noise**			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				Management Plan • Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc. • Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				equipment. • All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC). • All high noise generating equipment will be identified and subjected to periodic preventive maintenance.			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				• No night time operation of vehicles and construction activities will be undertaken. • Use of noise barriers **Soil Quality Management Plan** • Drip trays to be used during vehicular/ equipment maintenance and during re-fuelling			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				operations. • Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately. • Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				within the drill sites. • 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings. Surface Water Quality Management Plan • Levelling and grading operations will be undertaken with minimal disturbance to the existing site			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				contours thereby maintaining the general slope and topographical profile of the site. • Spill kits will be used to contain chemical spillages. • During site preparation and construction, surface water run-off will be channelized through appropriately designed drainage system.			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				• Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses. • Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system.			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				• Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. **Ground Water Quality Management Plan** • Water based mud would be used as a drilling fluid for the proposed project. • Eco-friendly synthetic based mud if required			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				for deeper sections, will be used after providing intimation to the Pollution Control Board; • The drill cutting along with spent mud will be stored in HDPE lined pit. **Waste Management Plan** • Use of low toxicity chemicals for the preparation of drilling			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				fluid. • Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				modified in 2005. The waste water will be treated in an ETP and will be reused. • The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016. • The kitchen waste will			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				be disposed in nearest municipal/ village dumping site on a daily basis through approved waste handling contractors. • The sewage generated will be treated through septic tank and soak pit system. • Used batteries will be recycled through the vendors supplying lead acid			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				batteries as required under the Batteries (Management & Handling) Rules, 2001. • The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon. OIL will also implement conservation plan for protection of wildlife in the			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				area. Wildlife Conservation Plan for Schedule I species will include • Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; • Appropriate shading of			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				lights to prevent scattering; • Strict no hunting policy to be implemented by contractors. • Sedimentation tank and oil-water separator will be installed at peripheral drains developed along the well pad			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				sites to control any accidental discharge before it reaches any surface water body; • Spill kits to be used for removal of any oil or chemical spillage on site; • Oil booms, sorbents, dispersants will be kept on			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				site to contain any oil spill to the nearest receiving waterbody. • Contributing to Forest Departments habitat improvement program • Capacity building of forest department staffs • Awareness Generation Meetin			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				gs at villages • Engaging a NGO for Identification of Hoolock Gibbon roosting sites.			
8.		Requested OIL for social welfare, road construction, school, etc. after the completion of drilling process.	OIL will prepare an action plan and will provide fund in the PH Action Plan budget for developmental activities at the	Refer Sl. No. 4 of this table	Refer Sl. No. 4 of this table	Refer Sl. No. 4 of this table	-

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
			peripherical villages.				
9.		equested OIL to take precautions to the environment.	They are following all the guidelines of EIA, 2006 to protect the environment and they are always ready to help common people regarding employment and other problems	OIL has EMP for managing the environmental pollution related issues at the drill sites (Refer S No. 7 of this table)	CGM-Safety & Environment	-	Budget for environmental control measures presented in Table 10.8 of EIA report

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
10	Mr.Rajive Raj Phukan, President Beer LachitHena. Charaideo District	Welcomes OIL to start their project.	-	-	-	-	-
11		Questioned about the emergency precaution measures taken by Oil India Ltd to protect the biodiversity.		OIL has conducted a detailed study on the risk assessment for their project activity based on the results OIL has developed an Emergency Response Plan. The emergency response plan will include • Drilling rig and related equipm	CGM-Safety & Environment	-	Only management time required Chapter 7 of this EIA report

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				ent to be used for drilling will be conformed to international standards specified for such equipment. • Blow-out preventers and related well control equipment shall be installe			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				d, operated, maintainedand tested generally in accordance with internationally recognized standards. • Appropriate gas and leak detection system will be made available at each of			

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon-sibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				the drill sites. • Adequate fire-fighting equipment shall be provided at each drilling site.			
12		Requested OIL not to hand over their operations to private sector.	-	Refer Sl. No. 2 of this table	Refer Sl. No. 2 of this table	Refer Sl. No. 2 of this table	-
13	Mr. Raju Gogoi-Convener Krishak Shramik Sangra	Questioned about the problems created by the drilling activities/accidents.	-	OIL is following all the guidelines of EIA, 2006 to protect the environm	CGM-Safety & Environment	-	Only management time required Chapter 7 of this

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
	m Samiti			ent. OIL also has developed Environmental Management Plan to abate pollution and protect the environment. Pollution related to drilling activity in the area has not been identified yet by any studies. OIL is also submitting EC compliance report to MoEF&CC and OIL is			EIA report Budget for environmental control measures presented in Table 10.8 of EIA report

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				obeying all the clause mentioned in the EC.			
14		Said about the precautions taken by OIL during any accidents in their operation/after operation.	-	OIL is following all the guidelines of EIA, 2006 to protect the environment. OIL also has developed Environmental Management Plan to abate pollution and protect the environment.	CGM-Safety & Environment	-	Only management time required
15		Said OIL to give compensation to the	-	Refer Sl. No. 13 of this table	CGM-Safety & Enviro	-	Refer Sl. No. 13 of this

S. No	Raised by Public	Comments /Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Responsibility	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
		farmers and common people harmed by their drilling activities.			nment		table
16		Requested OIL to take actions regarding proper water supply to public and also provide facilities/protection for Eri Muga production done by the local people.	-	OIL will provide funds for development of drinking water facility and protection of Eri Muga production.	CGM-Safety & Environment GM-CSR GM-HR	Refer Sl. No. 4 of this table	-

Total area after expansion will be 222 Ha (existing area 21 Hectares and additional land required 201 Hectares for proposed capacity). Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 15 ha. EMP Budget includes budget for Public Hearing Action Plan/CER Plan, Wildlife Conservation Plan, Greenbelt Budget and Budget for Environmental Conservation Measures. Budget for CER Plan for socioeconomic development is planned to be INR 195 lakhs for 7 years for Dibrugarh district, INR 49 lakhs for 7 years for Tinsukia district and INR 51 lakhs for 7 years for Charaideo district. Budget for Greenbelt Plan will be INR 15 lakhs. Budget for Wildlife Conservation Plan for Schedule-I species for 7

year will be INR 58 lakhs. Detail of cost breakup of implementation of Environmental Conservation measures for each well would be INR 11.3 lakhs. Capital cost of EMP would be INR 202 lakhs and recurring cost for EMP would be approximately INR 136.394 lakhs per annum. Capital cost of environmental control measures are included within the budget for drilling.

Dihing Patkai national Park is located within the Block and is located at a distance of 1.4km from nearest proposed wells. ESZs of DPNP and Bherjan-Borajan-Padumoni Wildlife Sanctuary (BBPWLS) located within 10 km of proposed project. Bherjan Borjan Podumoni WLS is located at a distance of 5km from the nearest proposed well. Conservation plan for schedule I species has been submitted to PCCF & Chief Wildlife Warden Assam dated 25.08.2021 and a budget of 58 lakhs has been earmarked for the same. Buri Dehing River is present within the Block, nearest well is located at a distance of 0.1 km from Burhi Dehing River.

Ambient air quality monitoring was carried out at 8 locations and the baseline data indicates the ranges of average concentrations as: PM_{10} (63.42 – 85.38 µg/m^3), $PM_{2.5}$ (34.17 – 45.46 µg/m^3), SO_2 (5.66 - 6.38 µg/m^3) and NO_2 (17.40 – 21.73 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 11.85 µg/m^3, 0.0046 µg/m^3, 0.095 µg/m^3 and 0.32 µg/m^3 with respect to NOx, SO_2, PM_{10} and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Additional two weeks ambient air quality monitoring conducted during February-March 2022 the average values ranged between PM_{10} (58.73-86.98 µg/m^3), $PM_{2.5}$ (30.11-48.57 µg/m^3), SO_2 (6.19-13.75 µg/m^3) and NO_2 (17.52-23.06 µg/m^3).

Water consumption during drilling and testing of wells will be 50 m^3 per day. Total 39 m^3 per day fresh water and 11 m^3 per day recycled water will be required for drilling activities. Among 39 m^3 per day fresh water requirement; 29 m^3 per day freshwater will be required for drilling and 10 m^3 per day freshwater will be used for domestic purposes including drinking, washings and domestic use.

Water for drilling will be sourced from groundwater. OIL obtained permission from CGWA for groundwater withdrawal vide NOC no. CGWA/NOC/MIN/ORIG/2021/11476 dated 26.03.2021. Existing effluent generation is 21.8 CMD (8 CMD domestic wastewater and 13.8 CMD drilling and wash wastewater). Drilling and wash wastewater will be treated through effluent treatment plant. Domestic wastewater will be treated in septic tank and soak pits. The project will be based on Zero Liquid discharge system.

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

Details of Process emissions generation and its management:

- Operation of DG sets,
- Movement of vehicles and machineries during construction and drilling,
- Flaring of natural gas will result in the generation of air pollutants,
- Stacks will be used with DG sets and flare system as per CPCB norms.

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

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

Coordinates of Proposed wells

S No.	Proposed Well Name	Latitude	Longitude
1.	524	27° 19' 32.768" N	95° 27' 10.843" E
2.	525	27° 20' 35.703" N	95° 26' 58.988" E

S No.	Proposed Well Name	Latitude	Longitude
3.	526	27° 20' 53.555" N	95° 26' 41.265" E
4.	527	27° 20' 40.745" N	95° 25' 16.152" E
5.	Loc. DHD (Rev)	27° 20' 49.277" N	95° 27' 56.400" E
6.	Loc. A	27° 20' 41.542" N	95° 27' 51.099" E
7.	Loc. B	27° 20' 53.383" N	95° 27' 44.632" E
8.	531	27° 21' 32.634" N	95° 27' 23.744" E
9.	Loc. C	27° 20' 42.380" N	95° 27' 47.808" E
10.	534	27° 17' 14.005" N	95° 26' 5.254" E
11.	536	27° 18' 57.203" N	95° 25' 58.088" E
12.	A2_R	27° 14' 3.059" N	95° 21' 9.014" E
13.	A3	27° 14' 51.199" N	95° 22' 1.276" E
14.	539	27° 19' 52.790" N	95° 26' 12.651" E
15.	D2_R	27° 12' 39.684" N	95° 20' 50.584" E
16.	D1	27° 12' 26.981" N	95° 20' 50.681" E
17.	542	27° 16' 14.657" N	95° 23' 19.460" E
18.	543	27° 18' 4.445" N	95° 18' 22.277" E
19.	D3	27° 12' 57.101" N	95° 21' 1.959" E
20.	544	27° 18' 2.939" N	95° 16' 35.987" E
21.	547	27° 19' 22.127" N	95° 27' 4.498" E
22.	549	27° 18' 37.194" N	95° 26' 39.000" E
23.	546	27° 19' 41.172" N	95° 26' 50.987" E
24.	551	27° 19' 25.185" N	95° 26' 34.560" E
25.	552	27° 19' 59.120" N	95° 26' 44.471" E
26.	553	27° 20' 40.876" N	95° 26' 4.682" E
27.	554	27° 20' 10.849" N	95° 25' 29.869" E
28.	D4_R	27° 13' 29.074" N	95° 20' 51.874" E
29.	557	27° 19' 47.372" N	95° 24' 38.691" E
30.	D5_R	27° 13' 29.074" N	95° 20' 51.874" E
31.	558	27° 21' 28.610" N	95° 24' 43.394" E
32.	559	27° 21' 50.061" N	95° 24' 27.705" E
33.	560	27° 21' 33.135" N	95° 27' 43.292" E
34.	561	27° 21' 16.977" N	95° 27' 44.026" E
35.	562	27° 21' 1.077" N	95° 27' 46.730" E
36.	563	27° 20' 59.699" N	95° 27' 25.382" E
37.	564	27° 21' 10.577" N	95° 27' 16.418" E
38.	565	27° 20' 24.992" N	95° 26' 30.670" E
39.	566	27° 19' 36.807" N	95° 26' 3.354" E
40.	567	27° 19' 59.796" N	95° 25' 5.986" E
41.	569	27° 21' 43.583" N	95° 22' 0.392" E
42.	568	27° 21' 11.197" N	95° 22' 28.990" E
43.	570	27° 20' 31.380" N	95° 25' 39.192" E

S No.	Proposed Well Name	Latitude	Longitude
44.	571	27° 21' 9.161" N	95° 27' 30.429" E
45.	572	27° 21' 25.697" N	95° 27' 32.177" E
46.	573	27° 20' 46.336" N	95° 22' 56.217" E
47.	109	27° 20' 24.463" N	95° 15' 5.096" E
48.	115	27° 22' 25.481" N	95° 12' 3.557" E
49.	D6	27° 14' 9.667" N	95° 22' 50.078" E
50.	307	27° 20' 24.048" N	95° 14' 40.422" E
51.	T-100	27° 18' 52.202" N	95° 17' 56.533" E
52.	D7	27° 21' 32.921" N	95° 18' 3.782" E
53.	501	27° 21' 4.058" N	95° 24' 1.571" E
54.	HYQ	27° 14' 42.948" N	95° 23' 19.644" E
55.	DGR	27° 21' 55.944" N	95° 26' 51.259" E
56.	DGT	27° 15' 43.796" N	95° 23' 15.602" E
57.	DHD	27° 21' 56.040" N	95° 26' 51.370" E
58.	NLK	27° 17' 50.685" N	95° 23' 5.989" E
59.	507-D	27° 21' 12.361" N	95° 26' 11.701" E
60.	T-101	27° 19' 50.731" N	95° 14' 21.309" E
61.	Loc. B (KB2)	27° 21' 42.356" N	95° 27' 37.966" E
62.	305	27° 21' 21.575" N	95° 11' 43.118" E
63.	548	27° 18' 46.496" N	95° 27' 0.551" E
64.	K	27° 21' 23.308" N	95° 17' 43.899" E
65.	BH	27° 8' 44.037" N	95° 16' 12.812" E
66.	A	27° 10' 55.376" N	95° 20' 17.080" E
67.	523	27° 21' 27.271" N	95° 27' 46.240" E

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Capital Cost in crores	Recurring Cost in Crores /Annum
1.	Wildlife Conservation Plan	-	0.0829
2.	Greenbelt Plan	-	0.0214
3.	EMP Cost Well drilling	-	1.0982
4.	CER Cost	2.02	0.1186
	Grant Total	**2.02**	**1.3354**

Details of CER with proposed activities and budgetary allocation:

Dibrugarh District

S No.	Proposed Activity	Proposed Budget
1.	Mobile health services	Rs. 2 lakhs per year for 7 years = Total 14 lakhs
2.	Drinking water facilities	Rs. 0.2 lakh per hand pump x 100 pumps= Total Rs. 50 lakhs
3.	Infrastructure improvement work across schools in 50 schools	Rs. 1 lakh per school= Total Rs. 50 lakhs
4.	Training support for skill development among women	Rs.1 lakh per training program x 10 training programs= Total Rs. 10 lakhs
5.	Industrial training for students	Rs. 0.5 lakh per student x 40 selected students = Rs. 20 lakhs
6.	Barricading the abandoned well sites	Rs. 1 lakh per well x 7 wells= Total Rs. 7 lakhs
7.	Provision for street light at major traffic intersections	Rs. 30 lakhs
8.	Plantation at abandoned drill sites	Rs. 2 lakh per site x 7 sites= Total Rs. 14 lakhs
	Grant Total	**Rs. 195 lakhs**

Details of CER with proposed activities and budgetary allocation:

Tinsukia District

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Rs. 1 lakh per year for 7 years= Total 7 lakhs
2	Infrastructure improvement work in 10 schools including improvement of latrines	Rs. 1 lakh per school x 10 schools= Total Rs. 10 lakhs
3	Plantation at nearby forest area	Rs. 1 lakh per year for 7 years= Total Rs. 7 lakhs
4	Repair of local roads	Rs. 10 lakhs
5	Provision for Street light in the area	Rs. 8 lakhs
6	Providing fund to locals villagers for construction of household latrines	Rs. 0.1 lakh per unit X 10 units per year for 7 years= Rs. 7 lakhs

	Grant Total	**Rs. 49 lakhs**

Details of CER with proposed activities and budgetary allocation:

Charaideo district

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Rs. 1 lakh per year for 7 years= Total 7 lakhs
2	Infrastructure improvement work in 10 schools	Rs. 1 lakh per school x 10 schools= Total Rs. 10 lakhs
3	Drinking water facilities	Rs. 10 lakhs
4	Protection Eri Muga production done by local people	Rs. 1 lakh per year for 7 years= Total Rs. 7 lakhs.
5	Plantation at abandoned drill sites	Rs. 1 lakh per year for 7 years= Total Rs. 7 lakhs
6	Repair of local roads	Rs. 10 lakhs
	Grant Total	**Rs. 51 lakhs**

During deliberations, EAC discussed following issues:

S.N.	Issues Discuss	Response
1	Clarification to be provided how planning for drilling of 67 wells are arrived at and justification for the discrepancy to be provided	The project was planned for drilling of 67 developmental wells in the Block. The ToR obtained for the project with the Title "**Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh Districts under Hugrijan, Naharkatia & Naharkatia Extn, Sapkaint and few parts of Dumduma (Block A&B), Borhat and Moran Extension PMLs". The EIA has been prepared considering 67 wells in the Block.** As 56 wells (out of 67) are located within 10 km ESZ of Dehing Patkai National Park (DPNP) and 17 wells (out of 67) located within 10 km of Bherjan Borjan Podumoni Wildlife Sanctuary (BBPWLS), at the time of application for Wildlife Clearance (proposal no is FP/AS/MIN/6162/2021) total 73 wells have been counted (as there are wells that fall within 10 km of

<table>
<tr><td></td><td></td><td>both DPNP and BBPWLS) and reflected in the heading of the proposal.

When the EC applications was linked with the Wildlife application the words “73 wells” are reflected in the title of the EC proposal also.

However, the project is planned for 67 wells only.

Undertaking that 67 wells development wells are planned in the Block is attached as Appendix-1</td></tr>
<tr><td>2</td><td>Baseline data collected during 2017 indicate higher maximum values for PM and NOx; justify
And why maximum values collected during 2017 were higher compared to the maximum values collected during 2022</td><td>The maximum values collected during 2017 were higher for PM compared to 2022. Monitoring during 2017 conducted on October- December. Most of the higher PM values (beyond NAAQS limits) were obtained during late November to December which represents the winter season in the area. While monitoring conducted during February-March represents the onset of spring in the area. Winter conditions in the area are represented by low wind speeds and lowering of mixing heights in the region which leads to higher atmospheric stability and consequentially a deterioration of air quality in general due to lesser dispersive capacity in the near-to-surface/lower atmospheric layer leading to a buildup /heightened concentrations of gaseous pollutant & PM because of natural reasons.
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Criteria Pollutants</th><th rowspan="2">Unit</th><th colspan="2">2017 data</th><th colspan="2">2022 data</th></tr>
<tr><th>Max Value</th><th>Min Value</th><th>Max. Value</th><th>Min. Value</th></tr>
<tr><td>1.</td><td>PM_{10}</td><td>µg/m^3</td><td>136</td><td>27</td><td>86.98</td><td>58.73</td></tr>
<tr><td>2.</td><td>$PM_{2.5}$</td><td>µg/m^3</td><td>69</td><td>16</td><td>48.57</td><td>30.11</td></tr>
<tr><td>3.</td><td>SO_2</td><td>µg/m^3</td><td>8.6</td><td>4.2</td><td>13.75</td><td>6.19</td></tr>
<tr><td>4.</td><td>NOx</td><td>µg/m^3</td><td>28.7</td><td>10.2</td><td>23.06</td><td>17.52</td></tr>
<tr><td>5.</td><td>CO</td><td>mg/m^3</td><td>1.06</td><td>0.12</td><td>0.84</td><td>0.28</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>Modelling results indicate that NOx</td><td></td></tr>
</table>

<table>
<tr><td></td><td>values are very high. Modelling values to be rechecked</td><td></td></tr>
<tr><td>4</td><td>Undertaking to be provided as no activity for the projects will be conducted within forest areas</td><td>PP informed that no well will be drilled within forest land.</td></tr>
<tr><td>5</td><td>Application submitted to NBWL for Wildlife Clearance to be provided for wells located within 10 km radius of national park or wildlife sanctuary</td><td><u>56 proposed wells within 10 km of ESZ of Dihing Patkai National Park</u>
<table>
<tr><th>S No.</th><th>Name</th><th>Latitude</th><th>Longitude</th></tr>
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</table>

		15	D2_R	27° 12' 39.684" N	95° 20' 50.584" E
		16	D1	27° 12' 26.981" N	95° 20' 50.681" E
		17	542	27° 16' 14.657" N	95° 23' 19.460" E
		18	D3	27° 12' 57.101" N	95° 21' 1.959" E
		19	547	27° 19' 22.127" N	95° 27' 4.498" E
		20	549	27° 18' 37.194" N	95° 26' 39.000" E
		21	546	27° 19' 41.172" N	95° 26' 50.987" E
		22	551	27° 19' 25.185" N	95° 26' 34.560" E
		23	552	27° 19' 59.120" N	95° 26' 44.471" E
		24	553	27° 20' 40.876" N	95° 26' 4.682" E
		25	554	27° 20' 10.849" N	95° 25' 29.869" E
		26	D4_R	27° 13' 29.074" N	95° 20' 51.874" E
		27	557	27° 19' 47.372" N	95° 24' 38.691" E
		28	D5_R	27° 13' 29.074" N	95° 20' 51.874" E
		29	558	27° 21' 28.610" N	95° 24' 43.394" E
		30	559	27° 21' 50.061" N	95° 24' 27.705" E
		31	560	27° 21' 33.135" N	95° 27' 43.292" E
		32	561	27° 21' 16.977" N	95° 27' 44.026" E
		33	562	27° 21' 1.077" N	95° 27' 46.730" E
		34	563	27° 20' 59.699" N	95° 27' 25.382" E
		35	564	27° 21' 10.577" N	95° 27' 16.418" E

36	565	27° 20' 24.992" N	95° 26' 30.670" E
37	566	27° 19' 36.807" N	95° 26' 3.354" E
38	567	27° 19' 59.796" N	95° 25' 5.986" E
39	568	27° 21' 11.197" N	95° 22' 28.990" E
40	570	27° 20' 31.380" N	95° 25' 39.192" E
41	571	27° 21' 9.161" N	95° 27' 30.429" E
42	572	27° 21' 25.697" N	95° 27' 32.177" E
43	573	27° 20' 46.336" N	95° 22' 56.217" E
44	D6	27° 14' 9.667" N	95° 22' 50.078" E
45	501	27° 21' 4.058" N	95° 24' 1.571" E
46	HYQ	27° 14' 42.948" N	95° 23' 19.644" E
47	DGR	27° 21' 55.944" N	95° 26' 51.259" E
48	DGT	27° 15' 43.796" N	95° 23' 15.602" E
49	DHD	27° 21' 56.040" N	95° 26' 51.370" E
50	NLK	27° 17' 50.685" N	95° 23' 5.989" E
51	507-D	27° 21' 12.361" N	95° 26' 11.701" E
52	Loc. B (KB2)	27° 21' 42.356" N	95° 27' 37.966" E
53	548	27° 18' 46.496" N	95° 27' 0.551" E
54	BH	27° 8' 44.037" N	95° 16' 12.812" E
55	A	27° 10' 55.376" N	95° 20' 17.080" E
56	523	27° 21' 27.271" N	95° 27' 46.240" E

<u>17 proposed wells</u> within 10 km of ESZ of Bherjan-Borjan-Podumoni WLS

S No.	Name	Latitude	Longitude
1	527	27° 20' 40.745" N	95° 25' 16.152" E
2	553	27° 20' 40.876" N	95° 26' 4.682" E
3	554	27° 20' 10.849" N	95° 25' 29.869" E
4	557	27° 19' 47.372" N	95° 24' 38.691" E
5	558	27° 21' 28.610" N	95° 24' 43.394" E
6	559	27° 21' 50.061" N	95° 24' 27.705" E
7	567	27° 19' 59.796" N	95° 25' 5.986" E
8	569	27° 21' 43.583" N	95° 22' 0.392" E
9	568	27° 21' 11.197" N	95° 22' 28.990" E
10	570	27° 20' 31.380" N	95° 25' 39.192" E
11	573	27° 20' 46.336" N	95° 22' 56.217" E
12	D7	27° 21' 32.921" N	95° 18' 3.782" E
13	501	27° 21' 4.058" N	95° 24' 1.571" E
14	DGR	27° 21' 55.944" N	95° 26' 51.259" E
15	DHD	27° 21' 56.040" N	95° 26' 51.370" E
16	507-D	27° 21' 12.361" N	95° 26' 11.701" E
17	K	27° 21' 23.308" N	95° 17' 43.899" E

6	Details of the following to be shared for drilling, post drilling and operation of production facilities i. Flaring details and management, ii. Produced water treatment plan, what is the current capacity of ETP and what additional capacity is proposed ? Where ETP will be located? iii. where would be the injection wells located? DG sets emission management	**i. Flaring management:** In normal conditions, flaring won't be carried out at drilling locations/ site. Hydrocarbon produced/extracted will be sent to nearby production installations/ Group Gathering stations with adequate facility for flaring of the Low Pressure gas like enclosed ground flare/ Non-luminous flare systems as per the prevailing norms of OMR-2017 & OISD guidelines. ii. Formation/Produced water **(Not applicable for Jorajan Block as no Production Installations in this block is planned)** will be treated in the production installation to meet the parameters as per MoEF standards for Effluent disposal and the treated formation/ produced water will be disposed off in disposal wells located in the vicinity of the production installation. Formation/produced water will be treated through: a) Mobile ETP(s). b) Central ETP of capacity 5000 KLD at Tengakhat. c) ETP of capacity 7200 KLD at Madhuban. iii. DG sets at the drilling locations and Production Installations will be provided with adequate stack height based on the capacity of the DG sets as per the CPCB guidelines and regular monitoring of the stack gas emissions will be carried out. A gas pipeline of 400 mm diameter and 17 km length would be laid connecting Jorajan OCS to OCS-3. Additionally assorted oil and gas pipelines 50 mm-300 mm in diameter would be laid in the Block with the total length of 40 kms. These pipelines will be laid approximately 1.5 m below the ground and land

<table>
<tr><td></td><td></td><td>will not be acquired for them. A Right of Use (RoU) of 10m will be maintained by OIL and adequate compensation will be paid to the landowners for the RoU.</td></tr>
<tr><td>7</td><td>Nearest waterbody from the wells and production installations to be provided</td><td>• Nearest well is located 0.1 km from Burhi Dehing River
• No production installation is planned in the Block</td></tr>
<tr><td>8</td><td>CER plan budget to be increased to 10 crore</td><td>Revised CER plans for the three districts Dibrugarh, Charaideo and Tinsukia is presented below;
The Total CER budget for the three districts considered as Rs. 10.087 crores. CER budget for Dibrugarh district is planned as Rs. 6.847 crores; budget for Tinsukia district considered as Rs. 1.2 crores and CER budget for Charaideo district considered as Rs. 2.04 crores.
Dibrugarh District
<table>
<tr><th>S No.</th><th>Proposed Activity</th><th>Proposed Budget</th></tr>
<tr><td>1</td><td>Mobile health services</td><td>Rs. 0.5 crores per year for 2 years = Total Rs. 1 crore</td></tr>
<tr><td>2</td><td>Drinking water facilities</td><td>Rs. 0.005 crore per hand pump x 100 pumps= Total Rs. 0.5 crore</td></tr>
<tr><td>3</td><td>Infrastructure improvement work across schools in 50 schools</td><td>Rs. 0.02 crore per school x 80 schools = Total Rs. 1.6 crore</td></tr>
<tr><td>4</td><td>Training support for skill development among women</td><td>Rs. 0.01 crore per training program x 10 training programs in 2 years = Total Rs. 0.1 crores</td></tr>
<tr><td>5</td><td>Industrial training for students</td><td>Rs. 0.005 crore per student x 100 selected students = Rs. 0.5 crore</td></tr>
<tr><td>6</td><td>Barricading the abandoned well sites</td><td>Rs. 0.001 crores per well x 7 wells=</td></tr>
</table></td></tr>
</table>

		Total Rs. 0.007 crores
7	Provision for street light at major traffic intersections	Rs. 1 crore
8	Plantation at abandoned drill sites	Rs. 0.02 crore per site x 7 sites= Total Rs. 0.14 crore
9	Repair of roads in the area	Rs. 1 crore per year for 2 years= 2 crores
	Grant Total	**Rs. 6.847 crores**

Tinsukia District

S No.	**Proposed Activity**	**Proposed Budget**
1	Mobile health services	Rs. 0.20 crores
2	Infrastructure improvement work in 10 schools including improvement of latrines	Rs. 0.02 lakh per school x 10 schools= Total Rs. 0.2 crore
3	Plantation at nearby forest area	Rs. 0.05 crore per year for 2 years= Total Rs. 0.10 crore
4	Repair of local roads	Rs. 0.3 crore
5	Provision for Street light in the area	Rs. 0.2 crore
6	Providing fund to locals villagers for construction of household latrines	Rs. 0.01 crore per unit X 20 units= Rs. 0.2 crore
	Grant Total	**Rs. 1.2 crores**

Charaideo District

S No.	**Proposed Activity**	**Proposed Budget**
1	Mobile health services	Rs. 0.30 crores
2	Infrastructure improvement work in schools	Rs. 0.02 lakh per school x 20 schools= Total Rs. 0.4 crore
3	Drinking water facilities	Rs. 0.50 crores

		4	Protection Eri Muga production done by local people	Rs. 0.20 crores
		5	Plantation at abandoned drill sites	Rs. 0.02 crore per site x 7 sites= Total Rs. 0.14 crore
		6	Repair of local roads	Rs. 0.50 crore
			Grant Total	**Rs. 2.04 crores**
9	Details of solid waste management for Tinsukia district as undertaken by OIL	**CSR Project Undertaken: Rehabilitation of legacy solid waste of Tinsukia municipality"**		
10	Why proceedings of the two PHs conducted at Dibrugarh on 26.08.22 are same; justify	PP clarified the following: As per the EIA notification public hearing should be conducted District wise and in the close proximity to the proposed area of operation. Both the proposals i.e.***Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh Districts under Hugrijan, Naharkatia & Naharkatia Extn, Sapkaint and few parts of Dumduma (Block A&B), Borhat and Moran Extension PMLs*** (Proposal No. IA/AS/IND2/248260/2016; File No.J-11011/388/2016-IA II (I)) and ***Onshore Oil & Gas development drilling and production in Naharkatiya-Deohal-Bogapani-Nagajan area for 294 wells in Dibrugarh & Tinsukia District under Nahorkatiya Extension, Tinsukia Extension, Hugrijan, Chabua, Borhapjan, Dumduma Hugrijan Extension (Proposed) PMLs*** (Proposal no: IA/AS/IND2/246799/2018; ToR No. J-11011/546/2017-IA(I)) are partly		

		overlapping with each other and Duliajan within Tehsil Tengakhat is falling within the overlapping area ofthe proposedprojects inDibrugarh district. The venue of there-Public Hearing was Indian Oil Workers Union Office, Duliajan fallingwithin the overlappingareaofthe projectssites in Dibrugarh District. The same was also clearly mentioned in the news paper advertisement published for Public Hearing on 21.07.2022. Additionally public announcement was also made regarding re-conducting of thePublic Hearing as directed by MoEF&CC. Separate sets of draft EIA reports for each of the project was prepared and shared with concerned Govt. officials and loca residents of the project sites. During the Public hearing, two separate presentations were made for each project one after another. The concerns raised by the Public during the proceeding of the Public Hearing was found to be similar and therefore State Pollution Control Board hasprepared a single common minute. However, thenamesof both the proposed projectswere clearly mentioned in the heading ofthe covering letter (attached as **Appendix-A**) forwarded by Pollution Control Board Assam to MoEF&CC in "Reference Section Sl No. (ii) on 26.08.22 at Indian Oil Workers Union Office,

		Duliajan for Naharkatia-Deohal-Bogapani-Nagajan Block & Jorajan Block".Minutes of there-Public Hearing also mentioned names of the separate Blocks (first page of minutes of Public Hearing for the Jorajan Block provided as **Appendix B**). **The earlier Public Hearing which was held on 06.09.2019 at common venue in the same area forthesame projectsand minutes of themeeting wasalsodiscussed in theearlier 50thEAC Industry-2 meeting heldon 11.02.2022. The proceedings and theminutes of thesame was accepted during thediscussion.However, EACadvisedthe Project Proponent (OilIndiaLimited) to re-conduct the Public Hearingas thesaidPublic Hearing was chaired by an officer below therank of ADC.** Therefore, as directed by the MoEF&CC, re- Public Hearing was conducted on 26.08.2022 at Indian Oil Workers Union Office, Duliajan, Dibrugarh district in a common place and the meeting was chaired by Additional Deputy Commissioner(ADC), Dibrugarh. OIL has earmarked separate budgets in the form of CER for both the projects to be implemented over the course of 2years time from the commencement of the projects.

The Committee noted that AAQ modeling study for point source emissions indicates that the maximum incremental GLCs w.r.t. NOx for the proposed project would be 11.85 µg/m^3, which is in higher side and may have adverse impact on surrounding as most of drilling wells are proposed within 10 km distance of wildlife sanctuary. Accordingly PP shall submit the following:

1. PP shall assess the reasons for high incremental GLCs of NOx and reduce the overall incremental GLC w.r.t. NOx by considering various pollution control measures.
2. Details of court case against the project/proposed block if any.

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. 5

Onshore Oil & Gas development drilling and production in Naharkatiya-Deohal-Bogapani-Nagajan area for 294 wells in Dibrugarh & Tinsukia District under Nahorkatiya Extension, Tinsukia Extension, Hugrijan, Chabua, Borhapjan, Dumdumada Hugrijan Extension by M/s. Oil India Limited – Re-consideration of Environment Clearance

[IA/AS/IND2/246799/2018, J-11011/546/2017-IA(I)]

The proposal was earlier considered by the EAC (Ind-2) in its 05th meeting held during 10.05.2022 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S No.	Date	ADS by MoEF&CC	Reply by PP

1	17.05.22	During deliberations, EAC found that Public Hearing has been conducted by a lower rank officer i.e. Circle Officer and most of the wells fall in ESZ of Dihing Patkai National Park and Bherjan-Borjan-Podumoni Wildlife Sanctuary. PP requested the Committee to consider the no. of wells for grant of EC which are not falling in District Dibrugarh and wells which are outside ESZ of sanctuaries as mentioned. EAC suggested PP to give the same in writing and to clearly give the list (Co-ordinates) of wells which will be considered as above for grant of EC.	Fresh Public Hearing for the project conducted at Dibrugarh district on 26.08.2022. The minutes of PH and action plan submitted OIL has submitted application for NBWL clearance for the wells located within the ESZ of Dihing Patkai National Park and Bherjan-Borjan-Podumoni Wildlife Sanctuary and the proposal no. is FP/AS/MIN/6155/2021. The existing Proposal is pending at: Wildlife Warden.
		Public Hearing in one of the district is chaired by Circle Officer. It was noted that Public Hearing was not conducted in consonance with the EIA Notification, 2006. As per amended Notification dated 9th May, 2022, Public Hearing should be conducted not below the rank of SDM. Therefore, Ministry may take necessary action.	Fresh Public Hearing for the project conducted at Dibrugarh district on 26.08.2022. The minutes of PH and action plan submitted
		Revised CER break up.	Revised CER breakup prepared in line with PH dated 26.08.2022 submitted
		Fresh water requirement shall not exceed 25-30 m^3/day.	Undertaking for requirement of freshwater not exceeding 30m^3/day submitted

		Justification regarding ambient air quality data as discussed in EAC.	Copy of brief justification on ambient air quality monitoring of NDBN block is shared**.**
		Status of NBWL clearance for proposed wells as most of the wells fall in ESZ of Dihing Patkai National Park and Bherjan-Borjan-Podumoni Wildlife Sanctuary.	OIL has submitted application for NBWL clearance and the proposal no. is FP/AS/MIN/6155/2021. The existing Proposal is pending at: Wildlife Warden.
2	01.06.2022	Please comply with the direction issued vide EDS dated 20.05.2022.	Fresh Public Hearing for the project conducted at Dibrugarh district on 26.08.2022. The minutes of PH and action plan submitted

The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA 0177_Rev 01 and validity 30.06.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Onshore Oil & Gas development drilling and production in Naharkatiya-Deohal-Bogapani-Nagajan area for 294 wells in Dibrugarh & Tinsukia District under Nahorkatiya Extension, Tinsukia Extension, Hugrijan, Chabua, Borhapjan, Dumduma Hugrijan Extension located at Villages Hukanpukhuri Tea Estate, Monkhuli, Tingrai, Memorani, Laipuli, Borbil Gaon (Tinsukia district), Chetia Pathar, Hoogrijan, Bordubi, Madhuting,Bokulani, Naohalia (Dibrugarh district), Districts Dibrugarh, Sibsagar and Charaideo, State Assam by M/s. Oil India 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).

The details of products and capacity as under:

S No	Unit	Product/by product	Existing quantity	Proposed Quantity	Total Quantity
1	Wells	Wells	21	294	315
2	Production Installations	Production Installations	0	2	2

Ministry has issued Environmental Clearance to the existing capacity of 22 wells vide J-11011/418/2011 - IA II (I) dated 9th October, 2014. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Guwahati vide vide letter no. RO-NE/E/IA/AS/MI/80/1261-1263 on 06 October 2021. OIL submitted Action Taken report to IRO and IRO provided updated compliance report vide letter no. RO-NE/E/IA/AS/MI/80/1667-1669 on 15 December 2021.

The ToR has been issued by Ministry vide F. no. J-11011/546/2017-IA.II (I) ; 11 Feb 2018. PP was informed that no litigation is pending against the proposal.

Public Hearing for the proposed project had been conducted by the Pollution Control Board of Assam on 26th August 2022 at Indian Oil Workers Union Office, Duliajan, Dibrugarh District and on 13th March 2020 at Sambawana Khetra, Digboi under Digboi Forest Division (JFMC) Assam, Tinsukia District All the Public Hearings were chaired by Additional Deputy Commissioners of respective districts. The main issues raised during the public hearing and their action plan:

Dibrugarh District

Issue in Brief	Action Plan in brief	Budget allocated and timeline
Analysis period of EIA should have been summer and winter phases.	Terms of Reference (ToR) was issued by MoEF&CC on 11.02.2018. As per ToR, one season (non-monsoon) Baseline environmental monitoring data was collected during October-December 2017. As the data was more than three years old, EAC asked to collect additional 15 days of	-

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	environmental monitoring. Fresh Baseline Environmental monitoring was carried out for a period of 15 days during February-March 2022.	
Fund allotted for preservation of animal life is not sufficient.	As part of Wildlife Conservation Plan for Schedule-I species OIL has allotted INR 58 lakhs for the Block. The plan was submitted to the Chief Wildlife Warden, Assam for approval. Once the approval is obtained, necessary budget will be released from OIL.	Budget for Wildlife Conservation Plan for Schedule-I species is INR 58 lakhs
Information on Python vulture and leopard species mentioned in the EIA report need to be verified etc.	Information on vulture, python and other species is presented in the draft report and the data was collected from various reliable websites. The data presented in EIA contains primary surveys as well as secondary information obtained through consultation with Forest department & locals and also from relevant veritable Govt. reports (Forest Management Plans) and research articles. Relevant literature used for reference are mentioned in Section 3.4: Biological Environment Baseline of EIA Report and also included in detailed checklist of fauna presented in Table 3.9- Table 3.12 of the EIA report. The relevant literatures are cited	-

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	below. • *Management plan for Bherjan-Borajan-Padumoni Wildlife Sanctuary* • *Mazedul Islam and Prasanta Kumar Saikia. 2014. A study on the road-kill herpetofauna of Jeypore Reserve Forest, Assam NeBIO I An international journal of environment and biodiversity Vol. 5, No. 1.* • *Soumyadeep Datta. 2014. Dihing Patkai Abhayaranya. Nature's Beckon.* • *Anwaruddin Choudhury. 2009. The Hoolock Gibbon (Hoolock hoolock) in Tinsukia and Dibrugarh districts of Assam, India, Asian Primates Journal 1(2).* • *Right of Passage 2017. Elephant Corridors of India [2nd Edition]. Menon, V, Tiwari, S K, Ramkumar, K, Kyarong, S, Ganguly, U and Sukumar, R (Eds.). Conservation Reference Series No. 3.WIldlife Trust of India, New Delhi.* • *Saikia PK and Devi OS. 2011. A checklist of avian fauna at Jeypore Reserve Forest, eastern Assam, India with special reference to globally threatened and endemic*	

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	species in the Eastern Himalayan biodiversity hotspot. J Threatened Taxa 3 (4): 1711–1718. • *Management Plan- Dehing Patkai Wildlife Sanctuary (2011-12-2015-16)* Presence of pythons in forest areas was reported by the local villagers. Information on python species in the area was obtained from Datta (2014) and also from Management Plan for Dehing Patkai Wildlife Sanctuary (currently Dehing Patkai National Park). Information on the vulture species in the area obtained from study conducted by Saikia and Devi (2011) and also from Management Plan for Dehing Patkai Wildlife Sanctuary (currently Dehing Patkai National Park). Data on Leopard presented in the draft report was collected from various secondary data and community consultations. Common Leopard was reported by the local villagers. Information on common leopard in the area was obtained from Datta (2014) and Management Plan for Bherjan- Borjan Podumoni WLS.	

Issue in Brief	Action Plan in brief	Budget allocated and timeline
Oil spillage related issue of B-2 rig of Oil India	OIL took immediate action to prevent the spillage and also remedial measures to collect the spilled oil and disposed the same following the Hazardous and Other Waste (Management and Transboundary) Rules, 2016. OIL always take preventive measures and follow best practices to avoid/contain any spill of oil as per the Spill Management Plan mentioned in Section 10.1.8 of the EIA report.	Budget for oil spill management included in the drilling budget
Measures to control pollutions	OIL will take measures as per the Air Quality Management Plan, Noise Management Plan, Water Quality Management Plan, Water Quality Management Plan, Soil Quality Management Plan, Municipal Solid Waste and Hazardous Waste Management mentioned in the EMP report to prevent pollution.	Detail of cost breakup of implementation of Environmental Conservation measures for each well would be INR 10.18 lakhs and for each production installation for 1 year would be INR 6.66 lakhs.
Dust pollution during transportation	All the approach roads to the drilling locations and production Installations are made pucca roads to minimise dust generation. As part of Air Quality Management Plan, the following mitigation measures will be undertaken by OIL: • Dust suppression through water sprinkling in the internal unpaved roads • Maintenance of paved	Cost of air quality management plan has been presented as part of EMP

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	internal road and transport route • Ambient Air Quality Monitoring during different phases i.e., site development, drilling and decommissioning. • Stack emission monitoring for DG sets used for drilling.	
Tree plantation to reduce pollution in the area	OIL shall carry out plantation works in the abandoned well sites	Plantation at abandoned drill sites Rs. 2 lakh per site x 10 sites= Total Rs. 20 lakhs
Development of the area	Development of the local area will be done as per Corporate Environment Responsibility (CER) budget based on the PH action plan	• Mobile health services- Rs. 2 lakhs per year for 7 years = Total 14 lakhs • Drinking water facilities Rs. 0.2 lakh per hand pump x 50 pumps= Total Rs. 10 lakhs • Infrastructure improvement work across schools in 10 schools Rs. 1 lakh per school= Total Rs. 10 lakhs • Training support for skill development among women Rs.1 lakh per training program x 5 training programs= Total Rs. 5 lakhs • Industrial training for

Issue in Brief	Action Plan in brief	Budget allocated and timeline
		students Rs. 0.5 lakh per student x 30 selected students = Rs. 15 lakhs • Barricading the abandoned well sites Rs. 1 lakh per well x 20 wells= Total Rs. 20 lakhs • Provision for street light at major traffic intersections Rs. 20 lakhs

Tinsukia District

Issue in Brief	Action Plan in brief	Budget allocated and timeline
Safety of the existing gas gathering centre in the Balijan.	OIL has conducted risk assessment study to take all the safety required. OIL also follows all the guidelines of PCBA and MoEF&CC. OIL has dedicated team for management of pipeline operations. Regular patrols and inspections of pipelines conducted. Pressure testing and inspection of equipment and pipelines conducted regularly.	-
Land mining OIL in forest areas for various purpose.	OIL follows all the guidelines of PCBA and MoEF&CC and take necessary permission prior to its activities	
Proper implementation of	CER activities planned	Total Budget allocated in CER

Issue in Brief	Action Plan in brief	Budget allocated and timeline
CSR activities, like developmental works in Health Services and Schools of the local area.	•Mobile health services= Rs. 2 lakhs per year for 7 years= Total 14 lakhs •Infrastructure improvement work in 30 schools including improvement of latrines Rs. 1 lakh per school x 30 schools= Total Rs. 30 lakhs •Plantation at nearby forest area Rs. 3 lakh per year for 7 years= Total Rs. 14 lakhs •Repair of local roads=Rs. 50 lakhs •Provision for Street light in the area Rs.70 lakhs •Providing fund to locals villagers for construction of household latrines Rs. 0.1 lakh per unit X 100 units per year for 7 years= Rs. 35 lakhs CSR budget will include 2% of profit	activities will be INR 213 lakhs for a period of 7 years
OIL to take adequate measures to balance the ecology and environment of the locality.	OIL is committed to preserve the natural resource and environment. OIL has dedicated team for management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary guidelines from PCBA and MoEF&CC. OIL will also implement conservation plan for protection of wildlife in the area.	0.58 crores for Wildlife Conservation Plan 0.035 crores for greenbelt plantation

Issue in Brief	Action Plan in brief	Budget allocated and timeline
	Greenbelt plantation will also be undertaken at some producing wells	
OIL to contribute for Swachcha Bharat Abhiyan in this locality.	Providing fund to locals villagers for construction of household latrines etc.	Rs. 0.1 lakh per latrine unit X 100 units per year for 7 years= Rs. 35 lakhs
Development in local area through CSR activities like roadways, school development and unskilled employment of the locals.	OIL has planned the following activities as per the CER *viz.* Provision of Mobile health services, infrastructure improvement work in schools including improvement of latrines, plantation at nearby forest area, Repair of local roads, Provision for Street light in the area, Providing fund to locals villagers for construction of household latrines etc.	Total Budget allocated in CER activities will be INR 213 lakhs for a period of 7 years

Total plant area after expansion will be 969 Ha (existing plant area 63 Hectares and additional land required 896 Hectares for proposed capacity). Land for the drill sites will be procured prior to drilling. Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 35000 m^2. The estimated project cost is Rs 9734.60 Crores. Capital cost of EMP would be Rs. 2.45 Crores and recurring cost for EMP would be Rs. 4.61 Crores per annum (which includes CER budget also). Industry proposes to allocate Rs. 3.28 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 180 persons as direct & indirect.

Forest within the NDBN Area include the reserve forests viz. Upper Dehing Reserve Forest, Borjan segment of Bherjan-Borajan-Padumoni Wildlife Sanctuary (BBPWLS). A significant part of the NDBN Area falls within the western part of Upper Dihing Reserved forest. Also the Borajan Segment of

BBPWLS located within the Block, nearest well is located at a distance of 1 km from BBPWLS. Dihing Patkai National Park (DPNP) is located at a distance of 1.7 km from the field boundary at the south-eastern side. Nearest well is located at a distance of 3 km from DPNP. Two Elephant Corridors between Upper Dihing R. F. East and West Blocks at Bogapani and Golai-Powai are located within the NDBN field on the eastern boundary. No wells or production installation locate in forest land. ESZ for DPNP and BBPWLS is not finalized yet. Conservation plan for schedule I species has been submitted to PCCF & Chief Wildlife Warden Assam dated 26.11.2021 and a budget of 0.58 Crores has been earmarked for the same. Buri Dehing River is present within the Block, the nearest well is located at a distance of 0.5 km from Burhi Dehing River.

Ambient air quality monitoring was carried out at 8 locations during 05.10.2017 to 31.12.2017 and the baseline data indicates the ranges of average concentrations as: PM_{10} (57.21-89.50 µg/m^3), $PM_{2.5}$ (30.0-47.29 µg/m^3), SO_2 (5.44-6.43 µg/m^3) and NO_2 (17.4 – 20.93 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 11.73 µg/m^3, 0.48 µg/m^3, 0.06 µg/m^3 and 0.08 µg/m^3 with respect to NOx, SO_2, PM_{10} and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Two weeks air monitoring conducted at the same 8 locations during February 2022 indicate average concentrations of PM_{10}: 57.96-90.25 µg/m^3, $PM_{2.5}$:30.25-47.04 µg/m^3, SO_2:5.84-7.13 µg/m^3 and NO_2:17.63 – 20.98 µg/m^3.

Total fresh water requirement after expansion will be 39 CMD for each well which will be met from groundwater. NOC has been obtained from CGWA vide letter no. CGWA/NOC/MIN/ORIG/2020/9251 dated 10.12.2020. Existing effluent generation is 21.8 CMD (8 CMD domestic wastewater and 13.8 CMD drilling and wash wastewater). Drilling and wash wastewater will be treated through effluent treatment plant. Domestic wastewater will be treated in septic tank and soak pits. The project will be based on Zero Liquid discharge system.

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

Details of Process emissions generation and its management:

- Operation of DG sets,
- Movement of vehicles and machineries during construction and drilling,
- Flaring of natural gas will result in the generation of air pollutants,
- Stacks will be used with DG sets and flare system as per CPCB norms.

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

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

Production Installations:

At the production installation the well fluid would be processed where oil, associated gas and water would be separated. Planned oil storage and handling capacity at each production installation based on anticipated production from proposed drilling wells in vicinity of respective production installations. The formation water generated in production installation would be treated in an ETP and would be reused in the system or injected in water injection/water disposal wells. Flare system shall be installed as per the recommended practices of OISD and CPCB guidelines.

Coordinates of Proposed wells and production installations

S. No.	Well No	Latitude	Longitude
1.	308	27° 25' 16.200" N	95° 14' 16.239" E
2.	309	27° 24' 10.414" N	95° 15' 14.698" E

S. No.	Well No	Latitude	Longitude
3.	310	27° 22' 37.314" N	95° 18' 32.967" E
4.	314	27° 22' 21.243" N	95° 19' 48.572" E
5.	315	27° 23' 8.653" N	95° 17' 4.772" E
6.	316	27° 22' 59.404" N	95° 14' 30.012" E
7.	327	27° 22' 0.320" N	95° 28' 23.130" E
8.	332	27° 22' 14.779" N	95° 24' 9.013" E
9.	333	27° 21' 55.062" N	95° 20' 3.978" E
10.	334	27° 22' 31.480" N	95° 17' 7.290" E
11.	337	27° 23' 16.678" N	95° 17' 56.125" E
12.	340	27° 22' 2.965" N	95° 21' 13.045" E
13.	341	27° 21' 35.322" N	95° 20' 44.004" E
14.	356	27° 22' 2.318" N	95° 23' 17.135" E
15.	359	27° 22' 52.927" N	95° 21' 51.515" E
16.	360	27° 21' 19.637" N	95° 25' 34.399" E
17.	361	27° 21' 45.800" N	95° 23' 21.867" E
18.	362	27° 21' 37.051" N	95° 26' 33.834" E
19.	365	27° 23' 29.743" N	95° 20' 43.573" E
20.	366	27° 21' 34.473" N	95° 22' 33.711" E
21.	367	27° 23' 17.369" N	95° 22' 38.454" E
22.	368	27° 22' 30.075" N	95° 22' 34.441" E
23.	369	27° 23' 9.393" N	95° 16' 33.424" E
24.	370	27° 22' 31.490" N	95° 20' 51.695" E
25.	373	27° 23' 8.664" N	95° 24' 3.759" E
26.	381	27° 23' 57.543" N	95° 17' 34.579" E
27.	399	27° 21' 7.657" N	95° 13' 57.155" E
28.	400	27° 21' 53.577" N	95° 14' 22.518" E
29.	DHC-H	27° 21' 20.751" N	95° 27' 24.581" E
30.	DHU	27° 20' 52.118" N	95° 27' 39.501" E
31.	HSA	27° 22' 31.893" N	95° 19' 5.648" E
32.	HSA	27° 22' 32.480" N	95° 19' 4.720" E
33.	HSY	27° 20' 26.345" N	95° 25' 57.849" E
34.	HSZ	27° 22' 30.160" N	95° 22' 37.051" E
35.	HTA	27° 21' 12.289" N	95° 22' 18.248" E
36.	HTB	27° 20' 31.758" N	95° 23' 41.380" E
37.	HTC	27° 20' 18.224" N	95° 24' 44.801" E
38.	HTD	27° 20' 26.620" N	95° 25' 20.010" E
39.	HUJ	27° 22' 1.245" N	95° 22' 25.798" E
40.	HUK	27° 20' 54.265" N	95° 22' 21.750" E
41.	HUL	27° 20' 26.421" N	95° 22' 44.910" E
42.	HUM	27° 22' 1.267" N	95° 22' 26.442" E
43.	HUN	27° 22' 5.619" N	95° 21' 36.694" E
44.	HWA	27° 21' 35.930" N	95° 13' 54.650" E

S. No.	Well No	Latitude	Longitude
45.	HWY	27° 22' 53.707" N	95° 24' 30.972" E
46.	HXA	27° 21' 54.714" N	95° 26' 2.710" E
47.	HXF	27° 20' 30.730" N	95° 23' 42.250" E
48.	HXG	27° 20' 30.730" N	95° 23' 42.250" E
49.	HYA	27° 22' 6.078" N	95° 21' 36.471" E
50.	HYS	27° 20' 26.060" N	95° 25' 56.970" E
51.	HZD	27° 23' 10.320" N	95° 17' 45.840" E
52.	Loc-401	27° 22' 12.136" N	95° 24' 43.603" E
53.	Loc-501	27° 21' 4.090" N	95° 24' 1.586" E
54.	Loc-502	27° 20' 48.327" N	95° 24' 22.837" E
55.	Loc-507(D)	27° 21' 56.011" N	95° 28' 6.771" E
56.	Loc-B	27° 22' 51.065" N	95° 17' 51.064" E
57.	Loc-H	27° 22' 53.248" N	95° 18' 43.757" E
58.	Loc-I	27° 23' 4.768" N	95° 19' 6.017" E
59.	Loc-J	27° 22' 52.969" N	95° 16' 58.394" E
60.	Loc-K	27° 23' 11.121" N	95° 17' 24.635" E
61.	Loc 101	27° 26' 14.521" N	95° 13' 43.295" E
62.	Loc 102	27° 24' 53.993" N	95° 14' 5.216" E
63.	NKM	27° 20' 35.660" N	95° 19' 16.100" E
64.	NKP	27° 20' 5.942" N	95° 16' 31.476" E
65.	NKQ	27° 21' 38.980" N	95° 18' 16.390" E
66.	NLA	27° 20' 20.590" N	95° 14' 37.860" E
67.	NLB	27° 20' 46.440" N	95° 14' 28.070" E
68.	NLC	27° 20' 20.980" N	95° 14' 36.910" E
69.	NLC-1	27° 20' 20.110" N	95° 14' 37.500" E
70.	NLD	27° 20' 56.110" N	95° 14' 33.450" E
71.	NLI	27° 20' 20.590" N	95° 14' 37.860" E
72.	NLN	27° 21' 39.253" N	95° 18' 16.703" E
73.	NLO	27° 21' 28.814" N	95° 19' 5.505" E
74.	Well-1	27° 23' 11.000" N	95° 17' 48.000" E
75.	Well-11	27° 23' 14.000" N	95° 19' 7.000" E
76.	Well-12	27° 23' 18.000" N	95° 23' 25.000" E
77.	Well-14	27° 20' 58.000" N	95° 22' 19.000" E
78.	Well-15	27° 21' 55.000" N	95° 24' 24.000" E
79.	Well-2	27° 22' 0.000" N	95° 15' 14.000" E
80.	Well-3	27° 21' 25.000" N	95° 14' 50.000" E
81.	Well-4	27° 22' 50.000" N	95° 14' 27.000" E
82.	301	27° 26' 56.820" N	95° 30' 21.790" E
83.	302	27° 25' 4.460" N	95° 28' 24.080" E
84.	303	27° 24' 6.846" N	95° 36' 2.953" E
85.	304	27° 23' 44.774" N	95° 28' 14.020" E
86.	305	27° 24' 52.554" N	95° 26' 25.619" E

S. No.	Well No	Latitude	Longitude
87.	306	27° 26' 5.551" N	95° 20' 12.114" E
88.	307	27° 25' 16.396" N	95° 18' 58.474" E
89.	311	27° 23' 57.497" N	95° 23' 12.157" E
90.	312	27° 23' 47.736" N	95° 25' 36.117" E
91.	313	27° 24' 47.350" N	95° 23' 26.085" E
92.	317	27° 24' 9.690" N	95° 22' 46.950" E
93.	318	27° 24' 9.039" N	95° 19' 49.988" E
94.	319	27° 24' 57.584" N	95° 27' 39.775" E
95.	320	27° 24' 8.036" N	95° 36' 5.387" E
96.	321	27° 26' 52.980" N	95° 31' 50.420" E
97.	322	27° 26' 43.907" N	95° 30' 55.892" E
98.	323	27° 23' 43.690" N	95° 35' 45.360" E
99.	324	27° 22' 57.948" N	95° 25' 16.806" E
100.	325	27° 22' 30.541" N	95° 27' 37.344" E
101.	326	27° 23' 26.960" N	95° 27' 43.200" E
102.	328	27° 26' 48.360" N	95° 31' 49.670" E
103.	329	27° 23' 0.755" N	95° 26' 21.270" E
104.	330	27° 24' 3.185" N	95° 26' 27.107" E
105.	331	27° 24' 25.240" N	95° 27' 38.100" E
106.	336	27° 23' 59.407" N	95° 18' 5.377" E
107.	338	27° 23' 17.993" N	95° 21' 31.112" E
108.	339	27° 23' 48.080" N	95° 21' 51.630" E
109.	342	27° 24' 24.482" N	95° 25' 41.306" E
110.	343	27° 23' 18.760" N	95° 27' 37.900" E
111.	344	27° 25' 5.778" N	95° 28' 48.969" E
112.	345	27° 25' 3.150" N	95° 28' 41.910" E
113.	346	27° 26' 56.620" N	95° 31' 53.130" E
114.	347	27° 24' 11.219" N	95° 36' 5.980" E
115.	348	27° 23' 45.670" N	95° 35' 48.940" E
116.	349	27° 23' 46.740" N	95° 35' 44.377" E
117.	350	27° 27' 38.378" N	95° 31' 44.401" E
118.	351	27° 28' 0.345" N	95° 32' 24.949" E
119.	352	27° 27' 38.509" N	95° 32' 50.248" E
120.	353	27° 27' 7.425" N	95° 32' 9.266" E
121.	354	27° 28' 11.520" N	95° 31' 31.342" E
122.	355	27° 27' 23.985" N	95° 30' 36.418" E
123.	357	27° 26' 53.150" N	95° 31' 35.620" E
124.	358	27° 23' 48.964" N	95° 23' 53.216" E
125.	363	27° 25' 35.140" N	95° 23' 37.240" E
126.	364	27° 24' 33.625" N	95° 22' 54.803" E
127.	371	27° 23' 45.146" N	95° 19' 41.254" E
128.	372	27° 20' 52.060" N	95° 28' 9.870" E

S. No.	Well No	Latitude	Longitude
129.	374	27° 25' 21.152" N	95° 25' 17.905" E
130.	376	27° 23' 41.699" N	95° 26' 44.584" E
131.	377	27° 24' 26.024" N	95° 26' 41.797" E
132.	378	27° 25' 31.614" N	95° 24' 6.494" E
133.	379	27° 26' 38.952" N	95° 20' 40.702" E
134.	380	27° 25' 7.368" N	95° 19' 45.013" E
135.	382	27° 23' 34.778" N	95° 27' 30.884" E
136.	383	27° 25' 54.248" N	95° 27' 33.529" E
137.	384	27° 26' 53.423" N	95° 25' 54.267" E
138.	385	27° 27' 22.333" N	95° 25' 46.865" E
139.	386	27° 27' 34.963" N	95° 26' 42.854" E
140.	387	27° 27' 28.667" N	95° 27' 36.007" E
141.	388	27° 28' 2.805" N	95° 27' 26.918" E
142.	389	27° 28' 21.439" N	95° 26' 28.500" E
143.	390	27° 28' 27.712" N	95° 25' 36.307" E
144.	391	27° 27' 34.240" N	95° 24' 42.307" E
145.	392	27° 27' 42.496" N	95° 23' 19.112" E
146.	393	27° 26' 56.642" N	95° 22' 6.052" E
147.	394	27° 26' 8.720" N	95° 20' 25.480" E
148.	395	27° 25' 33.986" N	95° 19' 52.059" E
149.	396	27° 26' 1.882" N	95° 18' 36.578" E
150.	397	27° 25' 38.237" N	95° 17' 31.380" E
151.	398	27° 25' 7.803" N	95° 15' 57.710" E
152.	CAC	27° 28' 50.587" N	95° 14' 55.985" E
153.	CK	27° 27' 26.717" N	95° 19' 3.000" E
154.	CL	27° 28' 3.983" N	95° 17' 38.346" E
155.	CM	27° 26' 28.331" N	95° 16' 15.981" E
156.	CZ	27° 26' 28.359" N	95° 16' 16.229" E
157.	DHF	27° 28' 48.266" N	95° 28' 52.002" E
158.	DHO	27° 27' 28.884" N	95° 32' 4.536" E
159.	DHV	27° 24' 32.578" N	95° 36' 23.869" E
160.	DHW	27° 24' 35.750" N	95° 36' 26.272" E
161.	HQN	27° 28' 21.993" N	95° 24' 35.234" E
162.	HQQ	27° 26' 10.665" N	95° 27' 53.040" E
163.	HRI	27° 27' 36.441" N	95° 24' 55.891" E
164.	HRO	27° 28' 52.460" N	95° 25' 56.930" E
165.	HRP	27° 28' 35.937" N	95° 26' 57.523" E
166.	HRS-H	27° 27' 42.950" N	95° 26' 28.630" E
167.	HRT	27° 26' 48.274" N	95° 24' 42.345" E
168.	HRV	27° 28' 52.250" N	95° 25' 55.960" E
169.	HRW	27° 28' 54.000" N	95° 26' 13.010" E
170.	HRY	27° 27' 9.700" N	95° 26' 53.000" E

S. No.	Well No	Latitude	Longitude
171.	HRZ	27° 27' 1.026" N	95° 23' 46.718" E
172.	HSU	27° 24' 14.610" N	95° 27' 55.737" E
173.	HTF	27° 25' 27.462" N	95° 27' 18.068" E
174.	HTG	27° 25' 11.796" N	95° 26' 21.281" E
175.	HTO-H	27° 27' 11.138" N	95° 26' 52.928" E
176.	HTP-H	27° 27' 10.650" N	95° 26' 52.990" E
177.	HTQ-H	27° 27' 42.850" N	95° 26' 27.900" E
178.	HTR-H	27° 27' 36.205" N	95° 24' 56.370" E
179.	HTS-H	27° 28' 44.193" N	95° 25' 18.891" E
180.	HTT-H	27° 27' 10.232" N	95° 26' 52.733" E
181.	HTU	27° 28' 44.681" N	95° 25' 18.839" E
182.	HTW	27° 27' 47.857" N	95° 26' 37.439" E
183.	HTZ-H	27° 28' 11.756" N	95° 26' 13.861" E
184.	HUA-H	27° 28' 11.709" N	95° 26' 12.811" E
185.	HUB-H	27° 28' 8.313" N	95° 26' 41.645" E
186.	HUE	27° 25' 38.961" N	95° 26' 41.151" E
187.	HUF	27° 25' 39.870" N	95° 26' 43.042" E
188.	HUG	27° 25' 39.885" N	95° 26' 42.161" E
189.	HUH	27° 25' 40.552" N	95° 26' 43.020" E
190.	HUI	27° 28' 23.331" N	95° 24' 6.788" E
191.	HUO	27° 23' 56.569" N	95° 21' 9.001" E
192.	HUU	27° 27' 0.978" N	95° 23' 47.620" E
193.	HUW	27° 26' 22.688" N	95° 24' 19.123" E
194.	HUX	27° 26' 48.634" N	95° 24' 42.207" E
195.	HVA	27° 28' 20.165" N	95° 24' 35.270" E
196.	HVB	27° 28' 22.109" N	95° 24' 43.018" E
197.	HVC	27° 28' 45.038" N	95° 25' 18.822" E
198.	HVD-H	27° 26' 48.193" N	95° 24' 41.382" E
199.	HVE-H	27° 26' 48.249" N	95° 24' 41.933" E
200.	HVG-H	27° 27' 36.680" N	95° 24' 55.190" E
201.	HVH-H	27° 27' 40.952" N	95° 25' 27.919" E
202.	HVI	27° 28' 7.970" N	95° 23' 32.435" E
203.	HVJ	27° 25' 20.755" N	95° 20' 12.033" E
204.	HVK	27° 25' 31.677" N	95° 17' 27.309" E
205.	HVM	27° 26' 36.416" N	95° 27' 49.826" E
206.	HVN	27° 24' 48.767" N	95° 15' 49.612" E
207.	HVP	27° 27' 36.531" N	95° 24' 56.290" E
208.	HVQ	27° 27' 40.925" N	95° 25' 27.300" E
209.	HVR	27° 28' 22.155" N	95° 24' 42.240" E
210.	HWB	27° 23' 25.422" N	95° 24' 4.008" E
211.	HWC-H	27° 28' 20.651" N	95° 24' 35.331" E
212.	HWE-H	27° 25' 19.816" N	95° 16' 57.809" E

S. No.	Well No	Latitude	Longitude
213.	HWN-H	27° 27' 48.393" N	95° 26' 36.840" E
214.	HWO-H	27° 26' 48.252" N	95° 24' 40.852" E
215.	HWO-H	27° 26' 48.570" N	95° 24' 41.370" E
216.	HWP-H	27° 27' 1.606" N	95° 23' 45.129" E
217.	HWR-H	27° 28' 23.600" N	95° 24' 6.408" E
218.	HWT-H	27° 27' 36.939" N	95° 24' 55.731" E
219.	HWV	27° 25' 20.204" N	95° 16' 57.905" E
220.	HWZ	27° 25' 42.123" N	95° 25' 16.808" E
221.	HXC	27° 21' 53.220" N	95° 28' 12.810" E
222.	HXD	27° 25' 21.170" N	95° 20' 12.450" E
223.	HXE	27° 24' 48.999" N	95° 15' 49.321" E
224.	HXH-H	27° 27' 1.352" N	95° 23' 46.671" E
225.	HXI-H	27° 28' 25.853" N	95° 27' 38.792" E
226.	HXO	27° 25' 54.699" N	95° 15' 30.524" E
227.	HXP	27° 26' 10.244" N	95° 27' 52.972" E
228.	HXT-H	27° 26' 22.682" N	95° 24' 19.123" E
229.	HXU	27° 25' 39.758" N	95° 26' 42.753" E
230.	HXU	27° 25' 39.310" N	95° 26' 41.631" E
231.	HXV	27° 24' 49.616" N	95° 15' 49.349" E
232.	HXW	27° 26' 28.417" N	95° 16' 16.682" E
233.	HXX	27° 25' 21.441" N	95° 16' 57.781" E
234.	HXY	27° 25' 9.569" N	95° 18' 23.512" E
235.	HXZ	27° 25' 9.088" N	95° 18' 23.123" E
236.	HYB	27° 28' 8.080" N	95° 23' 30.680" E
237.	HYC	27° 28' 7.970" N	95° 23' 32.435" E
238.	HYD	27° 28' 7.880" N	95° 23' 33.650" E
239.	HYE	27° 28' 23.956" N	95° 24' 5.750" E
240.	HYF	27° 26' 36.343" N	95° 27' 50.301" E
241.	HYG	27° 28' 2.886" N	95° 27' 59.061" E
242.	HYI	27° 27' 35.671" N	95° 28' 53.551" E
243.	HYJ	27° 25' 12.412" N	95° 27' 55.429" E
244.	HYK	27° 26' 8.938" N	95° 27' 53.369" E
245.	HYL	27° 26' 28.755" N	95° 16' 15.859" E
246.	HYM	27° 23' 10.809" N	95° 27' 39.880" E
247.	HYN	27° 23' 36.007" N	95° 27' 47.721" E
248.	HYO	27° 22' 37.069" N	95° 28' 8.643" E
249.	HYP	27° 21' 53.220" N	95° 28' 12.810" E
250.	HYQ-H	27° 27' 42.851" N	95° 26' 26.502" E
251.	HYR	27° 22' 9.572" N	95° 26' 28.010" E
252.	HYT	27° 23' 39.530" N	95° 21' 13.849" E
253.	HYU	27° 23' 38.971" N	95° 21' 14.281" E
254.	HYV	27° 25' 58.343" N	95° 27' 42.612" E

S. No.	Well No	Latitude	Longitude
255.	HYX	27° 26' 22.585" N	95° 24' 19.460" E
256.	HYY	27° 26' 48.410" N	95° 24' 42.260" E
257.	HYZ-H	27° 28' 23.331" N	95° 24' 6.788" E
258.	HZA-H	27° 26' 58.206" N	95° 24' 10.882" E
259.	HZB	27° 23' 53.625" N	95° 23' 52.298" E
260.	Loc-405	27° 25' 22.083" N	95° 19' 23.701" E
261.	Loc-407	27° 27' 28.293" N	95° 32' 22.754" E
262.	Loc-409	27° 27' 26.493" N	95° 16' 11.226" E
263.	Loc-410	27° 26' 7.234" N	95° 17' 10.389" E
264.	Loc-410A	27° 27' 22.471" N	95° 35' 59.587" E
265.	Loc-411	27° 24' 30.358" N	95° 36' 6.945" E
266.	Loc-413	27° 26' 10.103" N	95° 18' 22.710" E
267.	Loc-508	27° 25' 40.583" N	95° 28' 29.820" E
268.	Loc-509	27° 23' 29.100" N	95° 27' 52.420" E
269.	Loc-509 (D1)	27° 27' 13.083" N	95° 30' 11.231" E
270.	Loc-A	27° 25' 48.480" N	95° 28' 11.295" E
271.	Loc-C	27° 25' 30.701" N	95° 28' 24.725" E
272.	Loc-D	27° 25' 30.701" N	95° 28' 24.725" E
273.	Loc-D10	27° 28' 39.856" N	95° 19' 6.024" E
274.	Loc-E	27° 28' 13.487" N	95° 14' 1.539" E
275.	Loc-F	27° 26' 25.400" N	95° 27' 46.388" E
276.	Loc-G	27° 26' 25.400" N	95° 27' 46.388" E
277.	Loc 103	27° 27' 11.028" N	95° 14' 31.109" E
278.	Loc 104	27° 27' 55.530" N	95° 15' 33.643" E
279.	Loc 105	27° 28' 14.094" N	95° 18' 32.884" E
280.	Loc 106	27° 27' 5.113" N	95° 18' 47.473" E
281.	Loc 107	27° 26' 24.996" N	95° 19' 2.896" E
282.	Loc 108	27° 25' 43.480" N	95° 19' 2.902" E
283.	Loc. 001	27° 26' 41.336" N	95° 17' 30.686" E
284.	THE	27° 23' 40.740" N	95° 21' 13.383" E
285.	Well-10	27° 24' 16.000" N	95° 20' 5.000" E
286.	Well-13	27° 24' 18.000" N	95° 23' 28.000" E
287.	Well-16	27° 23' 1.812" N	95° 27' 37.941" E
288.	Well-17	27° 24' 30.000" N	95° 25' 43.000" E
289.	Well-21	27° 24' 26.443" N	95° 36' 9.723" E
290.	Well-5	27° 25' 17.000" N	95° 15' 17.000" E
291.	Well-6	27° 26' 38.000" N	95° 18' 9.000" E
292.	Well-7	27° 24' 41.000" N	95° 18' 14.000" E
293.	Well-8	27° 24' 52.000" N	95° 19' 21.000" E
294.	Well-9	27° 25' 50.000" N	95° 18' 21.000" E
	Production Installation-1	27° 26' 27.950" N	95° 16' 12.500" E
	Production Installation-2	27° 24' 46.190" N	95° 15' 49.150" E

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Capital Cost in crores	Recurring Cost in Crores /Annum
1.	Wildlife Conservation Plan	-	0.0829
2.	Greenbelt Plan	-	0.0050
3.	EMP Cost Well drilling	-	4.2742
4.	EMP cost production installation	-	0.1332
5.	CER Cost	2.45	0.1186
	Grant Total	**2.45**	**4.6139**

Details of CER with proposed activities and budgetary allocation: Dibrugarh District

S No.	Proposed Activity	Proposed Budget
1.	Plantation at abandoned drill sites	Rs. 2 lakh per site x 10 sites= Total Rs. 20 lakhs
2.	Mobile health services	Rs. 2 lakhs per year for 7 years = Total 14 lakhs
3.	Drinking water facilities	Rs. 0.2 lakh per hand pump x 50 pumps= Total Rs. 10 lakhs
4.	Infrastructure improvement work across schools in 10 schools	Rs. 1 lakh per school= Total Rs. 10 lakhs
5.	Training support for skill development among women	Rs.1 lakh per training program x 5 training programs= Total Rs. 5 lakhs
6.	Industrial training for students	Rs. 0.5 lakh per student x 30 selected students = Rs. 15 lakhs
7.	Barricading the abandoned well sites	Rs. 1 lakh per well x 20 wells= Total Rs. 20 lakhs
8.	Provision for street light at major traffic intersections	Rs. 20 lakhs
	Grant Total	**Rs. 115 lakhs**

Details of CER with proposed activities and budgetary allocation: Tinsukia District

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Rs. 2 lakhs per year for 7 years= Total 14 lakhs
2	Infrastructure improvement work in 30 schools including improvement of latrines	Rs. 1 lakh per school x 30 schools= Total Rs. 30 lakhs
3	Plantation at nearby forest area	Rs. 2 lakhs per year for 7 years= Total Rs. 14 lakhs
4	Repair of local roads	Rs. 50 lakhs
5	Provision for Street light in the area	Rs.70 lakhs
6	Providing fund to locals villagers for construction of household latrines	Rs. 0.1 lakh per unit X 100 units per year for 7 years= Rs. 35 lakhs
	Grant Total	**Rs. 213 lakhs**

During deliberations, EAC discussed following issues:

<table>
<tr><th>S. N.</th><th>Issues Discuss</th><th>Response</th></tr>
<tr><td>1</td><td>Baseline data collected during 2017 indicate higher maximum values for PM and NOx; justify
And why maximum values collected during 2017 were higher compared to the maximum values collected during 2022</td><td>The maximum values collected during 2017 were higher for PM compared to 2022. Monitoring during 2017 conducted on October- December. Most of the higher PM values (beyond NAAQS limits) were obtained during late November to December which represents the winter season in the area. While monitoring conducted during February-March represents the onset of spring in the area. Winter conditions in the area are represented by low wind speeds and lowering of mixing heights in the region which leads to higher atmospheric stability and consequentially a deterioration of air quality in general due to lesser dispersive capacity in the near-to-surface/lower atmospheric layer leading to a buildup /heightened concentrations of gaseous pollutant & PM because of natural reasons.
<table>
<tr><th rowspan="2">Criteria Pollutants</th><th rowspan="2">Unit</th><th colspan="2">2017 data</th><th colspan="2">2022 data</th></tr>
<tr><th>Maximum</th><th>Minimum</th><th>Maximum</th><th>Minimum</th></tr>
<tr><td>PM_{10}</td><td>µg/m^3</td><td>134</td><td>32</td><td>97.5</td><td>52.21</td></tr>
<tr><td>$PM_{2.5}$</td><td>µg/m^3</td><td>68</td><td>14</td><td>53.27</td><td>25.3</td></tr>
</table>
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<table>
<tr><td></td><td></td><td>
<table>
<tr><td>SO_2</td><td>µg/m^3</td><td>8.6</td><td>4</td><td>8.86</td><td>5.24</td></tr>
<tr><td>NO_2</td><td>µg/m^3</td><td>28.5</td><td>10.2</td><td>22.87</td><td>16.1</td></tr>
<tr><td>CO</td><td>mg/m^3</td><td>0.78</td><td>0.12</td><td>0.67</td><td>0.18</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>Modelling results indicate that NOx values are very high. Modelling values to be rechecked</td><td></td></tr>
<tr><td>4</td><td>Undertaking to be provided as no activity for the projects will be conducted within forest areas</td><td>PP informed that no well will be drilled within forest land.</td></tr>
<tr><td>5</td><td>Application submitted to NBWL for Wildlife Clearance to be provided for wells located within 10 km radius of national park or wildlife sanctuary</td><td><u>Wells and production installations within ESZ of protected areas</u>
<table>
<tr><th>Protected areas</th><th>ESZ</th><th>Number of wells/productions installations</th></tr>
<tr><td>Dihing Patkai National Park (DPNP)</td><td>10 km Buffer</td><td>57 wells</td></tr>
<tr><td>Bherjan Borjan Podumoni Wildlife Sanctuary (BBPWLS)</td><td>10 km Buffer</td><td>237 wells and 2 production installations</td></tr>
</table>
*39 wells located within 10 km buffers of both DPNP and BBPWLS

<u>Wells within 10 km of Dihing Patkai National Park</u></td></tr>
</table>

S No.	Name	Latitude	Longitude
1.	DHV	27° 24' 32.578" N	95° 36' 23.869" E
2.	DHW	27° 24' 35.750" N	95° 36' 26.272" E
3.	DHU	27° 20' 52.118" N	95° 27' 39.501" E
4.	DHC-H	27° 21' 20.751" N	95° 27' 24.581" E
5.	303	27° 24' 6.846" N	95° 36' 2.953" E
6.	304	27° 23' 44.774" N	95° 28' 14.020" E
7.	312	27° 23' 47.736" N	95° 25' 36.117" E
8.	320	27° 24' 8.036" N	95° 36' 5.387" E
9.	323	27° 23' 43.690" N	95° 35' 45.360" E
10.	324	27° 22' 57.948" N	95° 25' 16.806" E
11.	325	27° 22' 30.541" N	95° 27' 37.344" E
12.	326	27° 23' 26.960" N	95° 27' 43.200" E
13.	327	27° 22' 0.320" N	95° 28' 23.130" E
14.	329	27° 23' 0.755" N	95° 26' 21.270" E
15.	330	27° 24' 3.185" N	95° 26' 27.107" E
16.	331	27° 24' 25.240" N	95° 27' 38.100" E
17.	332	27° 22' 14.779" N	95° 24' 9.013" E
18.	343	27° 23' 18.760" N	95° 27' 37.900" E
19.	347	27° 24' 11.219" N	95° 36' 5.980" E
20.	348	27° 23' 45.670" N	95° 35' 48.940" E
21.	349	27° 23' 46.740" N	95° 35' 44.377" E
22.	356	27° 22' 2.318" N	95° 23' 17.135"

			E
23.	360	27° 21' 19.637" N	95° 25' 34.399" E
24.	361	27° 21' 45.800" N	95° 23' 21.867" E
25.	362	27° 21' 37.051" N	95° 26' 33.834" E
26.	372	27° 20' 52.060" N	95° 28' 9.870" E
27.	376	27° 23' 41.699" N	95° 26' 44.584" E
28.	382	27° 23' 34.778" N	95° 27' 30.884" E
29.	Well-14	27° 20' 58.000" N	95° 22' 19.000" E
30.	Well-15	27° 21' 55.000" N	95° 24' 24.000" E
31.	Well-16	27° 23' 1.812" N	95° 27' 37.941" E
32.	Well-21	27° 24' 26.443" N	95° 36' 9.723" E
33.	HTA	27° 21' 12.289" N	95° 22' 18.248" E
34.	HTB	27° 20' 31.758" N	95° 23' 41.380" E
35.	HSU	27° 24' 14.610" N	95° 27' 55.737" E
36.	HTC	27° 20' 18.224" N	95° 24' 44.801" E
37.	HSY	27° 20' 26.345" N	95° 25' 57.849" E
38.	HUK	27° 20' 54.265" N	95° 22' 21.750" E
39.	HUL	27° 20' 26.421" N	95° 22' 44.910" E
40.	HWY	27° 22' 53.707" N	95° 24' 30.972" E
41.	HXA	27° 21' 54.714" N	95° 26' 2.710" E
42.	HYM	27° 23' 10.809" N	95° 27' 39.880" E
43.	HYR	27° 22' 9.572" N	95° 26' 28.010" E
44.	HYO	27° 22' 37.069"	95° 28' 8.643" E

		N	
45.	HXG	27° 20' 30.730" N	95° 23' 42.250" E
46.	HXF	27° 20' 30.730" N	95° 23' 42.250" E
47.	HXC	27° 21' 53.220" N	95° 28' 12.810" E
48.	HYP	27° 21' 53.220" N	95° 28' 12.810" E
49.	Loc-509	27° 23' 29.100" N	95° 27' 52.420" E
50.	HYN	27° 23' 36.007" N	95° 27' 47.721" E
51.	HTD	27° 20' 26.620" N	95° 25' 20.010" E
52.	HYS	27° 20' 26.060" N	95° 25' 56.970" E
53.	Loc-401	27° 22' 12.136" N	95° 24' 43.603" E
54.	Loc-411	27° 24' 30.358" N	95° 36' 6.945" E
55.	Loc-501	27° 21' 4.090" N	95° 24' 1.586" E
56.	Loc-502	27° 20' 48.327" N	95° 24' 22.837" E
57.	Loc-507(D)	27° 21' 56.011" N	95° 28' 6.771" E

Wells and Production installations within 10 km of Bherjan-Borajan-Podumoni Wildlife Sanctuary

S No	Name	Latitude	Longitude
	HZA-H	27° 26' 58.206" N	95° 24' 10.882" E
	HXU	27° 25' 39.758" N	95° 26' 42.753" E
	HYC	27° 28' 7.970" N	95° 23' 32.435" E
	HXT-H	27° 26' 22.682" N	95° 24' 19.123" E
	NLN	27° 21' 39.253" N	95° 18' 16.703" E
	HYZ-H	27° 28'	95° 24'

	23.331" N	6.788" E
302	27° 25' 4.460" N	95° 28' 24.080" E
305	27° 24' 52.554" N	95° 26' 25.619" E
306	27° 26' 5.551" N	95° 20' 12.114" E
307	27° 25' 16.396" N	95° 18' 58.474" E
309	27° 24' 10.414" N	95° 15' 14.698" E
310	27° 22' 37.314" N	95° 18' 32.967" E
311	27° 23' 57.497" N	95° 23' 12.157" E
312	27° 23' 47.736" N	95° 25' 36.117" E
313	27° 24' 47.350" N	95° 23' 26.085" E
314	27° 22' 21.243" N	95° 19' 48.572" E
315	27° 23' 8.653" N	95° 17' 4.772" E
317	27° 24' 9.690" N	95° 22' 46.950" E
318	27° 24' 9.039" N	95° 19' 49.988" E
319	27° 24' 57.584" N	95° 27' 39.775" E
324	27° 22' 57.948" N	95° 25' 16.806" E
325	27° 22' 30.541" N	95° 27' 37.344" E
326	27° 23' 26.960" N	95° 27' 43.200" E
329	27° 23' 0.755" N	95° 26' 21.270" E
330	27° 24' 3.185" N	95° 26' 27.107" E
331	27° 24' 25.240" N	95° 27' 38.100" E
332	27° 22' 14.779" N	95° 24' 9.013" E
333	27° 21'	95° 20'

			55.062" N	3.978" E
		334	27° 22' 31.480" N	95° 17' 7.290" E
		336	27° 23' 59.407" N	95° 18' 5.377" E
		337	27° 23' 16.678" N	95° 17' 56.125" E
		338	27° 23' 17.993" N	95° 21' 31.112" E
		339	27° 23' 48.080" N	95° 21' 51.630" E
		340	27° 22' 2.965" N	95° 21' 13.045" E
		341	27° 21' 35.322" N	95° 20' 44.004" E
		342	27° 24' 24.482" N	95° 25' 41.306" E
		343	27° 23' 18.760" N	95° 27' 37.900" E
		356	27° 22' 2.318" N	95° 23' 17.135" E
		358	27° 23' 48.964" N	95° 23' 53.216" E
		359	27° 22' 52.927" N	95° 21' 51.515" E
		360	27° 21' 19.637" N	95° 25' 34.399" E
		361	27° 21' 45.800" N	95° 23' 21.867" E
		362	27° 21' 37.051" N	95° 26' 33.834" E
		363	27° 25' 35.140" N	95° 23' 37.240" E
		364	27° 24' 33.625" N	95° 22' 54.803" E
		365	27° 23' 29.743" N	95° 20' 43.573" E
		366	27° 21' 34.473" N	95° 22' 33.711" E
		367	27° 23' 17.369" N	95° 22' 38.454" E
		368	27° 22' 30.075" N	95° 22' 34.441" E
		369	27° 23'	95° 16'

			9.393" N	33.424" E
		370	27° 22' 31.490" N	95° 20' 51.695" E
		371	27° 23' 45.146" N	95° 19' 41.254" E
		373	27° 23' 8.664" N	95° 24' 3.759" E
		374	27° 25' 21.152" N	95° 25' 17.905" E
		376	27° 23' 41.699" N	95° 26' 44.584" E
		377	27° 24' 26.024" N	95° 26' 41.797" E
		378	27° 25' 31.614" N	95° 24' 6.494" E
		379	27° 26' 38.952" N	95° 20' 40.702" E
		380	27° 25' 7.368" N	95° 19' 45.013" E
		381	27° 23' 57.543" N	95° 17' 34.579" E
		382	27° 23' 34.778" N	95° 27' 30.884" E
		383	27° 25' 54.248" N	95° 27' 33.529" E
		384	27° 26' 53.423" N	95° 25' 54.267" E
		385	27° 27' 22.333" N	95° 25' 46.865" E
		386	27° 27' 34.963" N	95° 26' 42.854" E
		387	27° 27' 28.667" N	95° 27' 36.007" E
		388	27° 28' 2.805" N	95° 27' 26.918" E
		389	27° 28' 21.439" N	95° 26' 28.500" E
		390	27° 28' 27.712" N	95° 25' 36.307" E
		391	27° 27' 34.240" N	95° 24' 42.307" E
		392	27° 27' 42.496" N	95° 23' 19.112" E
		393	27° 26'	95° 22'

			56.642" N	6.052" E
		394	27° 26' 8.720" N	95° 20' 25.480" E
		395	27° 25' 33.986" N	95° 19' 52.059" E
		396	27° 26' 1.882" N	95° 18' 36.578" E
		397	27° 25' 38.237" N	95° 17' 31.380" E
		398	27° 25' 7.803" N	95° 15' 57.710" E
		Well-1	27° 23' 11.000" N	95° 17' 48.000" E
		Well-5	27° 25' 17.000" N	95° 15' 17.000" E
		Well-6	27° 26' 38.000" N	95° 18' 9.000" E
		Well-7	27° 24' 41.000" N	95° 18' 14.000" E
		Well-8	27° 24' 52.000" N	95° 19' 21.000" E
		Well-9	27° 25' 50.000" N	95° 18' 21.000" E
		Well-10	27° 24' 16.000" N	95° 20' 5.000" E
		Well-11	27° 23' 14.000" N	95° 19' 7.000" E
		Well-12	27° 23' 18.000" N	95° 23' 25.000" E
		Well-13	27° 24' 18.000" N	95° 23' 28.000" E
		Well-14	27° 20' 58.000" N	95° 22' 19.000" E
		Well-15	27° 21' 55.000" N	95° 24' 24.000" E
		Well-16	27° 23' 1.812" N	95° 27' 37.941" E
		Well-17	27° 24' 30.000" N	95° 25' 43.000" E
		Loc-B	27° 22' 51.065" N	95° 17' 51.064" E
		Loc-C	27° 25' 30.701" N	95° 28' 24.725" E
		Loc-D	27° 25'	95° 28'

			30.701" N	24.725" E
		Loc-F	27° 26' 25.400" N	95° 27' 46.388" E
		Loc-G	27° 26' 25.400" N	95° 27' 46.388" E
		Loc-H	27° 22' 53.248" N	95° 18' 43.757" E
		Loc-I	27° 23' 4.768" N	95° 19' 6.017" E
		Loc-J	27° 22' 52.969" N	95° 16' 58.394" E
		Loc-K	27° 23' 11.121" N	95° 17' 24.635" E
		HUE	27° 25' 38.961" N	95° 26' 41.151" E
		HUG	27° 25' 39.885" N	95° 26' 42.161" E
		HUH	27° 25' 40.552" N	95° 26' 43.020" E
		HUF	27° 25' 39.870" N	95° 26' 43.042" E
		HXU	27° 25' 39.310" N	95° 26' 41.631" E
		HYL	27° 26' 28.755" N	95° 16' 15.859" E
		HXV	27° 24' 49.616" N	95° 15' 49.349" E
		HXE	27° 24' 48.999" N	95° 15' 49.321" E
		HXW	27° 26' 28.417" N	95° 16' 16.682" E
		HSZ	27° 22' 30.160" N	95° 22' 37.051" E
		HTA	27° 21' 12.289" N	95° 22' 18.248" E
		HTB	27° 20' 31.758" N	95° 23' 41.380" E
		THE	27° 23' 40.740" N	95° 21' 13.383" E
		HSU	27° 24' 14.610" N	95° 27' 55.737" E
		HTF	27° 25' 27.462" N	95° 27' 18.068" E
		HTG	27° 25'	95° 26'

			11.796" N	21.281" E
		HWB	27° 23' 25.422" N	95° 24' 4.008" E
		HTC	27° 20' 18.224" N	95° 24' 44.801" E
		HSY	27° 20' 26.345" N	95° 25' 57.849" E
		HUO	27° 23' 56.569" N	95° 21' 9.001" E
		HUK	27° 20' 54.265" N	95° 22' 21.750" E
		CM	27° 26' 28.331" N	95° 16' 15.981" E
		HUN	27° 22' 5.619" N	95° 21' 36.694" E
		HUM	27° 22' 1.267" N	95° 22' 26.442" E
		HUJ	27° 22' 1.245" N	95° 22' 25.798" E
		HWV	27° 25' 20.204" N	95° 16' 57.905" E
		CK	27° 27' 26.717" N	95° 19' 3.000" E
		HUL	27° 20' 26.421" N	95° 22' 44.910" E
		HVN	27° 24' 48.767" N	95° 15' 49.612" E
		HVJ	27° 25' 20.755" N	95° 20' 12.033" E
		HWE-H	27° 25' 19.816" N	95° 16' 57.809" E
		HVK	27° 25' 31.677" N	95° 17' 27.309" E
		HXD	27° 25' 21.170" N	95° 20' 12.450" E
		HXY	27° 25' 9.569" N	95° 18' 23.512" E
		HXZ	27° 25' 9.088" N	95° 18' 23.123" E
		HXX	27° 25' 21.441" N	95° 16' 57.781" E
		HWY	27° 22' 53.707" N	95° 24' 30.972" E
		HYA	27° 22'	95° 21'

			6.078" N	36.471" E
		HXA	27° 21' 54.714" N	95° 26' 2.710" E
		HYM	27° 23' 10.809" N	95° 27' 39.880" E
		HYT	27° 23' 39.530" N	95° 21' 13.849" E
		HYU	27° 23' 38.971" N	95° 21' 14.281" E
		HYR	27° 22' 9.572" N	95° 26' 28.010" E
		HTR-H	27° 27' 36.205" N	95° 24' 56.370" E
		HTT-H	27° 27' 10.232" N	95° 26' 52.733" E
		HRP	27° 28' 35.937" N	95° 26' 57.523" E
		HTP-H	27° 27' 10.650" N	95° 26' 52.990" E
		HUA-H	27° 28' 11.709" N	95° 26' 12.811" E
		HTO-H	27° 27' 11.138" N	95° 26' 52.928" E
		HYQ-H	27° 27' 42.851" N	95° 26' 26.502" E
		HUB-H	27° 28' 8.313" N	95° 26' 41.645" E
		HQQ	27° 26' 10.665" N	95° 27' 53.040" E
		HVM	27° 26' 36.416" N	95° 27' 49.826" E
		HTW	27° 27' 47.857" N	95° 26' 37.439" E
		HXI-H	27° 28' 25.853" N	95° 27' 38.792" E
		HXP	27° 26' 10.244" N	95° 27' 52.972" E
		HYG	27° 28' 2.886" N	95° 27' 59.061" E
		HYK	27° 26' 8.938" N	95° 27' 53.369" E
		HYF	27° 26' 36.343" N	95° 27' 50.301" E
		HYJ	27° 25'	95° 27'

			12.412" N	55.429" E
		HYV	27° 25' 58.343" N	95° 27' 42.612" E
		HRI	27° 27' 36.441" N	95° 24' 55.891" E
		HTU	27° 28' 44.681" N	95° 25' 18.839" E
		HRZ	27° 27' 1.026" N	95° 23' 46.718" E
		HTS-H	27° 28' 44.193" N	95° 25' 18.891" E
		HTZ-H	27° 28' 11.756" N	95° 26' 13.861" E
		HRT	27° 26' 48.274" N	95° 24' 42.345" E
		HVH-H	27° 27' 40.952" N	95° 25' 27.919" E
		HVG-H	27° 27' 36.680" N	95° 24' 55.190" E
		HVA	27° 28' 20.165" N	95° 24' 35.270" E
		HVE-H	27° 26' 48.249" N	95° 24' 41.933" E
		HVC	27° 28' 45.038" N	95° 25' 18.822" E
		HVP	27° 27' 36.531" N	95° 24' 56.290" E
		HWC-H	27° 28' 20.651" N	95° 24' 35.331" E
		HVD-H	27° 26' 48.193" N	95° 24' 41.382" E
		HUX	27° 26' 48.634" N	95° 24' 42.207" E
		HVB	27° 28' 22.109" N	95° 24' 43.018" E
		HVR	27° 28' 22.155" N	95° 24' 42.240" E
		HUW	27° 26' 22.688" N	95° 24' 19.123" E
		HUU	27° 27' 0.978" N	95° 23' 47.620" E
		HWP-H	27° 27' 1.606" N	95° 23' 45.129" E
		HXH-H	27° 27'	95° 23'

			1.352" N	46.671" E
		HYE	27° 28' 23.956" N	95° 24' 5.750" E
		HYX	27° 26' 22.585" N	95° 24' 19.460" E
		HYY	27° 26' 48.410" N	95° 24' 42.260" E
		HSA	27° 22' 31.893" N	95° 19' 5.648" E
		HWN-H	27° 27' 48.393" N	95° 26' 36.840" E
		HQN	27° 28' 21.993" N	95° 24' 35.234" E
		HUI	27° 28' 23.331" N	95° 24' 6.788" E
		HVQ	27° 27' 40.925" N	95° 25' 27.300" E
		HWO-H	27° 26' 48.252" N	95° 24' 40.852" E
		HVI	27° 28' 7.970" N	95° 23' 32.435" E
		HWR-H	27° 28' 23.600" N	95° 24' 6.408" E
		HWT-H	27° 27' 36.939" N	95° 24' 55.731" E
		HYB	27° 28' 8.080" N	95° 23' 30.680" E
		HYD	27° 28' 7.880" N	95° 23' 33.650" E
		NKQ	27° 21' 38.980" N	95° 18' 16.390" E
		HSA	27° 22' 32.480" N	95° 19' 4.720" E
		NKM	27° 20' 35.660" N	95° 19' 16.100" E
		HXG	27° 20' 30.730" N	95° 23' 42.250" E
		HXF	27° 20' 30.730" N	95° 23' 42.250" E
		HZD	27° 23' 10.320" N	95° 17' 45.840" E
		HRV	27° 28' 52.250" N	95° 25' 55.960" E
		HRO	27° 28'	95° 25'

				52.460" N	56.930" E
			HRW	27° 28' 54.000" N	95° 26' 13.010" E
			HWO-H	27° 26' 48.570" N	95° 24' 41.370" E
			HRS-H	27° 27' 42.950" N	95° 26' 28.630" E
			HRY	27° 27' 9.700" N	95° 26' 53.000" E
			HTQ-H	27° 27' 42.850" N	95° 26' 27.900" E
			Loc-509	27° 23' 29.100" N	95° 27' 52.420" E
			Loc-409	27° 27' 26.493" N	95° 16' 11.226" E
			Loc-508	27° 25' 40.583" N	95° 28' 29.820" E
			Loc-A	27° 25' 48.480" N	95° 28' 11.295" E
			CZ	27° 26' 28.359" N	95° 16' 16.229" E
			HYN	27° 23' 36.007" N	95° 27' 47.721" E
			CL	27° 28' 3.983" N	95° 17' 38.346" E
			HWZ	27° 25' 42.123" N	95° 25' 16.808" E
			HXO	27° 25' 54.699" N	95° 15' 30.524" E
			HZB	27° 23' 53.625" N	95° 23' 52.298" E
			NLO	27° 21' 28.814" N	95° 19' 5.505" E
			HTD	27° 20' 26.620" N	95° 25' 20.010" E
			HYS	27° 20' 26.060" N	95° 25' 56.970" E
			Loc 105	27° 28' 14.094" N	95° 18' 32.884" E
			Loc 106	27° 27' 5.113" N	95° 18' 47.473" E
			Loc 107	27° 26' 24.996" N	95° 19' 2.896" E
			Loc 108	27° 25'	95° 19'

				43.480" N	2.902" E
		2	Loc. 001	27° 26' 41.336" N	95° 17' 30.686" E
		2	Loc-D10	27° 28' 39.856" N	95° 19' 6.024" E
		2	Loc-405	27° 25' 22.083" N	95° 19' 23.701" E
		2	Loc-410	27° 26' 7.234" N	95° 17' 10.389" E
		2	Loc-413	27° 26' 10.103" N	95° 18' 22.710" E
		2	Loc-401	27° 22' 12.136" N	95° 24' 43.603" E
		2	Loc-501	27° 21' 4.090" N	95° 24' 1.586" E
		2	Loc-502	27° 20' 48.327" N	95° 24' 22.837" E
		2	CAC	27° 28' 50.587" N	95° 14' 55.985" E
		2	Loc-E	27° 28' 13.487" N	95° 14' 1.539" E
		2	Loc 104	27° 27' 55.530" N	95° 15' 33.643" E
			Production Installation-1	27° 26' 27.950" N	95° 16' 12.500" E
			Production Installation-2	27° 24' 46.190" N	95° 15' 49.150" E

6	Details of the following to be shared for drilling, post drilling and operation of production facilities iv. Flaring details and manag ement,	**i. Flaring management:** In normal conditions, flaring won't be carried out at drilling locations/ site. Hydrocarbon produced/extracted will be sent to nearby production installations/ Group Gathering stations with adequate facility for flaring of the Low Pressure gas like enclosed ground flare/ Non-luminous flare systems as per the prevailing norms of OMR-2017 & OISD guidelines. ii. Formation/Produced water will be treated in the production installation to meet the parameters as per MoEF standards for Effluent disposal and the treated formation/ produced water will be

	v. Produced water treatment plan, what is the current capacity of ETP and what additional capacity is proposed? Where ETP will be located? vi. where would be the injection wells located? DG sets emission management	disposed off in disposal wells located in the vicinity of the production installation. Formation/produced water will be treated through: d) Mobile ETP(s). e) Central ETP of capacity 5000 KLD at Tengakhat. f) ETP of capacity 7200 KLD at Madhuban. iii. Water injection wells will be planned within a production facility to inject excess ETP treated water from the production installation. It is planned to develop 2 new water injection wells at 2 production installations. Water injection wells will be drilled once the installations are in operation. iv. DG sets at the drilling locations and Production Installations will be provided with adequate stack height based on the capacity of the DG sets as per the CPCB guidelines and regular monitoring of the stack gas emissions will be carried out. A gas pipeline of 400 mm diameter and 17 km length would be laid connecting Jorajan OCS to OCS-3. Additionally assorted oil and gas pipelines 50 mm-300 mm in diameter would be laid in the Block with the total length of 40 kms. These pipelines will be laid approximately 1.5 m below the ground and land will not be acquired for them. A Right of Use (RoU) of 10m will be maintained by OIL and adequate compensation will be paid to the landowners for the RoU.
7	Nearest waterbody from the wells and production installations to be provided	• Nearest well is located 0.5 km from Burhi Dehing River • Nearest production installation is 0.5 km from waterbody.
8	CER plan budget to be	Revised CER plans for the three districts Dibrugarh, Charaideo and Tinsukia is presented below;

	increased to 10 crore	The Total CER budget for the three districts considered as Rs. 10.087 crores. CER budget for Dibrugarh district is planned as Rs. 6.847 crores; budget for Tinsukia district considered as Rs. 1.2 crores.

Dibrugarh District

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Rs. 0.5 crores per year for 2 years = Total Rs. 1 crore
2	Drinking water facilities	Rs. 0.005 crore per hand pump x 100 pumps= Total Rs. 0.5 crore
3	Infrastructure improvement work across schools in 50 schools	Rs. 0.02 crore per school x 80 schools = Total Rs. 1.6 crore
4	Training support for skill development among women	Rs. 0.01 crore per training program x 10 training programs in 2 years = Total Rs. 0.1 crores
5	Industrial training for students	Rs. 0.005 crore per student x 100 selected students = Rs. 0.5 crore
6	Barricading the abandoned well sites	Rs. 0.001 crores per well x 7 wells= Total Rs. 0.007 crores
7	Provision for street light at major traffic intersections	Rs. 1 crore
8	Plantation at abandoned drill sites	Rs. 0.02 crore per site x 7 sites= Total Rs. 0.14 crore
9	Repair of roads in the area	Rs. 1 crore per year for 2 years= 2 crores
	Grant Total	**Rs. 6.847 crores**

Tinsukia District

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Rs. 0.20 crores

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>2</td><td>Infrastructure improvement work in 10 schools including improvement of latrines</td><td>Rs. 0.02 lakh per school x 10 schools= Total Rs. 0.2 crore</td></tr>
<tr><td>3</td><td>Plantation at nearby forest area</td><td>Rs. 0.05 crore per year for 2 years= Total Rs. 0.10 crore</td></tr>
<tr><td>4</td><td>Repair of local roads</td><td>Rs. 0.3 crore</td></tr>
<tr><td>5</td><td>Provision for Street light in the area</td><td>Rs. 0.2 crore</td></tr>
<tr><td>6</td><td>Providing fund to locals villagers for construction of household latrines</td><td>Rs. 0.01 crore per unit X 20 units= Rs. 0.2 crore</td></tr>
<tr><td></td><td>Grant Total</td><td>Rs. 1.2 crores</td></tr>
</table>
</td></tr>
<tr><td>9</td><td>Details of solid waste management for Tinsukia district as undertaken by OIL</td><td>CSR Project Undertaken: Rehabilitation of legacy solid waste of Tinsukia municipality”</td></tr>
<tr><td>10</td><td>Why proceedings of the two PHs conducted at Dibrugarh on 26.08.22 are same; justify</td><td>PP clarified the following:
As per the EIA notification public hearing should be conducted District wise and in the close proximity to the proposed area of operation.

Both the proposals i.e.Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh Districts under Hugrijan, Naharkatia & Naharkatia Extn, Sapkaint and few parts of Dumduma (Block A&B), Borhat and Moran Extension PMLs (Proposal No. IA/AS/IND2/248260/2016; File No.J-11011/388/2016-IA II (I)) and Onshore Oil & Gas development drilling and production in Naharkatiya-Deohal-Bogapani-Nagajan area for 294 wells in</td></tr>
</table>

		Dibrugarh & Tinsukia District under Nahorkatiya Extension, Tinsukia Extension, Hugrijan, Chabua, Borhapjan, Dumduma Hugrijan Extension (Proposed) PMLs (Proposal no: IA/AS/IND2/246799/2018; ToR No. J-11011/546/2017-IA(I)) are partly overlapping with each other and Duliajan within Tehsil Tengakhat is falling within the overlapping area ofthe proposedprojects inDibrugarh district. The venue of there-Public Hearing was Indian Oil Workers Union Office, Duliajan fallingwithin the overlapping area of the projects sites in Dibrugarh District. The same was also clearly mentioned in the news paper advertisement published for Public Hearing on 21.07.2022. Additionally public announcement was also made regarding re-conducting of thePublic Hearing as directed by MoEF&CC. Separate sets of draft EIA reports for each of the project was prepared and shared with concerned Govt. officials and loca residents of the project sites. During the Public hearing, two separate presentations were made for each project one after another. The concerns raised by the Public during the proceeding of the Public Hearing was found to be similar and therefore State Pollution Control Board hasprepared a single common minute. However, thenamesof both the proposed projectswere clearly mentioned in

		the heading ofthe covering letter (attached as **Appendix-A**) forwarded by Pollution Control Board Assam to MoEF&CC in "Reference Section Sl No. (ii) on 26.08.22 at Indian Oil Workers Union Office, Duliajan for Naharkatia-Deohal-Bogapani-Nagajan Block & Jorajan Block".Minutes of there-Public Hearing also mentioned names of the separate Blocks (first page of minutes of Public Hearing for the Jorajan Block provided as **Appendix B**). **The earlier Public Hearing which was held on 06.09.2019 at common venue in the same area forthesame projectsand minutes of themeeting wasalsodiscussed in theearlier 50thEAC Industry-2 meeting heldon 11.02.2022. The proceedings and theminutes of thesame was accepted during thediscussion.However, EAC advisedthe Project Proponent (OilIndiaLimited) to re-conduct the Public Hearingas thesaidPublic Hearing was chaired by an officer below therank of ADC.** Therefore, as directed by the MoEF&CC, re-Public Hearing was conducted on 26.08.2022 at Indian Oil Workers Union Office, Duliajan, Dibrugarh district in a common place and the meeting was chaired by Additional Deputy Commissioner(ADC), Dibrugarh. OIL has earmarked separate budgets in the form of CER for both the projects to be implemented over the course of 2years time from the commencement of the projects.

The Committee noted that AAQ modeling study for point source emissions indicates that the maximum incremental GLCs w.r.t. NOx for the proposed project would be 11.73 µg/m^3, which is in higher side and may have adverse impact on surrounding as most of drilling wells are proposed within 10 km distance of wildlife sanctuary. Accordingly PP shall submit the following:

1. PP shall assess the reasons for high incremental GLCs of NOx and reduce the overall incremental GLC w.r.t. NOx by considering various pollution control measures.
2. Details of court case against the project/proposed block if any.

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. 06

Greenfield project of 100 KLPD Grain-based Ethanol Plant along with 3 MW Co-generation Power Plant by M/s. Mangal Synthesis Private Limited at 37, 38/1, & 38/2 Village Jaisingpura, District-Neemuch, Madhya Pradesh- Re-consideration of Environmental Clearance.

[IA/MP/IND2/ 410769/2022, IA-J-11011/433/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its EAC meeting ID: IA/IND2/13414/09/01/2023 and IA/IND2/13448/23/02/2023 held on 09th -10th January, 2023 and 23rd February 2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S.No	ADS by MOEFCC	Reply of PP
1.	PP shall submit revised layout map showing inventory of existing trees along with revised plantation scheme.	The revised Layout Map has been revised as per the instructions received from the committee. We have proposed 3 rows plantation with existing trees present at the project site. The revised layout

		plant for the same has been submitted by PP on 02.03.2023.
2.	PP shall submit stack height justification. PP has submitted the calculation of the stack height.	Stack height justification has been submitted by the PP on 02.03.2023.
3.	PP shall submit Revised CER details. Revised CER details are submitted by PP.	The company has earmarked 165 Lakhs, based on needs identified during the social survey. Revised CER has been submitted by PP on 02.03.2023 by PP.
4.	PP shall submit rain water harvesting calculation.	Rain Water Harvesting Calculation is submitted on 02.03.2023
5.	PP shall commit that approach road from Industry to nearest State Highway/National Highway will be maintained by the Industry.	The undertaking has been submitted on 02.03.2023 by PP.

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. Envisolve LLP (NABET certificate no. NABET/EIA/2124/IA0088 and validity 19/08/2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100 KLPD Grain based Ethanol Plant & 3 MW Co-generation power plant (Rice Husk) located at Survey No. 37, 38/1, & 38/2, Village Jaisingpura, Tehsil- Neemuch, District Neemuch, State MP by M/s. Mangal Synthesis Private 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:

S. No	Name of unit	Name of the product/by-product	Production capacity
1.	Distillery (Raw material-Grains such as rice and maize)	Ethanol	100 KLPD
2.	Co-generation powerplant	Power	3 MW
3.	DWGS dryer	DDGS	50 TPD
4.	Fermentation unit	Carbon Di-Oxide	55 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 there is no litigation is pending against the project.

Total land area required is 4.913 hectares. Greenbelt will be developed in total area of 1.62 hectares i.e., 33.03% of total project area. The estimated project cost is Rs. 110 Crores. Capital cost of EMP would be Rs. 14.85 Crores and recurring cost for EMP would be Rs. 1.78 Crores per annum. Industry proposes to allocate Rs. 1.65 Crores towards Extended EMP (Corporate Environment Responsibility). Total employment will 150 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. No Reserve forests/protected forests, No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. from project site. No Eco sensitive around the boundary. Water bodies: River Retum is at a distance of 0.67 Km in North West direction and Jaju Sagar Dam is at distance of 9.29 Km in South East direction. River Retum is at a distance of 0.67 Km for which, PP has received the NOC for proximity of river vide letter No. 2473/work/IA/2022 date 20.09.2022 from WRD.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.81 $\mu g/m^3$, 3.71 $\mu g/m^3$ and 1.87 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 400 m^3/day which will be met from River Retum. Application has been submitted to WRD dated 12.09.2022.Effluent (Condensate/spent lees/blowdown etc.) of 602 m^3 /day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 KLPD.Raw stillage (626 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.

Power requirement will be 2.6 MW and will be met from proposed 3 MW cogeneration power plant. 25 TPH Rice husk fired boiler will Be installed. Bag filter with a stack height of 45m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm for the proposed boiler. 2 DG sets of 500 kVA each 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

- APCE Bag filter with a stack height of 45 m meters will be installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (55 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) (50 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (40 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 Kiloliters per annum) will be sold to authorized recyclers.

- CPU sludge (0.23 TPD) and STP Sludge (0.0002 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16 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 4.913 Hectares is under possession of the company and land use conversion has been completed vide letter no. patwari halka no. 05. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

S.NO.	**ITEM**	**CAPITAL COST INR CRORES**	**RECURRING COST INR CRORES/ANNUM**
1.	Air emission control systems (Bag Filters, dust suppression ,etc.)	2.5	0.1
2.	Effluent Treatment Plant (MEE)	6.0	1.0
3.	Condensate Policing unit	1.75	0.2
4.	Environment all equipment & OCEMS- Online Continuous Emission/Effluent Monitoring System	0.50	0.01
5.	Solid & hazardous Waste Management	0.65	0.05
6.	Ash handling & management	0. 5	0.05
7.	Occupational Health & Safety	0.60	0.07
9.	Green belt development	0.6	0.2
10.	Fire fighting	0.5	0.07
11.	Rainwater harvesting systems	0.10	0.03
12.	CER (Education, Health, Solar Light and Drinking water.	1.65	-
TOTAL		**14.85**	**1.78**

Details of CER with proposed activities and budgetary allocation:

S. No	**CER Activities**	**1st Year (Cost in**

		Lakhs)
1	Tube wells / Drinking Water facility in nearby Jaisinghpura village in consultation with local Panchayat's.	40
2	7500 No. of Solar light distribution in Deokheda village.	85
3	Plantation cum maintenance Program around 5 km alongside Retum River (around 10000 trees) with consultation from local authority.	40
	Total	**165**

The committee was satisfied with the response provided by PP on additonal information sought. 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the distillery 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. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 400 m^3/day, which will be sourced from River Retum. 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/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). 10 KLPD STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). Bag filter with a stack height of 45 meters will be installed with the 25 TPH Rice husk 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/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 (40 TPD) will be supplied 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.

(ix). CO_2 (55 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.

(x). PP shall allocate at least Rs. 0.6 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(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.

(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 has already been developed in 1.62 hectares i.e., 33.03 % of total project area shall be maintained 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.

(xvi). PP proposed to allocate Rs. 1.65 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. 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. 07

Greenfield Project of 120 KLD Grain Based Ethanol Plant along with 3.4 MW Co-generation Power Plant located at Plot No. 6, 7 & 8, Hargarh Industrial Area, Tehsil Sihora, Distt. Jabalpur, MP by M/s.

Vardhinni Fuels Private Limited – Re-consideration of Environmental Clearance.

[IA/MP/IND2/414740/2023, IA-J-11011/362/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its EAC meeting ID: IA/IND2/13444/13/02/2023 held on 13th - 14th February, 2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S. No.	ADS by MoEF&CC	Reply of PP
1.	The Committee suggested to restrict the fresh water requirement upto 4 KL per KL of alcohol produced.	Agreed, We will restrict the fresh water requirement to 4 KL per KL of alcohol production. Total fresh water requirement will be 480 KLD for 120 KLD Ethanol production.
2.	PP shall furnish action plan for the greenbelt to be developed in 1 year instead of 5 years.	Action plan for the greenbelt development within one year has been submitted
3.	Domestic wastewater shall not be treated in soak pit. PP shall propose STP.	That we will provide 10 KLD STP to treat the sewage to be generated from the industrial premises. Treated sewage will be used for watering of green belt.
4.	Steam balance to be provided.	Steam consumption table is submitted.
5.	PP shall revise the EMP and CER.	The revise EMP & CER of the project has been submitted
6.	PP shall provide details of Fuel to be used in boiler.	Biomass (130 TPD) will be used as fuel for Boiler. Coal will be used as auxiliary fuel.
7.	Risk assessment and Risk mitigation plan to be provided.	The revised Risk assessment and Risk mitigation plan has been submitted.

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. Ascenso Enviro Pvt Ltd (NABET certificate no. NABET/EIA/2124/SA 0175 and validity Dec 21,2024) made a detailed presentation on the salient features of the project

and informed that the proposal is for environmental clearance to the project for 120 KLPD Grain based Ethanol Plant & 3.4 MW Co-generation power plant (Biomass as rice husk, bagasse and agrowaste, and during unavailability of biomass, Coal will also use) located at Plot No. 6, 7 & 8, Hargarh Industrial Area, Tehsil Sihora, Distt. Jabalpur, MP by M/s. Vardhinni Fuels 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(using grains as Raw material)	Ethanol	120 KLPD
2	Co-generation power plant	Power	3.4 MW
3	DWGS dryer	DDGS	54 TPD
4	Fermentation unit	Carbondi-oxide	66 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 there is no litigation is pending against the project.

Total land area required is 5.5275 hectares. Greenbelt will be developed in total area of 1.92 hectares i.e., 33.0 % of total project area. The estimated project cost is Rs.125 Crores. Capital cost of EMP would be Rs. 12.50 Crores and recurring cost for EMP would be Rs.2.50 Crores per annum. Industry proposes to allocate Rs 1.50 Crores towards Extended EMP (Corporate Environment Responsibility).Total Employment 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: Hargarh RF–Approx. 0.4 Km towards North & Dhanwani RF- 3.8 km in North East direction. Water bodies: Heran River - Approx. 1.23 Km towards SSE & Belkund Nadi- Approx. 2.39 Km towards East etc. River Heran is at a distance of 1.23 Km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.94 $\mu g/m^3$, 2.43 $\mu g/m^3$ and 3.14 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 480 KLD which will be met from Hargarh Industrial Area, MPIDC. NOC for withdrawal of water from MPIDC has been obtained vide letter no.MP IDC/ROJ/Engg/2022/2467 Jabalpur dated 08.08.2022. Effluent (Condensate/spent lees/blowdown etc.) of 900 KLD quantity will be treated through Condensate Polishing Unit of capacity CMD. Raw stillage (950 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.

Power requirement will be 3.4 MW and will be met from co-generation power plant. 34 TPH rice husk fired boiler will be installed. APCE ESP- with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (14 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 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 (66 TPD) generated during the fermentation process will be

collected by utilizingCO_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) (54 TPD) will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash (48 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 Kilo litres per annum) will be sold to authorized recyclers.
- CPU sludge (65.2kg) and STP Sludge (10 kg) 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 5.5275 Hectares is under possession of the company and project area comes in Industrial area. EAC found the response satisfactory.

Capital cost and recurring cost of EMP are given below:

S. No	Particulars	Capital Cost In Rs lacs	Annual Recurring Cost in Rs lacs
1	Air pollution control system ESP with 34 TPH boiler	350	60
2	Spent wash treatment including concentration using MEE (Multiple effect evaporator).	175	50
3	Scrubbing system, compressing system, liquefying system and storage for CO_2 removal	100	30
4	CPU (Condensate Polishing Unit)	300	60
5	Installation of Water treatment plant (RO)	50	10

6	Rainwater harvesting systems and STP	20	5
7	OCEMS- Online Continuous Emission/Effluent Monitoring System	50	5
8	Occupational Health Management	40	10
9	Green Belt Development	25	5
10	Environment monitoring	-	10
11	Solid/ hazardous waste management	15	5
12	CER	125	-
	Total	**1250**	**250**

Details of CER with proposed activities and budgetary allocation:

Activities	**1st Year (INRCr)**	**2nd Year (INRCr)**	**Expenditure (INRCr)**
Infrastructure development in Govt schools & classroom development, Provision of digital education in school & laptop distribution, sanitation facilities, safe drinking water, Solar power installation in schools & Panchayat bhavan, rainwater harvesting system etc.	0.20	0.20	0.40
Health facilities- Distribution of medical instruments, oxygen cylinders to nearby health centre and hospitals	0.30	0.50	0.80
Solar Lightsin Villages	0.15	0.15	0.30
TOTAL			**1.5**

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

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the Surface 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. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 480 m^3/day, which will be sourced from Hargarh Industrial Area, MPIDC. 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/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). ESP (five fields) with a stack height of 60 meters will be installed with the 34 TPH rice husk fired 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/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 (48 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. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO2 (66 TPD) generated during the fermentation process will be collected by utilizingCO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 40 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.

(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 1.92 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery within one year. 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.

(xvi). PP proposed to allocate Rs. 1.5 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. 08

Proposed Grain Based Distillery Capacity 130 KLD Fuel Ethanol along with 3.0 MW Co-Gen Power Plant at Plot/Sr. No. - 83, 97, 98, 100, 107, 110, 130, 147, 148, 73, 62 Village-Amradandi, Tehsil -Gurh, Dist-Rewa, Madhya Pradesh by M/s. Bhairav Bio Fuels Pvt. Ltd. – Re-consideration of Environmental Clearance.

[IA/MP/IND2/407631/2022, IA-J-11011/526/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its EAC meeting ID: IA/IND2/13444/13/02/2023 held on 13th - 14th February, 2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

Sr. No.	ADS by MOEFCC	Project Proponent reply
1	PP shall furnish reasons for high incremental level of SO_2 and NO_X. Re-conduct air quality modelling data. EMP for reducing the incremental levels of SO_2 and NOx levels.	PP has submitted revised air quality modelling data.
2	Reorient the layout map of the proposed project considering 3 row of greenbelt towards road side.	Revised layout considering 10-m with green belt towards the road side has been submitted.
3	Details of fuel to be used in the proposed boiler. Steam balance of the proposed project.	Biomass will be the main fuel. Coal will be the used as auxiliary Fuel, which will not more than 15% of the total fuel requirement. Details of steam balance have been submitted.
4	Action plan for fly ash generated from the boiler. Undertaking for installation of brick manufacturing plant inside the plant premises.	About 42 TPD ash will be generated from the boiler. To manage the ash in house brick manufacturing unit will be installed within the plant premises. Undertaking for installation of brick manufacturing plant inside the plant premises have been submitted.
5	Submit revised water balance chart.	Fresh Water requirement will not be more than 490 KLD. Which is 3.76 KL/KL Ethanol. The revised water balance chart have been submitted.

6	Revised budget for EMP and CER considering decanter, drier, OCMS to be submitted.	The revised EMP and CER Budget details have been submitted.

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. AmplEnviron Pvt. Ltd. (NABET certificate no.: NABET/EIA/2023/IA0061 and validity 22th 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 for 130 KLPD Grain based Ethanol Plant & 3.0 MW Co-generation power plant (fuel to be used) located at Village Amradandi, Tehsil Gurh, District Rewa, State Madhya Pradesh by M/s. Bhairav Bio Fuels 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 (Grain Based)	Ethanol	130 KLPD
2	Co-generation power plant	Power	3.0 MW
3	DWGS dryer	DDGS	56 TPD
4	Fermentation unit	CO2	85 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 there is no litigation is pending against the project.

Total land area required is 24.44 hectares. Greenbelt will be developed in total area of 8.34 hectares i.e., 34.12 % of total project area. The estimated project cost is Rs. 160.0 Crores. Capital cost of EMP would be Rs. 18.15 Crores and recurring cost for EMP would be Rs. 1.68 Crores per annum. Industry proposes to allocate Rs. 2.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 300 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: Gurh Reserved Forest – 1.74 km, SW, Govindgarh Reserved Forest – 6.33 km, SW Hardi Protected Forest – 2.55 km, SW. Water bodies: Devdah Nala – 0.20 km, N, Canal near Bhusunwa – 1.34 km, NW, Pond near Hardua – 2.17 km, WNW, Bichia Nadi – 5.1 km, WNW. Devdah Nala is at a distance of 0.2 Km- for which NOC has been obtained from State Irrigation Department vide letter no. 77 dated 10/01/23 stating that No flood is observed in last 25 to 30 years in the area due to the Devdah Nala (If applicable).

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.29 $\mu g/m^3$, 2.75 $\mu g/m^3$ and 5.73 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 490 CMD which will be met from surface water. Application has been submitted to Superintendent Engineer dated 18.05.2023. Effluent (Condensate/spent lees/blowdown etc.) of 488 - CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 600 CMD. Raw stillage (610 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.

Power requirement will be 2.0 MW and will be met from proposed 3.0 MW co-generation power plant. 32 TPH Biomass/Coal fired boiler will be installed.

APCE ESP with a stack height of 58 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 1200 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 (5 Fields) with a stack height of 58 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 (85 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) (56 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 (0.2- Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.08 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 130 KLPD will be used for manufacturing fuel ethanol only.

Total land of 24.44 Hectares is under possession of the company and land use conversion has been completed as it is an Industrial land. EAC found the response satisfactory.

Capital cost and recurring cost of EMP are given below:

S. No	Particulars	Capital Cost In Rs Cr.	Annual Recurring Cost in Rs lacs
1	Air pollution control system (ESP/Bag filter) on 32 TPH rice husk/biomass briquettes/Bagasse fired boiler	8.0	35.0
2	Scrubbing system, compressing system, liquefying system and storage for CO2 removal	3.0	25.0
3	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system	4.0	20.0
4	Brick Manufacturing Unit	0.5	10.0
5	CondensatePolishing unit for water treatment and recycle	1.0	20.0
6	Rainwater Harvesting Systems	0.30	8.0
7	Occupational Health Management	0.50	6.0
8	Noise Reduction Systems	0.25	4.0
9	Greenbelt Development	0.40	10.0
10	Environment Monitoring (OCMS)	0.20	10.0
11	Environment Management Cell	-	20.0
	Total	**18.15**	**168**

Details of CER with proposed activities and budgetary allocation:

Sr. No	Activity	Amount	Time Frame
1	Development of Library in Amradandi, Bhusunwa, and Bhatigaon village schools	INR 50.0 Lakhs	12 Months
2	Plantation in Amradandi, Bhusunwa, and Bhatigaon villages	INR 50.0 Lakhs	12 Months
3	Developed drinking water Facility in the Villages	INR 25.0 Lakhs	12 Months
4	Providing Solar lighting in the surrounding area	INR 50.0 Lakhs	18 months

5	Upgradation of Nearby schools (Providing Computers, Drinking water Facility and Plantation) Amradandi, Bhusunwa, and Bhatigaon villages	INR 50.0 Lakhs	18 months
6	A Community Centre will be established in Amradandi village	INR 25.0 Lakhs	12 Months
	Total	**INR 250 Lakhs**	

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 130 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the Surface 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. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 490 m^3/day, which will be sourced from Surface 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/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). APCE ESP (five fields) with a stack height of 58 meters will be installed with the 32 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/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 (42 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass / Coal 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. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO2 (85 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.

(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.

(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 8.34 hectares i.e., 34.12 % of 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.

(xvi). PP proposed to allocate Rs. 2.5 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. 09

Proposed Grain Based Distillery Plant (100 KLPD) along with Co-Generation Power Plant of 7.5 MW located at Khasra No. 314/2, 338/1, 327, 328, 329, 330, 336, 335, 339, 340, 349 Village: Kandarka, Tehsil: Berla, Dist: Bemetara, Chhattisgarh by M/s. Varda Energy & Engineering Pvt. Ltd. – Consideration of amendment of Environmental Clearance

[IA/CG/IND2/ 297271/2023, IA-J-11011/388/2021-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vides EC Identification No.-EC22A060CG114975 File No.- IA-J-11011/388/2021-IA-II(I) Dated 24.03.2022 for the project proposed Grain Based Distillery Plant (100 KLPD) along with Co-Generation Power Plant of 7.5 MW located at Khasra No. 314/2, 338/1, 327, 328, 329, 330, 336, 335, 339, 340, 349 Village: Kandarka, Tehsil: Berla, Dist: Bemetara, Chhattisgarh by M/s. Varda Energy & Engineering Pvt. Ltd.

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

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons

1.	Cond. No. 8 (Page no.2)	Distance of Kharun River- 1.8 km, E from Project site.	Distance of Kharun River – 0.125 km, E from project site.	PP informed that inadvertently distance of Kharun River was mentioned by typographic mistake in during presentation in EAC meeting.

Kharun River flows at a distance of 0.125 km from the proposed project site for which NOC has been obtained from Executive Engineer, Tandula Water Resources Division, Durg (CG) vide letter Memo No. 562/T/2022-23 dated 31.01.2023 stating that Kharun River is approx. 125 m away from the project site towards East direction and nearest HFL of river is 40 m away. The proposed project falls outside the HFL of Kharun River. There is no history of flood in the region for more than 25 years. The RL of proposed site is 266 m. amsl while RL of river is 261 m. amsl. The project site is at high altitude w.r.t. River.

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.

After detailed deliberations EAC found the justification for amendment sought satisfactory and recommended for amendment in EC as proposed by the project proponent with the following additional conditions:

- PP shall ensure compliance to conditions mentioned in NOC has been obtained from Executive Engineer, Tandula Water Resources Division, Durg (CG) vide letter Memo No. 562/T/2022-23 dated 31.01.2023. PP

shall also construct a RCC boundary towards river side and also provide 30 m thick green belt buffer towards the river side.

- APCE ESP (five fields) with a stack height of 60 meters will be installed with the 36 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/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.
- Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- 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.

All other terms and conditions in the EC issued vide EC Identification No.- EC22A060CG114975 File No.- IA-J-11011/388/2021-IA-II(I) Dated 24.03.2022.

Agenda No. 10

Proposed 30 KLPD Grain Based Distillery along with 0.75 MW Co-gen under Ethanol Blending Program by Uddhavesh Urja Ethanol Products Pvt. Ltd. at Gat No 40, Village Jamoti, Taluka- Baglan (Satana), District Nashik, Maharashtra by M/s. Uddhavesh Urja Ethanol Products Pvt. Ltd. - Consideration of Environmental Clearance.

The Project Proponent and the accredited Consultant M/s. AmplEnviron Pvt. Ltd. (NABET certificate No. NABET/EIA/2023/IA0061and validity 22nd 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 for 30 KLPD Grain based Ethanol Plant &0.75 MWCo-generation power plant located at Gat No 40, Village- Jamoti, Taluka-Baglan (Satana), District Nashik, Maharashtra, Pin Code– 423301 by M/s. Uddhavesh Urja Ethanol Products Pvt. Ltd.

The committee noted that a drain and road are passing through the proposed project site of 2.413825 hectares land. After deducting the area of road and drain passing through project site, the available land left for the proposed project is around 1.8 hectare which is very less for establishment of 30 KLPD distillery, keeping in view for compliance of statutory requirement such as development of greenbelt, adequate distance between units from safety angle etc. Committee suggested to revise the proposal by increasing the proposed land area. The consultant shall ensure that proposed project site should be free from natural water bodies.

Accordingly, proposal was returned in present form.

10th March, 2023 (Friday)

Agenda No. 01

Expansion of the Existing 120 KLPD Molasses based Distillery Unit to 450 KLPD Multi Feed (Cane Syrup/Grain/BH-Molasses & C Molasses) based Distillery Unit under EBP Programme of Government of India at Sy. Nos. 241/C3, 158/2, 251/A/1, 257/1, 248/1, 267/B, 248/B/1B, 263/2A, 269/C, 247/A, 241/B, 243/A, 247/B, 241/D, 241/C1, 241/C2,248/2, 242/1/A, 242/2, 241/F, 248/B/2, 246/B, 242/1B, 242/1/C, 248/B/1A, 248/3, 244, 241/3, 241/E, 241/4, 241/6, 241/7, 241/5 of Birrabi Village and 157/3, 157/1 of Kotihal Village, Hoovinahadagali Taluk, Vijayanagara District, Karnataka State - Environmental Clearance- reg– Consideration of Environmental Clearance.

[IA/KA/IND2/414938/2023, IA-J-11011/136/2016-IA-II(I)]

The Project Proponent vide letter MSL/MOEF/EC/2023-24 dated 09.03.2023 informed that due to personal reasons PP will not available to attend the meeting and requested to consider the proposal in the next EAC meeting. Accordingly, the project proposal was deferred.

Agenda No. 02

Proposed 120KLPD Molasses based distillery at Sr. No. 22, 25, 27,1/1 Village- Immampur, Dist. Bidar, Karnataka by M/s. The Naranja Sahakara Sakkare Karkhana Ltd- Consideration of Environmental Clearance.

[IA/KA/IND2/415184/2023;IA-J-11011/40/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Mitcon Consultancy and Engineering Services Ltd (NABET certificate no. NABET/EIA/2124/RA 0229_Rev 2 and validity 05/02/2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project proposed 120KLPD

Molasses based distillery at Sr. No. 22, 25, 27,1/1 Village- Immampur, Dist. Bidar, Karnataka by M/s. The Naranja Sahakara Sakkare Karkhana Ltd.

The committee noted that proposed project is located within the premises of existing 2500 TCD sugar unit. However, PP did not submit CCR of the existing CTO of the existing sugar factory. As per Ministry's OM dated 08.06.2022 all brown field proposals operating on CTO should furnish CCR from SPCB. Accordingly, the project proposal was returned in present form.

Agenda No. 03

Proposed 120 KLPD Grain based Ethanol Plant & 3.30 MW Co-generation power plant located at Survey No. 1118/1109, 1120/674, 1122/1096, 1123/1096, 672, 678, 679 Village Satheli, Tehsil Taleda, District Bundi, Rajastan by M/s. Suyasi Agro and Biofuels Pvt. Ltd - Consideration of Environmental Clearance.

[IA/RJ/IND2/418767/2023, IA-J-11011/75/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmplEnvironPvt. Ltd. (NABET certificate No. NABET/EIA/2023/IA0061 and validity 22nd 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 for 120 KLPD Grain based Ethanol Plant & 3.30 MW Co-generation power plant located at Survey No. 1118/1109, 1120/674, 1122/1096, 1123/1096, 672, 678, 679 Village Satheli, Tehsil Taleda, District Bundi, Rajastan by M/s. Suyasi Agro and 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 (Grain based)	Ethanol	120 KLPD
		Fusel Oil	0.18 KLD
2	Co-generation power plant	Power	3.30 MW
3	DDGS dryer	DDGS	82 TPD
4	Fermentation unit	Carbon di-oxide	93 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 there is no litigation is pending against the project.

Total land area required is 6.9800 hectares. Greenbelt will be developed in total area of 2.46514 hectares i.e., 35.32% of total project area. The estimated project cost is Rs. 161 Crores. Capital cost of EMP would be Rs. 36.4759 Crores and recurring cost for EMP would be Rs. 3.7042 Crores per annum. Industry proposes to allocate Rs. 2.415 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 250 persons as direct & indirect. PP informed that broken rice (340 TPD)/ maize (307 TPD) will be used as raw material for the proposed project.

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, protected forest & Reserve etc. within 10 km distance. Water bodies: Canals are present at a distance of 412 meters from project plot boundary in East direction respectively for which NOC has been obtained from Command Area Development, Bundi, vide letter No.2397 dated 02/02/2023 from Ex. Engg. LMC Division, CAD Canal with certain conditions. Ghora Pachhar River is present at a distance of 2.30 km in West direction For which NOC has been obtained from Water Resource Project Division, Bundi, vide letter No.EE/WRP/2023/3623 dated 01/02/2023 stating that GhoraPachharNadi is passing at an aerial distance of 2.30 km in left side western direction Khasra No. 1118/1109, 1120/674, 1122/1096,

1123/1096. 672,678 & 679 from the above said project site and there is no history of flood in the region for more than 25 years. Village NOC has been obtained.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.024 µg/m3, 0.005 µg/m3, 0.663 µg/m3 and 1.176 µg/m3 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 483.3 CMD (Out of which fresh water required for distillery activity will be 409.8 KLD i.e. 3.415 KL/KL) which will be met from Ground water. Application has been submitted to CGWA Vide application number: 21-4/18080/RJ/IND/2023. Effluent (Condensate/spent lees/dryer process condensate, sealing water etc.) of 880 m3/day quantity will be treated through Condensate Polishing Unit of capacity 900 CMD and Effluent (Boiler & Cooling tower blowdown/Domestic sewage/DM reject/CIP water/CPU RO Reject) of 224 m3/day quantity will be treated through Effluent Treatment Plant of capacity 250 CMD. Raw stillage (809 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. CPU of capacity 900 KLPD will be installed to treat Condensate, Spent Lees, Dryer process condensate & sealing water and ETP of capacity of 250 CMD will be installed to treat sewage, blowdowns, DM reject and CIP water. 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 and will be met from proposed 3.30 MW Co-generation power plant. 28 TPH Rice Husk/Coal fired boiler will be installed. APCE- ESP with 99.9% efficiency with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler and Dry-FGD system for SO2 removal. 750 kVA DG set will be used as standby during power failure and stack height (5.5 m above roof) will be provided as per CPCB norms to the proposed DG sets. Rice husk (124.34 TPD) /Coal (108.96 TPD) will be used as fuel.

Details of Process emissions generation and its management:

- ESP with 99.9% efficiency with a stack height of 50 meters will be installed for controlling the particulate emissions.
- Dry-FGD system for SO2 removal
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (93 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:

- ESP with 99.9% efficiency with a stack height of 50 meters will be installed for controlling the particulate emissions.
- Dry-FGD system for SO2 removal
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (93 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.

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 6.9800 Hectares is under possession of company and land use conversion application has been submitted to Revenue Department, Rajasthan vide letter No. LC/2022-23/132989 dated 24.11.2022 and vide letter No. LC/2022-23/154026 dated 09.02.2023. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- 15% of power requirement generated through solar energy i.e. 420 kW.
- Satheli Village road will be maintained by PP.
- 5 fields ESP with 99.9% efficiency with a stack height of 50 meters will be installed for controlling the particulate emissions
- 19,173 KL tank is proposed for rain water harvesting.

Details of capital and recurring cost of EMP:

SR. NO.	COMPONENT	PARTICULARS	Capital Investment In Crores	Recurring Investment In Crores/Annum
1.	Air	➢ Construction of Stack of 50 meters height ➢ Installation of ESP with 99.9% efficiency ➢ Installation of CO2 Bottling Plant ➢ Installation of Dry-FGD system	12.90	1.29
2.	Water	➢ Construction of CPU ➢ Construction of ETP ➢ Installation of MEE ➢ Installation of Decanter ➢ Installation of DDGS dryer	20.10	2.01
3.	Noise	Acoustic enclosures, Silencer pads, ear plugs etc	0.20	0.02
4.	Environment monitoring and Management	Environment monitoring and Management ➢ Quarterly Environment Monitoring ➢ Installation of OCMS	0.15	0.06
5.	Occupational Health	Gloves, Breathing Masks, Gloves, Boots, Helmets, Ear Plugs etc. &annual health-medical check-up of workers, Occupational Health (training, OH center)	0.50	0.05
6.	Greenbelt	Green belt development activity and Maintenance of green belt	0.5059	0.0222
7.	Solid Waste Management	Installation of Brick manufacturing unit	0.50	0.05

8.	Rain water harvesting	Rain water harvesting	0.50	0.05
9.	Carbon and Water Foot Print	Maintain the data of raw materials consumption, steam consumption, vehicle frequency for transport of raw materials, effluent generation, air emissions, hazardous waste generation, and raw material recovery	--	0.04
10.	Solar system	Installation of in-house solar system of 280 KW capacity	1.12	0.132
		TOTAL COST (INR, CRORES)	**36.4759**	**3.7042**

Details of CER activities:

S.N.	Proposed Activity	Proposed Budget in (IN Crores) (INR)
1.	Providing basic amenities to Primary & Secondary Schools of Satheli&Anthara, Bhoomkhera and LeeleraByasan Villages.	0.8624
2.	Provision of Solar Lights Satheli&Anthara, Bhoomkhera and LeeleraByasan Villages.	1.5526
	Grand Total	**2.4150**

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

(iv). NOC from the 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. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 483.3 m^3/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 rainfall capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc.., is shall be treated in the Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). 5 field ESP with 99.9% efficiency with a stack height of 50 mwill be installed with the 28 TPHRice Husk/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/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 (45.55 TPD) shall be will be used for proposed in-house brick manufacturing plant. PP shall use rice husk/Coal 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. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO_2 (93 TPD) generated during the fermentation process is being/will be collected by utilizing CO_2 scrubbers and sold to authorized vendors/collected in 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.

(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 2.46514 hectares i.e., 35.32 % of 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. Green belt shall be developed within one year.

(xvi). PP proposed to allocate Rs. 2.4150 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. 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. 04

Greenfield Project of 250 KLD Grain Based Ethanol Plant along with 7.0 MW Co-generation Power Plant at Kh. No. 10, 11, 12, 16/1,19, 102/5 & 102/6, Village - Rahadi, Taluka Mauda, District-Nagpur, Maharashtra by M/s Ashtavinayak Bio Fuels and Exports Pvt. Ltd - Consideration of Environmental Clearance.

[IA/MP/IND2/416590/2023, IA-J-11011/50/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Ascenso Enviro Pvt Ltd (NABET certificate no. NABET/EIA/2124/SA 0175 and validity Dec 21,2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 250 KLPD Grain based Ethanol Plant & 7.0 MW Co-generation power plant (Biomass as rice husk, bagasse and agrowaste, and during unavailability of biomass, Coal will be use as auxiliary fuel) located at Kh. No. 10, 11, 12, 16/1,19, 102/5 & 102/6, Village - Rahadi,

Taluka Mauda, District-Nagpur, Maharashtra by M/s Ashtavinayak Bio Fuels and Exports 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(using grains as Raw material)	Ethanol	250 KLPD
2	Co-generation power plant	Power	7.0 MW
3	DWGS dryer	DDGS	112 TPD
4	Fermentation unit	Carbondi-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 there is no litigation is pending against the project.

Total land area required is 10.15 hectares. Greenbelt will be developed in total area of 3.38 hectares i.e., 33.30 % of total project area. The estimated project cost is Rs.250 Crores. Capital cost of EMP would be Rs. 40.25 Crores and recurring cost for EMP would be Rs.1.63 Crores per annum. Industry proposes to allocate Rs.2.50 Crores towards Extended EMP (Corporate Environment Responsibility).Total Employment will be 300 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: NIL. The NIL national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. NBWL application has been submitted dated NA (if applicable). Water bodies: GangnerNala- Approx. 0.25 Km towards NW, Kanhan River- Approx. 0.7 Km towards West, Pench Left Bank Canal is at a distance of 1.00 Km & Sand Nadi- 2.25 Km in NE etc. River Kanhan is at a distance of 0.7 Km for which NOC has been obtained from State Irrigation Department vide letter no. 183/T.S.1/N.O.C./2023 dated 31.01.2023.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.461µg/m3, 1.055µg/m3 and 0.87µg/m3 with respect to PM10, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).

Total fresh water requirement will be 1000 KLD which will be met from surface water. NOC for withdrawal of water from Water Irrigation Department, Nagpur has been obtained vide letter No. 350/TS-4/Non-Irrigation/Ashtavinayak Bio-Fuel/2023 dated 24/01/2023. Effluent (Condensate/spent lees/blowdown etc.) of 1018 KLD quantity will be treated through Condensate Polishing Unit of capacity 1100 KLD CMD. Raw stillage (1510 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.

Power requirement will be 7.0MW and will be met from co-generation power plant. 60 TPH rice husk fired boiler will be installed. APCE ESP-with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 1200 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:

- APCE 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 (165 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) (112 TPD) will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash (132 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 (1.0 Kilo litres per annum) will be sold to authorized recyclers.
- CPU sludge (75.5kg) and STP Sludge (10 kg) 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 of 10.15 Hectares is under possession of the company and land use conversion has been completed vide letter No. TP/BN/Nomenclature P/21472 dated 26/12/2022, vide letter No. TP/BN/Nomenclature P/20283 dated 0/11/2022, vide letter No. TP/BN/Nomenclature P/20269 dated 01/11/2022, vide letter No. TP/BN/Nomenclature P/20268 dated 01/11/2022, letter No. TP/BN/Nomenclature P/20267 dated 01/11/2022, letter No. No. TP/BN/Nomenclature P/20266 dated 01/11/2022 and vide letter No. TP/BN/Nomenclature P/20114 dated 19/10/2022. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- PP informed that broken rice/maize as input for raw material and they will not use wheat in anyform as feedstock.
- 15% of total power requirement of the proposed unit will be generated through solar energy.

- Proposed budget of CER will be Rs. 2.5 crores and will be completed beforecommissioning of the plant.
- 5 field ESP will be provided to control particulate matter and keep it within the limitof 30 mg/Nm^3.
- PP informed that atleast 33% of the total project area shall be developed with greenbelt in the plant premises and as per the EAC recommendation, a minimum of 6 m width of greenbelt surrounding the periphery boundary will be provided.
- As per the EAC recommendation, they will provide an additional green cover towards the South West & South directionof the plant near the plant boundary, with a width range of 21 m to 26 m.
- All plantation will be developed within one year and they will increase thespecies of plantsin consultation of the local Forest Department. Wewill follow CPCB guidelines for Greenbelt development.
- Rain water storage pond of 60 days capacity will be constructed.

Details of capital and recurring cost of EMP:

S. No	Particulars	Capital Cost In Rs Cr.	Annual Recurring Cost in Rs lacs
1	Air pollution control system (ESP) on 60 TPH rice husk/biomass briquettes/Bagasse fired boiler	15.0	40
2	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system (MEE)	10.0	20
3	Scrubbing system, compressing system, liquefying system and storage for CO2 removal	9.0	25
4	CondensatePolishing unit for water treatment and recycle	2.5	20
5	Rainwater Harvesting Systems	1.0	8
6	Occupational Health Management	0.5	6
7	Noise Reduction Systems	1.5	4
8	Greenbelt Development	0.75	10
9	Environment Monitoring	-	15
10	Environment Management Cell	-	20

	Total	**40.25**	**163**

Details of CER activities:

Activities	**1st Year (INRCr)**	**2nd Year (INRCr)**	**Expenditure (INRCr)**
Infrastructure development in Govt schools & classroom development, Provision of digital education in school & laptop distribution, sanitation facilities, safe drinking water, Solar power installation in schools & Panchayat bhavan, rainwater harvesting system etc in village Rahadi	40	40	80
Health facilities- Distribution of medical instruments, oxygen cylinders to nearby health centre and hospitals in village Rahadi	60	50	110
Infrastructure development-development of community halls & nearby plantations in village Rahadi	30	30	60
TOTAL			**250**

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

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface 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. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 1000 m^3/day, which will be met from surface water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days rainfall capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc.., is shall be treated in the Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). APCE ESP with a stack height of 60 m will be installed with the 60 TPH Rice Husk fired 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/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 (132 TPD) shall be will be used for proposed in-house brick manufacturing plant. PP shall use rice husk 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. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO_2 (165 TPD) generated during the fermentation process is being/will be collected by utilizing CO_2 scrubbers and sold to authorized vendors/collected in 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.

(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 3.38hectares i.e., 33.30 % of 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. Green belt shall be developed within one year.

(xvi). PP proposed to allocate Rs. 2.50 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. 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. 05

Proposed 50 KLPD Grain based Ethanol Plant & 2 MW Co-generation power plant located at Village Tugalpur, Tehsil Laksar, District Haridwar, State Uttarakhand by M/s. Naruma Industries Private Limited- Consideration of Environmental Clearance.

[IA/UK/IND2/416770/2023, IA-J-11011/49/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan (NABET certificate no. NABET/EIA/2225/RA 0265 and validity 25/07/2025) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 50 KLPD Grain based Ethanol Plant & 2 MW Co-generation power plant located at Village Tugalpur, Tehsil Laksar, District Haridwar, State Uttarakhand by M/s. Naruma Industries Private Limited.

The committee noted that available plat area for the proposed project is 2.254 hectares, which is very less for establishment of 50 KLPD distillery, keeping in view for compliance of statutory requirement such as development of greenbelt, adequate distance between units from safety

angle etc. Committee suggested to revise the proposal by increasing the proposed land area.

Accordingly, proposal was returned in present form.

Agenda No. 06

Proposed 400 KLPD Grain based Ethanol Plant & 10 MW Co-generation power plant located at Survey No. 104,106, 107/1, 107/2, 108/1, 108/2, 109, 110, 111, 112/1, 112/2, 118/1, 118/3, 119/1, 119/3, 120/1, 123/1, 123/2, 123/3, 123/4 and 299/8, Village-Sarda, Taluka Berla, District Bemetara, Chhattisgarh by M/s. Shanti Greens Bio Fuels Pvt. Ltd- Consideration of Environmental Clearance.

[IA/CG/IND2/418040/2023, IA-J-11011/67/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmplEnvironPvt. Ltd. (NABET certificate No. NABET/EIA/2023/IA0061 and validity 22nd 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 for 400 KLPD Grain based Ethanol Plant & 10 MW Co-generation power plant located at Survey No. 104,106, 107/1, 107/2, 108/1, 108/2, 109, 110, 111, 112/1, 112/2, 118/1, 118/3, 119/1, 119/3, 120/1, 123/1, 123/2, 123/3, 123/4 and 299/8, Village-Sarda, Taluka Berla, District Bemetara, Chhattisgarh by M/s.Shanti Greens Bio Fuels 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 (Grain based)	Ethanol	400 KLPD
		Fusel Oil	0.6 KLD
2	Co-generation power plant	Power	10 MW
3	DDGS dryer	DDGS	177.6 TPD
4	Fermentation unit	Carbon di-oxide	302.64 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 there is no litigation is pending against the project.

Total land area required is 12.46432 hectares. Greenbelt will be developed in total area of 5.258662 hectares i.e., 42.19% of total project area. The estimated project cost is Rs. 417.34 Crores. Capital cost of EMP would be Rs. 102.0477 Crores and recurring cost for EMP would be Rs. 9.8712 Crores per annum. Industry proposes to allocate Rs. 6.2601 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 250 persons as direct & indirect.

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, protected forest & Reserve etc. within 10 km distance. Water bodies: SararNala is passing adjacent to the project boundary, Small checkdams/lakes are present within 10 km radius from the project site. Shivnath River is Present at distance of 1.12 km in NWW direction from project site boundary for which NOC has been obtained from Irrigation Department vide letter No. 651/WB/Bemetara dated 14/02/2023 stating that the Khasra No. 104, 107/2, 109, 110.111, 118/3, 119/3, 108/1, 108/2, 112/1, 112/2, 123/1, 123/2, 123/3, 123/4, 106, 107/1, 118/1, 119/1, 120/1, 299/8 of the proposed plant are not affected fully or partially by actual flood level already occurred in the last 20 years.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.101 µg/m3, 0.045µg/m3, 0.36 µg/m3 and 1.402 µg/m3 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 1598 CMD which will be met from Shivnath River. Application has been submitted to Water Resource Department, Bemetara dated 27.01.2023. Effluent (Condensate/spent lees/dryer process condensate, sealing water etc.) of 1957.68 m3/day quantity will be treated through Condensate Polishing Unit of capacity 2100 CMD and Effluent (Boiler & Cooling tower blowdown/Domestic sewage/DM reject/CIP water/CPU RO Reject) of 823.86 m3/day quantity will be treated through Effluent Treatment Plant of capacity 900 CMD. Raw stillage (2721.6 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. CPU of capacity 2100 KLPD will be installed to treat Condensate, Spent Lees, Dryer process condensate & sealing water and ETP of capacity of 900 CMD will be installed to treat sewage, blowdowns, DM reject and CIP water. 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 9.6 MW and will be met from proposed 10 MW Co-generation power plant. 70 TPH Rice Husk (338.64 TPD) & Coal (Auxiliary fuel) fired boiler will be installed. APCE- ESP with 99.9% efficiency 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 and Dry-FGD system for SO2 removal. 750 kVA DG set will be used as standby during power failure and stack height (6.0 m above roof) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with 99.9% efficiency with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Dry-FGD system for SO2 removal
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (302.64 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:

- ESP with 99.9% efficiency with a stack height of 60 meters will be installed for controlling the particulate emissions.

- Dry-FGD system for SO2 removal
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (302.64 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.

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 400 KLPD will be used for manufacturing fuel ethanol only.

Total land of 12.46432 Hectares is under possession of company and land use conversion application has been submitted to Revenue Department, Berla, Bemetara dated 08.02.2023. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- PP shall construct RCC wall and 30 m thick greenbelt towards the drain.
- No single drop of treated water/effluent shall be discharged into the drain.
- As proposed, all major installations of distillery such as manufacturing area, ETP, CPU etc shall be located at least 175.6 m away from the boundary of the nallah.
- PP shall meet 15% (1440 kW) of the total power requirement from solar power by generating power inside plant premises

Details of capital and recurring cost of EMP:

SR. NO.	COMPONENT	PARTICULARS	CAPITAL INVESTMENT (IN Crores)	RECURRING INVESTMENT (IN Crores/Annum)
1.	Air	➢ Construction of Stack of 60 meters height ➢ Installation of ESP with 99.9%	25.75	2.6

SR. NO.	COMPONENT	PARTICULARS	CAPITAL INVESTMENT (IN Crores)	RECURRING INVESTMENT (IN Crores/Annum)
		efficiency ➢ Installation of Dry-FGD ➢ Installation of CO2 Bottling Plant		
2.	Water	➢ Construction of CPU with RO ➢ Construction of ETP with RO ➢ Installation of MEE ➢ Installation of Decanter ➢ Installation of DDGS dryer	67	6.5
3.	Noise	Acoustic enclosures, Silencer pads, ear plugs etc.	0.10	0.03
4.	Environment monitoring and Management	Environment monitoring and Management ➢ Quarterly Environment Monitoring ➢ Installation of OCMS	0.15	0.06
5.	Occupational Health	Gloves, Breathing Masks, Gloves, Boots, Helmets, Ear Plugs etc. &annual health-medical checkup of workers, Occupational	0.50	0.14

SR. NO.	COMPONENT	PARTICULARS	CAPITAL INVESTMENT (IN Crores)	RECURRING INVESTMENT (IN Crores/Annum)
		Health (training, OH center)		
6.	Greenbelt	Green belt development activity and Maintenance of green belt	1.0637	0.0312
7.	Solid Waste Management	Solid Waste Management- Brick Manufacturing unit etc.	3.0	0.1
8.	Rain water harvesting	Provision of rain water harvesting tank with 60 days storage capacity	0.5	0.01
9.	Solar system	Installation of in-house solar system of 996 KW capacity	3.984	0.4
		TOTAL COST (INR, Cr)	**102.0477**	**9.8712**

Details of CER activities:

S.N.	Proposed Activity	Proposed Budget in (IN Crores) (INR)
1.	Providing basic amenities to Primary School of Sardha, Bhilauri. Deori and Jamgaon Village	1.4638
2.	Provision of Solar Lights and Tree Plantation in Sardha, Bhilauri. Deori and Jamgaon Village	4.7963

	Grand Total	**6.2601**

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 400 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). As proposed, PP shall construct RCC wall and 30 m thick greenbelt towards the drain. No single drop of treated water/effluent shall be discharged into the drain. As proposed, all major installations of distillery such as manufacturing area, ETP, CPU etc shall be located at least 175.6 m away from the boundary of the nallah.

(v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface 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. No ground water shall be used for the plant operations.

(vi). Total fresh water requirement shall not exceed 1598 m^3/day, which will be met from River Shivnath. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days rainfall capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vii). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc.., is shall be treated in the Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(viii). APCE ESP with a stack height of 60 mwill be installed with the 70 TPH Rice Husk/coal fired boilerfor 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.

(ix). Boiler ash (86.8 TPD) shall be will be used for proposed in-house brick manufacturing plant. PP shall use rice husk/Coal as fuel for the proposed boiler.Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% (1440 kW) of the total power requirement from solar power by generating power inside plant premises. Approach to the project site to the nearest highway will be maintained by the Industry.

(x). CO_2 (302.64 TPD) generated during the fermentation process is being/will be collected by utilizing CO_2 scrubbers and sold to authorized vendors/collected in proposed bottling plant.

(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.

(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 10 m width shall be developed in 5.258662 hectares i.e., 42.19% of 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. Green belt shall be developed within one year.

(xvii). PP proposed to allocate Rs. 6.2601 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. 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.

(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 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. 07

Proposed 100 KLD Grain based Distillery with ZLD along with 4.0 MW Co-Generation Power Plant located at Village Patvi, Tehsil Shehzadpur (Narayangarh), District Ambala, Haryana by M/s. Fylfot Geoworks private Limited - Consideration of Environmental Clearance.

[IA/HR/IND2/415811/2023, IA-J-11011/276/2022-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. Gaurang Environmental Solutions Private Limited (NABET certificate No. NABET/EIA/2023/RA 0192 and validity 12th July, 2023) 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 Distillery with ZLD along with 4.0 MW Co-Generation Power Plant located at Village Patvi, Tehsil Shehzadpur (Narayangarh), District Ambala, Haryanaby M/s. Fylfot Geoworks private Limited.

All grain based distilleries ≤200 KLPD are listed at S.N. 5 (g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' nut due to presence of Haryana-Punjab interstate boundary within 5 km the proposal is appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery (Grain based)	ENA/Ethanol	100 KLPD
		DDGS	40 TPD
		CO_2	40 TPD
2	Co-generation power plant	Power	4 MW

Standard TOR issued by MoEF&CC, New Delhi vide letter no. No. IA-J-11011/276/2022-IA-II(I) dated 30.07.2022. It was informed that there is no litigation is pending against the project. Public Hearing for the proposed project had been conducted by the Haryana Pollution Control Board on 30.11.2023 at project site chaired by Sh. Sachin Gupta (IAS), Additional Deputy Commissioner, Ambala. The main issues raised during the public hearing and their action plan:

Sl No	Issues in brief	Action plan in brief	Budget allocated and timeline
1	Pollution control	• The project is ZLD based. • APCD as per EMP recommendations will be implemented. • OCEMS will be installed • Periodical monitoring will be carried out.	Capital cost: 53.70 Crore Recurring: 0.85 Crore/ annum
2	Employment	The project will generate direct employment opportunities for 183 persons during operation phase. Preference will be given to locals for employment base don eligibility & qualification.	--
3	Village Development &/or Community	Infrastructure development in school, jatwar village	Capital cost: 169 Crore

	Infrastructure Development Related Issues	Scholarship to meritorious students recommended by Govt. school for ITI training Village Patvi&Jatwar	
		Plantation in nearby areas	
		Road strengthening	

Total land area required is 11.15 hectares. Greenbelt will be developed in total area of 3.7 hectares i.e., 33.2 % of total project area. The estimated project cost is Rs. 153.05 Crores. Capital cost of EMP would be Rs. 55.805Crores and recurring cost for EMP would be Rs. 1.25 Crores per annum. Industry proposes to allocate Rs. 1.75 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 183 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Conservation plan for schedule I species has been submitted to D.C.F Panchkula, Haryana dated 15.02.2023 and a budget of 0.05 Crores has been earmarked for the same. As per letter no. 443/6-W(NOC) dated 06.02.2023 of the office of executive engineer, water services division, Ambala, Haryana, the river has changes its course towards upstream side and has negligible amount of water and is reduced to a small nallah. There is no River/nallah within project premises as per site visit & revenue records. NOC has been issued with the following conditions:

(i) Untreated water should not be discharged in any nearby river/nallah.
(ii) Natural flow of fields should not be obstructed.
(iii) RWH structure shall be provided in the project.
(iv) Permission for ground water extraction shall be taken from concerned regulatory authority.

Ambient air quality monitoring was carried out at 8 locations during March 2022 to May 2023 and the baseline data indicates the ranges of concentrations as: PM_{10} (50.12 to 71.84 µg/m^3), $PM_{2.5}$ (17 to 39.45 µg/m^3),

SO_2 (7 to 9.99 µg/m^3) and NO_X (15.23 to 19.91 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.2515 µg/m^3, 0.1674 µg/m^3, 2.77135µg/m^3 and 8.59038 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 524.5 KLD which will be met from Ground water. Application has been submitted to HWRA dated 13.02.2023. Effluent of 814 KLD quantity will be treated through decanter centrifuge, MEE of capacity 500 KLD, Condensate Polishing Unit/Effluent Treatment Plant of capacity 185 KLPD. STP of capacity 15 KLPD will be installed to treat sewage generated from factory premises to the tune of 13 KLD. 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 Co-generation power plant. 35 TPH agro-waste (e.g. rice husk) fired boiler will be installed. Coal will be used as fuel in case of scarcity/non-availability of agro-waste. ESP with a stack of height of 52 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 1000 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:

- The process emissions likely to be generated from various processes like grain cleaning, milling and flour handling will contribute to PM emissions. Liquefaction and distillation contributes to VOC emissions. Saccrification& fermentation contribute to traces of ethanol and CO2 emissions.
- Thin slop from plant shall be transferred in closed conduit and concentrated in MEE.
- CO2 will be scrubbed, liquefied and handed over to end users like manufacturers of carbonated drinks.
- The equipment & process tanks shall be operated under slight vacuum to eliminate leaks
- The vent vapours shall be collected, condensed and washed with a scrubber & condensed water and acids shall be returned to the process.

- All treatment vessels, distillation vessel agitator and process pumps shall be mechanically sealed.
- ESP along with 52 meters stack height will be installed with the proposed boiler to keep the emissions within prescribed limit.
- Sampling port & monitoring point with stack and online monitoring system will be provided.
- Greenbelt & plantation using dust suppressing species will be developed along the plant boundary & within premises.
- DG Set will be operated only as emergency power backup and low sulphur content fuel will be used. Stack height of 30 m as per CPCB guidelines is proposed with DG Set for effective dispersion of the flue gases

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

- MSW (~75 kg/day) will be collected, segregated using twin bin collection system and handed over to generated waste collection system for final disposal to municipal corporation waste disposal site.
- DDGS (40 TPD) will be sold to Cattle/poultry feed manufacturers.
- Boiler ash will be collected and stored in covered area. This ash will be sold to brick manufacturers &/or used as manure. It is also proposed to establish a briquetting unit for effective & gainful utilization of boiler ash in land adjacent of the present project premises after obtaining industrial conversion of the same.
- Fly ash generated from boiler will be stored in fly ash silo & handed over to cement industry &/or used for brick manufacturing.
- CPU sludge (cake) ~0.08 TPD will be handed over to brick manufacturers.
- Used/Spent oil: ~ <0.1 KL/Annum will be handed over to CPCB authorized recyclers.
- STP sludge (cake) ~ 2 kg/day will be used as manure for landscaping within premises.

Total land of 11.15 Hectares is under possession of the company and the project site falls outside of urban & controlled area as per Memo No. E-Diary-189513/2023/TCP-OFA/173/2023 Dated: 18/01/2023 of the Directorate of Town and Country Planning, Haryana & thus does not require conversion of land use. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- Total fresh water requirement shall not exceed 400 m^3/day @

4kL/kL of alcohol produced.

- EAC noted that there is inconsistency in the data w.r.t to BOD, COD, DO and Coliform in surface water monitoring report and suggested to re-check the data.
- Committment that Industry shall install air cooled condensers for the proposed 35 TPH boiler for reducing net fresh water requirement.
- Committment that Fly ash brick manufacturing unit shall be installed in the plant.
- Incremental GLCs of NOx is reported as 8.59038 µg/m^3 which is on the higher side. Measures shall be taken to reduce the incremental GLCs of NOx.

Details of capital and recurring cost of EMP:

S. No.	Particulars	Proposed (in Rs. Lakh)	
		Capital	Recurring (annual)
1.	Air pollution control	200	20
2.	CO_2 plant	2000	20
3.	Water pollution control	3000	30
4.	Noise pollution control	50	0.5
5.	Waste Management & disposal	50	10
6.	Rainwater harvesting system	20	0.5
7.	Env. Monitoring laboratory, Environmental monitoring (Third party) & OCEMS	50	4
8	Occupational health & safety	50	20
9.	Firefighting equipment & fire hydrant	100	10
11.	Green Belt & Plantation	55.5	10
12.	Wildlife conservation plan	5.0	0
Total		5580.5	125

Details of CER activities:

S. No.	Particulars	Activity	Year wise Expenditure in (Rs Lac)					Total
			1st Year	2nd Year	3nd Year	4nd Year	5nd Year	
1.	Health	Medical camps	2.0	2.0	2.0	0	0	6
2.	Education	Infrastructure development in school	10.00	10.00	10.00	8.50	0	38.50
		Scholarship to meritorious students	10.00	10.00	10.00	10.00	0.50	40.50
3.	Community infrastructure	Plantation in nearby areas	10.00	10.00	10.00	10.00	10.00	50
		Road	40	0	0	0	0	40
Total :			**72**	**32**	**32**	**28.5**	**10.5**	**175**

After detailed deliberation, the Committee desired the following information :

- Total fresh water requirement shall not exceed 400 m^3/day @ 4kL/kL of alcohol produced.
- EAC noted that there is inconsistency in the data w.r.t to BOD, COD, DO and Coliform in surface water monitoring report and suggested to re-check the data.
- Committment that Industry shall install air cooled condensers for the proposed 35 TPH boiler for reducing net fresh water requirement.
- Committment that Fly ash brick manufacturing unit shall be installed in the plant.
- Incremental GLCs of NOx is reported as 8.59038 µg/m^3 which is on the higher side. Measures shall be taken to reduce the incremental GLCs of NOx.

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. 08

Proposed Onshore Development and Production of oil & gas from 145 wells in 30 ML blocks in Bharuch, Surat and Vadodara districts, Gujarat by M/S ONGC Limited– Consideration of Environmental Clearance

[IA/GJ/IND2/414546/2023, IA-J-11011/150/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. ABC Technolabs India Pvt. Ltd,(NABET Certificate No. NABET/EIA/1922/RA0155 and validity 23rd April 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 Development and Production of oil & gas from 145 wells located at 30 ML blocks in Bharuch, Surat and Vadodara districts, Gujarat by M/S ONGC Limited and Naharkatiya of District Dibrugarh, , State Assam by M/s. Oil India 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).

The proposed project activities of Development and Production of Oil & Gas are expected to carry out:

1. Drilling of 145 development wells and well testing.
2. The developmental wells will be drilled up to a depth of 1300-3000 m approx.
3. Plot area: Block Area – Total 1230.796 Sq. Km -. Land needed for drilling each well: 2 ha. for each well pad/drill site

Estimated Project Cost is Rs. 2393.49 Crores.

The details of products and capacity as under:

Sl.No.	Unit	Product/by-product	Existing quantity	Proposed quantity	Total Quantity
1	Tonnes Per Day (TPD)	Oil	NA	2674	2674

2	Cubic Meter Per Day	Natural Gas	NA	118000	118000

Coordinates of Blocks are as given below:

Sl No	Block	SEQ	VERT	Latitude	Longitude
1	ANKL_MN ML	1	A	N 21°36'53.074908"	E 72°59'47.59188"
		2	B	N 21°36'2.080584"	E 72°59'35.589912"
		3	C	N 21°34'20.087904"	E 72°55'32.622132"
		4	D	N 21°33'15.097536"	E 72°50'46.153608"
		5	E	N 21°33'43.097328"	E 72°50'34.647036"
		6	F	N 21°35'51.085572"	E 72°53'45.62736"
2	ANKL EXT-I ML	1	A	N 21°34'9.092496"	E 72°50'15.642744"
		2	B	N 21°35'56.084712"	E 72°53'12.616512"
		3	C	N 21°37'6.078576"	E 73°0'36.586116"
		4	D	N 21°35'50.077284"	E 73°1'5.58624"
		5	E	N 21°34'20.087904"	E 72°55'32.622132"
		6	F	N 21°36'2.080584"	E 72°59'35.589912"
		7	G	N 21°36'53.074908"	E 72°59'47.59188"
		8	H	N 21°35'51.085572"	E 72°53'45.62736"
		9	I	N 21°33'43.097328"	E 72°50'34.647036"
		10	J	N 21°33'15.097536"	E 72°50'46.153608"
		11	K	N 21°33'12.096864"	E 72°50'35.63502"

Sl No	Block	SEQ	VERT	Latitude	Longitude
3	KUDARA ML	1	A	N 21°31'35.100336"	E 72°49'47.655696"
		2	B	N 21°33'8.095068"	E 72°49'32.634732"
		3	C	N 21°33'12.096864"	E 72°50'35.63502"
4	SNKD ML	1	A	N 21°32'57.092388"	E 72°53'27.636216"
		2	B	N 21°30'52.101972"	E 72°53'33.621288"
		3	C	N 21°30'42.099732"	E 72°51'30.641436"
		4	D	N 21°31'35.100336"	E 72°49'47.655696"
		5	E	N 21°33'5.093496"	E 72°50'32.64144"
5	Motwan	1	A	21° 34' 19.92'' N	72° 55' 32.52'' E
		2	B	21° 34' 42.96'' N	72° 57' 3.6'' E
		3	C	21° 30' 51.84'' N	72° 57' 3.6036'' E
		4	D	21° 30' 52.092'' N	72° 53' 33.36'' E
		5	E	21° 32' 56.76'' N	72° 53' 27.6'' E
		6	F	21° 33' 5.076'' N	72° 50' 32.64'' E
		7	G	21° 33' 12.096'' N	72° 50' 35.628'' E
6	KIM ML	1	A	N 21°30'40.1067"	E 72°45'23.679288"
		2	B	N 21°30'40.106268"	E 72°45'57.67866"
		3	C	N 21°28'41.1168"	E 72°45'57.67686"
		4	D	N 21°28'41.117268"	E 72°45'23.677488"
		5	E	N 21°28'8.112072"	E 72°45'23.676984"
		6	F	N 21°28'42.114108"	E 72°43'57.6633"
		7	G	N 21°28'45.11514"	E 72°43'11.690148"
		8	H	N 21°30'40.1085"	E 72°43'10.675704"

Sl No	Block	SEQ	VERT	Latitude	Longitude
7	KRCH – KOSAMBA ML	1	A	N 21°26'42.114552"	E 72°53'52.622196"
		2	B	N 21°26'37.11606"	E 72°53'38.615892"
		3	C	N 21°26'26.116548"	E 72°53'33.617256"
		4	D	N 21°26'24.304308"	E 72°53'14.585568"
		5	E	N 21°26'37.23306"	E 72°53'8.791044"
		6	F	N 21°27'0.11052"	E 72°53'40.620876"
8	OL_DA EXT-I ML	1	A	N 21°15'3.52854"	E 72°40'2.786232"
		2	B	N 21°16'9.0642"	E 72°41'18.887352"
		3	C	N 21°18'28.150704"	E 72°41'18.889476"
		4	D	N 21°21'21.139596"	E 72°43'50.680848"
		5	E	N 21°21'20.13534"	E 72°45'57.670164"
		6	F	N 21°18'2.144844"	E 72°45'57.66714"
		7	G	N 21°18'2.145636"	E 72°44'57.66036"
		8	H	N 21°16'2.153928"	E 72°44'57.658524"
		9	I	N 21°16'2.154756"	E 72°43'57.651708"
		10	J	N 21°13'2.167212"	E 72°43'57.648972"
		11	K	N 21°13'2.16984"	E 72°40'42.688236"
9	GNDR ML	1	A	N 21°55'24.027888"	E 72°42'24.697332"
		2	B	N 21°54'21.031596"	E 72°42'29.694852"
		3	C	N	E

Sl No	Block	SEQ	VERT	Latitude	Longitude
				21°52'38.04078"	72°41'37.705452"
		4	D	N 21°52'26.039568"	E 72°40'57.719352"
		5	E	N 21°54'39.035808"	E 72°40'29.70894"
10	GNDR EXT-II ML	1	A	N 21°56'59.029872"	E 72°38'53.727324"
		2	B	N 21°57'36.022032"	E 72°41'21.726492"
		3	C	N 21°57'34.021548"	E 72°44'36.687048"
		4	D	N 21°53'28.03722"	E 72°44'33.689832"
		5	E	N 21°52'38.04078"	E 72°41'37.705452"
		6	F	N 21°54'21.031596"	E 72°42'29.694852"
		7	G	N 21°55'24.027888"	E 72°42'24.697332"
		8	H	N 21°54'39.035808"	E 72°40'29.70894"
11	GNDR EXT-III ML	1	A	N 21°52'2.038764"	E 72°45'43.691868"
		2	B	N 21°47'6.060804"	E 72°39'7.72452"
		3	C	N 21°49'22.052496"	E 72°36'49.724568"
		4	D	N 21°52'28.048404"	E 72°35'48.75954"
		5	E	N 21°52'38.045388"	E 72°35'51.753156"
		6	F	N 22°1'37.008444"	E 72°40'51.713076"
		7	G	N 22°4'10.001316"	E 72°45'43.702884"
12	GNDR EXT-IV ML	1	A	N 21°49'22.052496"	E 72°36'49.724568"
		2	B	N 21°47'6.060804"	E 72°39'7.72452"

Sl No	Block	SEQ	VERT	Latitude	Longitude
		3	C	N 21°45'38.06658"	E 72°37'11.746632"
		4	D	N 21°48'15.062004"	E 72°34'29.74422"
		5	E	N 21°52'28.048404"	E 72°35'48.75954"
13	GNDR EXT-V ML	1	A	N 21°55'52.024908"	E 72°45'43.69536"
		2	B	N 21°58'20.016444"	E 72°45'43.697592"
		3	C	N 21°58'20.015976"	E 72°46'21.679212"
		4	D	N 21°58'54.016824"	E 72°46'21.679716"
		5	E	N 21°58'54.014988"	E 72°48'42.675192"
		6	F	N 21°57'35.020872"	E 72°48'42.674004"
		7	G	N 21°57'35.02134"	E 72°48'6.670008"
		8	H	N 21°56'57.017508"	E 72°48'6.669468"
		9	I	N 21°56'57.01578"	E 72°50'17.668356"
		10	J	N 21°55'52.022136"	E 72°49'14.666808"
14	GNDR EXT-VI ML	1	A	N 21°42'32.070888"	E 72°37'53.734692"
		2	B	N 21°42'8.081172"	E 72°37'18.719184"
		3	C	N 21°43'50.070828"	E 72°35'59.73666"
		4	D	N 21°42'44.07678"	E 72°32'44.967588"
		5	E	N 21°45'57.067992"	E 72°33'45.746208"
		6	F	N 21°45'57.066984"	E 72°35'2.752656"
		7	G	N	E 72°35'2.75424"

Sl No	Block	SEQ	VERT	Latitude	Longitude
				21°47'42.056016"	
		8	H	N 21°47'42.056592"	E 72°34'18.758352"
		9	I	N 21°48'15.062004"	E 72°34'29.74422"
		10	J	N 21°45'38.06658"	E 72°37'11.746632"
15	GNDR EXT-VIII ML	1	A	N 21°57'28.015848"	E 72°50'45.653532"
		2	B	N 21°55'15.026448"	E 72°50'45.651516"
		3	C	N 21°55'15.028068"	E 72°48'41.683068"
16	GNDR EXT-IX ML	1	A	N 21°55'10.032456"	E 72°36'39.733308"
		2	B	N 21°55'7.63266"	E 72°32'22.788636"
		3	C	N 21°55'30.036756"	E 72°32'22.761636"
		4	D	N 21°55'32.033316"	E 72°34'1.765848"
		5	E	N 21°57'57.031236"	E 72°34'3.7731"
		6	F	N 21°58'18.0273"	E 72°34'42.770856"
		7	G	N 21°58'26.022936"	E 72°39'5.730228"
		8	H	N 21°52'38.045388"	E 72°35'51.753156"
17	GNDR EXT-XII ML	1	A	N 21°59'2.012316"	E 72°49'44.849136"
		2	B	N 21°59'2.010012"	E 72°52'41.111616"
		3	C	N 21°57'2.01654"	E 72°52'41.629764"
		4	D	N 21°57'2.018052"	E 72°50'45.641292"
		5	E	N 21°57'28.006632"	E 72°50'45.641688"

Sl No	Block	SEQ	VERT	Latitude	Longitude
		6	F	N 21°56'57.018696"	E 72°50'17.664"
		7	G	N 21°56'57.01992"	E 72°48'42.673428"
		8	H	N 21°57'35.017884"	E 72°48'42.674004"
18	DAHJ EXT-I ML	1	A	N 21°41'17.077632"	E 72°40'4.70514"
		2	B	N 21°41'47.07582"	E 72°39'42.707808"
		3	C	N 21°41'27.0753"	E 72°39'14.722452"
		4	D	N 21°40'57.077112"	E 72°39'36.720144"
		5	E	N 21°40'36.08094"	E 72°39'5.71392"
		6	F	N 21°40'54.077772"	E 72°38'15.73134"
		7	G	N 21°45'38.06658"	E 72°37'11.746632"
		8	H	N 21°49'40.050588"	E 72°42'31.695228"
		9	I	N 21°42'44.06922"	E 72°42'9.691128"
19	S_DAHJ ML	1	A	N 21°40'36.08094"	E 72°39'5.71392"
		2	B	N 21°40'42.836592"	E 72°40'7.286268"
		3	C	N 21°40'10.229556"	E 72°40'7.2858"
		4	D	N 21°40'10.229088"	E 72°40'42.163824"
		5	E	N 21°40'46.907508"	E 72°40'42.164364"
		6	F	N 21°41'10.078044"	E 72°43'50.58912"
		7	G	N 21°41'6.40392"	E 72°44'57.681384"
		8	H	N	E

Sl No	Block	SEQ	VERT	Latitude	Longitude
				21°39'26.488404"	72°44'57.679872"
		9	I	N 21°39'26.493192"	E 72°38'57.720948"
		10	J	N 21°40'39.301428"	E 72°38'57.722028"
20	PKJN ML	1	A	N 21°45'32.059044"	E 72°45'32.67324"
		2	B	N 21°44'10.064112"	E 72°45'32.67198"
		3	C	N 21°44'10.065264"	E 72°44'3.69168"
		4	D	N 21°45'32.060196"	E 72°44'3.69294"
21	PKJN EXT-I ML	1	A	N 21°46'19.059924"	E 72°42'20.707128"
		2	B	N 21°48'56.05272"	E 72°42'29.68992"
		3	C	N 21°48'56.0511"	E 72°44'30.692256"
		4	D	N 21°46'46.055172"	E 72°45'8.699292"
22	PKJN EXT-II ML	1	A	N 21°46'19.059924"	E 72°42'20.707128"
		2	B	N 21°46'38.05662"	E 72°44'24.209016"
		3	C	N 21°46'0.190272"	E 72°44'24.20844"
		4	D	N 21°46'0.189768"	E 72°45'2.683944"
		5	E	N 21°45'32.05944"	E 72°45'2.683512"
		6	F	N 21°45'32.060196"	E 72°44'3.69294"
		7	G	N 21°44'10.065264"	E 72°44'3.69168"
		8	H	N 21°44'10.064112"	E 72°45'32.67198"
		9	I	N 21°44'12.061608"	E 72°46'29.38332"

Sl No	Block	SEQ	VERT	Latitude	Longitude
		10	J	N 21°41'36.072708"	E 72°44'10.692456"
		11	K	N 21°41'46.076748"	E 72°43'56.686404"
		12	L	N 21°41'34.07514"	E 72°43'45.701184"
		13	M	N 21°41'23.075376"	E 72°43'58.691028"
		14	N	N 21°41'10.078044"	E 72°43'49.682748"
		15	O	N 21°42'44.06922"	E 72°42'9.691128"
23	DBKA ML	1	A	N 22°7'57.974232"	E 72°56'30.627096"
		2	B	N 22°9'51.97446"	E 72°52'59.657016"
		3	C	N 22°11'16.96974"	E 72°53'2.651748"
		4	D	N 22°10'31.967328"	E 72°55'36.636924"
		5	E	N 22°10'30.971496"	E 72°56'12.640884"
24	DBKA EXT-I ML	1	A	N 22°9'15.973092"	E 72°56'21.647508"
		2	B	N 22°10'30.971496"	E 72°56'12.640884"
		3	C	N 22°10'31.967328"	E 72°55'36.636924"
		4	D	N 22°11'39.969024"	E 72°55'39.631404"
		5	E	N 22°11'39.96852"	E 72°56'17.640024"
		6	F	N 22°12'11.964636"	E 72°56'17.640492"
		7	G	N 22°12'11.96514"	E 72°55'39.631872"
		8	H	N 22°12'28.965564"	E 72°55'39.632124"
		9	I	N	E

Sl No	Block	SEQ	VERT	Latitude	Longitude
				22°12'28.964376"	72°57'13.638204"
		10	J	N 22°9'15.972408"	E 72°57'13.635324"
25	KRAL ML	1	A	N 22°7'25.97736"	E 72°57'54.636156"
		2	B	N 22°6'4.983804"	E 72°59'27.62484"
		3	C	N 22°5'12.988068"	E 72°57'50.624532"
		4	D	N 22°2'36.996576"	E 72°59'21.607476"
		5	E	N 22°0'26.001648"	E 72°55'26.6313"
		6	F	N 22°1'5.001168"	E 72°55'2.629128"
		7	G	N 22°3'3.998304"	E 72°53'50.649936"
		8	H	N 22°4'53.993712"	E 72°52'42.65292"
		9	I	N 22°5'35.484432"	E 72°53'57.65532"
		10	J	N 22°7'25.9779"	E 72°57'12.644892"
26	MATR ML	1	A	N 21°59'33.601416"	E 73°1'57.5949"
		2	B	N 21°58'43.995288"	E 73°0'14.607648"
		3	C	N 21°57'17.33868"	E 73°0'11.420676"
		4	D	N 21°57'17.009892"	E 72°58'57.59994"
		5	E	N 21°58'32.0088"	E 72°58'12.61632"
		6	F	N 22°0'2.002464"	E 72°58'12.617652"
		7	G	N 22°0'13.661496"	E 72°57'46.418184"
		8	H	N 22°0'34.301592"	E 72°56'57.616368"

Sl No	Block	SEQ	VERT	Latitude	Longitude
		9	I	N 22°1'46.996752"	E 73°0'42.595092"
		1	A	N 22°1'1.999236"	E 72°56'57.616764"
		2	B	N 22°1'1.99956"	E 72°56'30.620904"
		3	C	N 22°2'36.996576"	E 72°59'21.607476"
		4	D	N 22°2'8.666952"	E 72°59'39.62256"
		5	E	N 22°2'8.6649"	E 73°2'17.2059"
		6	F	N 22°2'1.98402"	E 73°2'17.590236"
		7	G	N 21°59'47.51862"	E 73°2'26.596356"
		8	H	N 21°59'33.601416"	E 73°1'57.5949"
		9	I	N 22°1'46.996752"	E 73°0'42.595092"
		10	J	N 22°0'34.301592"	E 72°56'57.616368"
		1	A	N 22°0'2.002464"	E 72°58'12.617652"
		2	B	N 21°58'32.0088"	E 72°58'12.61632"
		3	C	N 21°57'17.009892"	E 72°58'57.59994"
		4	D	N 21°57'17.338608"	E 73°0'14.606388"
		5	E	N 21°56'32.015652"	E 73°0'14.605704"
		6	F	N 21°56'32.01756"	E 72°57'46.414908"
		7	G	N 22°0'13.661496"	E 72°57'46.418184"
27	NADA ML	1	A	N 21°57'1.032984"	E 72°32'21.774192"
		2	B	N 21°57'57.031236"	E 72°34'3.7731"

Sl No	Block	SEQ	VERT	Latitude	Longitude
		3	C	N 21°55'32.033316"	E 72°34'1.765848"
		4	D	N 21°55'30.036756"	E 72°32'21.772824"
28	UMRA EXT-I ML	1	A	N 22°6'41.986296"	E 72°49'9.678468"
		2	B	N 22°6'11.988396"	E 72°49'9.678036"
		3	C	N 22°6'11.987784"	E 72°49'57.683568"
		4	D	N 22°5'1.98816"	E 72°49'57.682524"
		5	E	N 22°5'1.98942"	E 72°48'19.694124"
		6	F	N 22°5'16.991232"	E 72°48'48.667896"
		7	G	N 22°5'45.994056"	E 72°48'27.686736"
		8	H	N 22°5'16.99188"	E 72°47'59.673876"
		9	I	N 22°6'49.986612"	E 72°47'11.697108"
29	UMRA EXT-II ML	1	A	N 22°6'49.986612"	E 72°47'11.697108"
		2	B	N 22°5'16.93032"	E 72°47'59.701236"
		3	C	N 22°2'33.084312"	E 72°48'42.12918"
		4	D	N 22°4'10.001316"	E 72°45'43.702884"
		5	E	N 22°4'44.635224"	E 72°44'5.825184"
		6	F	N 22°6’59.000”	E 72°45'14.951844"
30	JambusarDabka	1	A	N 22°8'16.986228"	E 72°48'11.677788"
		2	B	N 22°8'16.985832"	E 72°48'42.683652"
		3	C	N	E

Sl No	Block	SEQ	VERT	Latitude	Longitude
				22°8'46.983696"	72°48'42.68412"
		4	D	N 22°8'46.982724"	E 72°49'57.685908"
		5	E	N 22°5'46.987044"	E 72°51'27.652284"
		6	F	N 22°5'1.993812"	E 72°51'27.56916"
		7	G	N 22°5'1.995"	E 72°49'57.682524"
		8	H	N 22°6'12.001464"	E 72°49'57.683568"
		9	I	N 22°6'12.002076"	E 72°49'9.678036"
		10	J	N 22°6'41.986296"	E 72°49'9.678468"
		11	K	N 22°6'45.069768"	E 72°48'24.3918"

Standard Terms of Reference have been obtained vide F No. IA-J-11011/150/2019-IA-II(I) dated 13th May 2019. It was informed that no litigation is pending against the proposal.

PP has submitted the certified compliance report dated 4.1.2018 issued by IRO, in which it is reported that all 30 conditions found compliance. But, CCR issued by IRO is 3 years old. Acordingly, Ministry raised EDS to furnish latest CCR issued by IRO. Further, PP vide EDS reply dated 17.02.2023 has submitted that present project proposal is for a new project and it does not involve any 'expansion' activity. CCR is required for only expansion project.

Public Hearings for the proposed project had been conducted by the Gujarat Pollution Control Board on 10th August 2022 at APMC Hall, 1st Floor, TankariBhagol Market, Jambusar, Dist. Bharuch chaired by Resident Additional Collector & Additional District Magistrate, Bharuch; on 23rd August 2022 at Barbodhan Gram Panchayat Hall, Above Bank of Baroda – Barbodhan Branch, Village: Barbodhan, Ta: Olpad, Dist. Surat chaired by Collector & District Magistrate, Surat and on 25th August

2022 at Vishwa Traders and Warehouse, Sampla, Ta. Padra, Dist: Vadodara chaired by Sub- Divisional Magistrate, Padra and Vadodara Rural. The main issues raised during the public hearing and their action plan:

(i) PP informed the source of water supply will be nearby surface installation of ONGC which is having pipeline for river water.

(ii) As ONGC is PSU, compensation cost is directly given to government land as per land acquisition rules.

(iii) PP informed that they have started giving CSR fund regularly as per rule. They promised that they will give priority to paver block work of Mobha gram panchayat.

(iv) RO-GPCB has instructed ONGC to restore the land after completion of project.

(v) PP informef that there is possibility that no any well need to dig in Karjan taluka villages.

(vi) PP informed that 60 nos of employment opportunity either directly or indirectly will be generated per well.

(vii) The Chairman jas instructed PP to utilise CSR funds in local affected area only and give priority to locals for semi-skilled jobs like sweeping, security.

(viii) Well maintained Machineries to be used to reduce noise level.

Issue in brief	**Action plan in brief**	**Budget allocated and timeline**
If there is any leakage in the pipeline and there is oil spillage on the land then what steps are taken by ONGC	Representative of ONGC replied that we give compensation in case of a small leakage when there is a major leakage if the farmer asks to replace the soil.	Budget is given in CER
When there was fire in Dihen, farmers refused to take water from channel and provided it to ONGC. Our only suggestion is to make our field channel RCC.	Company will consider the request received from Dihen Society President for field channel RCC.	

Locals are not getting any benefits from the project. Company has not given any kind of employment in the villages.	PP has informed that around 60 nos of employment opportunity either directly or indirectly will be generated per well.	

2. Bharuch district

Issue in brief	Response/Commitment of ONGC
Participant desired details on CSR expenditure by ONGC Ankleshwar. They desired details on amount spent, area where amount was spent and activities carried out under CSR. Details of CSR expenditure on schools was also desired. It was desired that local people to be directly involved in CSR expenditure and requirement a NGO to be waved off for making CSR accessible to everyone.	ONGC representative informed that about 8.43 Crore rupees have been spent in CSR in Bharuch district during last five years. It was clarified that CSR fund has been used for primary schools, trust operated schools as per demand received. CSR activities such as furniture work, different school development activities, stationary provision, assistance for Uniforms has been carried out. It is further clarified that the Government of India has issued a notification which indicates that CSR proposals will have to come through the NGOs. However, ONGC is always ready to help people by being the Facilitator (bridge) and provide details of NGOs willing to help.
Few participants highlighted that some villages have issue in compensation payment.	ONGC representative informed that compensation payments are done through Bank accounts and people, whose bank details are not correct, might be facing some issue. He assured to verify the issue at his end.
Employment to local people in ONGC.	ONGC representative highlighted that out of total 1069 staff level employees at Ankleshwar Asset 956 belong to Gujarat (89.42%). Out of total 2271 regular employees 1543 belong to Gujarat (67.94 %).

	Also, ONGC contributes in employment generation and skill development in youth through apprentice programme wherein 297 nos of local individuals have been given training as apprentice in 2019-20 and 2021-22 at Ankleshwar Asset.
Issue of delay in survey for pipeline work at Dabha village was raised. Issue of pollution due to flare of ONGC GGS and effect on crops was raised.	ONGC representative informed that survey work is being carried out as per CAPMP Act. He informed that work for Dabha and Nada villages will be expedited.
Participant informed that CSR fund expenditure not carried out at Gandhar village despite ONGC having its units working here.	ONGC representative informed that Rs. 15,46 ,013 have been spent by ONGC in last five years under CSR at Gandhar village.
Few participants appreciated work by ONGC under CSR. However, they desired to arrange a seminar / workshop for facilitation regarding CSR work procedures and requirements.	ONGC representative welcomed request for a workshop and contact details of CSR department were shared for communicating such good idea.
Participant complained on issues related to land sale, compensation and rent paid by ONGC.	ONGC representative took note of issues and clarified that informed that land related proceedings are done under PMP Act.
Employment to farmers who have given land parcels to ONGC (i.e. land losers) was requested.	ONGC representative informed that ONGC helps land losers as it has reserved a quota for 30 % hired light vehicles for land losers.
Participant desired information on steps carried out by ONGC in case of oil spillage on land and for land restoration.	ONGC is having a centralised rate contract for bioremediation in place for immediately addressing oil spillage and land restoration through Bioremediation.

3. Surat district:

Issue in brief	Response/Commitment of ONGC

CSR fund will be provided to the nearby villages in OLAPD	Company carried out many social work under CSR fund. Company spent around Rs. 50 lacs in villages in OLAPAD. In addition if any requirement related to road, infrastructure or education i.e. school and if such proposal is submitted along with required documents along with Gam Panchayat OLPAD, then it will be definitely considered.
Suggestion is to make field channel RCC.	Company will consider the request received from Dihen Society President for field channel RCC.
1. commitment to maintain one fire tender at Olpad 2. Pending ROUs to be provided to people 3. Management & Disposal of drill cuttings	1. It was informed that ONGC Ankleshwar has tie-up with ONGC Hazira plant and Gujarat State fire department unit situated at Rander Road. As a backup measure ONGC has dedicated firefighting facility at CTF Ankleshwar. 2. Time bound plan will be prepared and implemented for ROU.. ROU is obtained by ONGC under PMP Act & payments is being disbursed by competent Authority (Dy. Collector). Pending Dues will be cleared as early as possible. 3. ONGC informed that Water based mud is used for drilling activities in ONGC. National Institute of Oceanography (NIO), Goa has carried out Eco toxicity Assessment for different formulations of Drilling muds used in ONGC. Formulations were found to be of 'Non-toxic or practically non-toxic' grades. Drill cuttings with water based mud are not categorized as Hazardous wastes as per Hazardous waste Rules, 2016.
ONGC to provide double lane road	Suggestion will be considered under operation activity.
ONGC to appoint local PRO.	Sh. Palanpuria has been appointed as IM at OLPAD installation.

The Committee also discussed the issues raised in the representations of Mr. MSH Sheikh. The Committe asked PP to submit the response discussed in writing.

Total plant area after expansion will be 290 Ha (2 ha./well for 145 wells). The estimated project cost is Rs.2393.49 Crores. Capital cost of EMP would

be Rs. 104.54 Crores and recurring cost for EMP would be Rs. 2.26 Crores per annum. Industry proposes to allocate Rs. 1.85 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 60 persons per well as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of proposed wells and production installations. Conservation plan for schedule I species has been submitted to PCCF-Wildlife, Gujarat dated 6th February 2023 and a budget of 5 Lacs has been earmarked for the same. Viswamitri (Dhadar) river is flowing through block, Narmada river is flowing through block, Kim river is at a distance 1.0 Km from block boundary towards South Direction, Tapi River is at a distance 6.50 Km from block boundary towards East Direction, and Gulf of Khambat is 5.25 Km from the block boundary towards West Direction.

Ambient air quality monitoring was carried out at **22 (twenty-two)** locations during 23rd December 2019 to 15th March 2020 and the baseline data indicates the ranges of concentrations as: PM10 (35-73 µg/m3), PM2.5 (16-48 µg/m3), SO2 (5.1-10.5 µg/m3) and NO2 (9.1-23.6 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.01 µg/m3, 0.006 µg/m3 and 0.236 µg/m3 with respect to PM10, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). The Committee noted that ambient air quality monitoring was carried out from 23rd December 2019 to 15th March 2020, which is within 3 years.

Total fresh water requirement after expansion will be 22 KLD for each well which will be met from local sources. Effluent of 5 KLD per well quantity will be treated through Mobile Effluent Treatment Plant of capacity 25 KLD. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside. All wastewater from the drilling operations will be collected in the drilling fluid storage pit. The wastewater in this storage pits will be recycled and reused during drilling phase. Domestic wastewater during the drilling 2.5 KLD will be treated in mobile STP.

PP informed that total oil Production envisaged from 145 wells: 3342.5 m3/day. Oil produced will be handled through existing production facilities of

Ankleshwar Asset viz. CPF Gandhar, CTF Ankleshwar, GGS Nada, Gandhar GGS IV & VII, GNAQ, GGS Dahej. These existing facilities are sufficient to handle the envisaged production and no new production facility is required to be setup.

Handling of Produced Water:

- PP informed that the total produced water envisaged from development wells: 371.3 m^3/day. Present handling capacity of ETP at CPF Gandhar is 3200-3500 m^3/day against installed capacity of 5000 (m^3/day). Present handling capacity of ETP at CTF Ankleshwar is 2800-3100 m^3/day against installed capacity of 3500 (m^3/day). Present handling capacity of ETP at GGS Nada is 1000-1050 m^3/day against installed capacity of 3000 (m^3/day).

- Disposal of treated produced water will be through Effluent Disposal wells below 1000 mtr. as per CPCB guidelines
- PP informed that available ETP capacity is adequate to handle additional Produced water generated

The power requirement of the drilling rig will be met by using 1x1430KVA, 1x500KVA, 1x250KVA, 1x160KVA, 1x30KVA, 1x1275KVA and 1x600KVA with diesel consumption of about 8 KLD. DG set will be used as standby during power failure and stack height (7.2-13m) will be provided as per CPCB norms to the proposed DG sets. A flare system consists of the flare stack or boom and pipes which collect the gases to be flared. For effective flaring CPCB's document "Oil & Gas drilling and extraction industry" June 2006 will be followed as follows:

- Standard flare design - An efficient test flare burner head will be selected to
- minimize incomplete combustion, black smoke, and hydrocarbon fallout. Location and height of the flare stack based on maximum ground level concentration criteria & maximum radiation intensity exposure criteria Flare stack- Minimum physical height of stack should be 30 m from ground level.
- Only in those situations and or locations where elevated flares are not technical feasible, then ground flaring may be resorted

Details of Process emissions generation and its management

- There will be No Process emissions generation.

Details of Solid waste/ Hazardous waste generation and its management

- **Hazardous waste will be generated from Drilling operations are**
  - Used Lubricating oil (10m3/well) - will be collected in metal drums kept in secured area and will be disposed through authorised recyclers.
  - Wastes/ residues containing oil (5-6 kg/well) - will be collected in metal drums kept in secured area and will be disposed through authorised recyclers.
  - Discarded containers/barrels/ liners contaminated with hazardous waste (50 Nos. /year) - Will be disposed as per Hazardous Waste Rules, 2016.
- **Solid waste will be generated from Drilling operations are**
  - Drill cutting generated from Water based Mud, not contaminated with oil (80-270 m3/well) - which are inert materials of shale, sand, and clay; will fall into the lined waste pits.
  - Packaging wastes (2.3 m3/well) - Proper segregation and storage of recyclable waste in designated bins onsite. Recyclables will be periodically sold to local waste recyclers.
  - Kitchen waste (10-15 kg/day) - will be stored in compost pits on a daily basis or disposed-off nearby municipal disposal site via local vendors.
  - Recyclable waste like papers, plastics (Negligible) - Proper segregation and storage of recyclable waste in designated bins onsite. Recyclables will be periodically sold to local waste recyclers.

During deliberations, EAC discussed following issues:

- PP informed the following:

Capital Cost and Recurring cost of EMP are given below:

Sl. No.	Description	Capital Cost	Recurring Cost
1	Wastewater Effluent Management		
	Septic Tank	50,000	5,000
	Water Quality Monitoring		5,000
2	Use of Mobile ETP		3,10,000
3	Noise and Vibration Mitigation		
	Noise Monitoring		3,000
	Maintenance & Cost of Equipment		5,50,000

Sl. No.	Description	Capital Cost	Recurring Cost
4	Solid Waste Management	50,000	
	HDPE Lined waste Pit	4,10,000	
5	Air Emission Mitigation		
	Approach Road construction (For new Road having 7.0 m Width and 1.0 km length)	50,00,000	500000
	Air Monitoring		25000
6	Other civil constructions like Cutting Pit / waste pit / Garland Drain	5,00,000	
7	Water Spray to prevent Dusting		10000
8	Training to staff		1,25,000
9	General Awareness in local public		25,000
10	Site restoration in case of abandoned well	12,00,000	
	Total	**72,10,000**	**155800**

Details of CER with proposed activities and budgetary allocation:

Action Plan on issues raised during public hearing & written submissions as per MoEF&CC OM dated 30/09/2020

Sl. No	CER Activities	District	Estimated Cost Allocation (INR Lacs)
1	Skill development of local people for enhancing their livelihood opportunities by Skill Development programmes/Vocational Trainings	Bharuch	15
2	Medical Camps / Health check-ups / Financial Assistance for procurement of equipment	Bharuch	10
3	Village development works such as Road Repairs / Road Widening / Internal C. C. Roads in villages / Fixing of Paved blocks on Road	Bharuch	40
4	Village development works such as construction of Drainage lines/RCC channels	Bharuch	20
5	Village Development work such as construction of Water storage tanks/	Bharuch	10

Sl. No	CER Activities	District	Estimated Cost Allocation (INR Lacs)
	Drinking water system		
6	Plantation/ Afforestation/Green belt development	Bharuch	5
7	Village development works such as Road Repairs / Road Widening / Internal C. C. Roads in villages/Fixing of Paved blocks on Road	Surat	20
8	Village development works such as construction of Drainage lines/RCC channels	Surat	10
9	Skill development of local people for enhancing their livelihood opportunities by Skill Development programs/Vocational Trainings	Vadodara	10
10	Village development works such as Road Repairs / Road Widening / Internal C. C. Roads in villages/Fixing of Paved blocks on Road	Vadodara	10
11	Village development works such as construction of Protection wall to Pond	Vadodara	10
12	Village development works Such as construction of Toilets /Repair of Toilets	Vadodara	10
13	Plantation/ Afforestation/Green belt development	Vadodara	5
	TOTAL		185

PP submitted undertaking that:

- No drilling activity will be carried in any ESZ, Forest land, CRZ area and within the distance of 1 km from the rivers/waterbodies.
- DG sets at drilling locations will be equipped with self-contained acoustic enclosures meeting the statutory norms.
- Proposed 6 wells will be drilled in Padra Taluka of Vadodara district where Public Hearing was presided by SDM, Padra Taluka.

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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to

time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i) 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.

(ii) No drilling activities shall be carried out within 500 m from the water bodies.

(iii) As proposed, no proposed development/production drilling shall be located within forest land and protected area.

(iv) As proposed, no proposed development/production drilling shall be located within eco-sensitive zones and CRZ in the proposed project.

(v) Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.

(vi) 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.

(vii) No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.

(viii) Total fresh water requirement shall not exceed 22 m3/day and will be met fromlocal sources. Prior permission shall be obtained from the

concerned regulatory authority.

(ix) The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Mobile STP shall also be installed. The size of the waste pit shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rainwater. There shall be separate storm water channel and rainwater shall not be allowed to mix with wastewater. Level of the Drilling site shall be constructed in such way that outside rainwater should not enter into the drilling site. Alternatively, if possible, pit less drilling be practiced instead of above.

(x) The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.

(xi) As proposed, produced formation water is stored in formation water tanks shall be disposed to the abandoned wells of ONGC after necessary treatment. Separated water from phase separation system will be treated in an ETP and will be reused. Treated effluent shall meet the water quality standards for re-injection well as per the CPCB/SPCB guidelines. PP shall monitor water quality of treated effluent regularly and maintain records.

(xii) During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.

(xiii) The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.

(xiv) Approach road shall be made pucca to minimize generation of suspended dust.

(xv) The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the

DG sets along with the adequate stack height as per CPCB guidelines.

(xvi) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

(xvii) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

(xviii) The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored.

(xix) The project proponent shall develop a contingency plan for H2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.

(xx) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.

(xxi) On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations. After completion of drilling of any well, the owner or operator shall restore the well site, remove or fill all pits used to contain produced fluids or industrial

waste and remove all drilling supplies and equipment not needed for production.

(xxii) As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility (Rs. 1.85 Crores), and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within 1 year as proposed.

(xxiii) No lead acid batteries shall be utilized in the project/site.

(xxiv) Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xxv) Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.

(xxvi) The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

(xxvii) PP shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.

(xxviii) PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring

of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non- compliance or infringement should be reported to the concerned authority

(xxix) The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check-up of their workers, 20% of the workers engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.

(xxx) 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. 09

Expansion of Molasses based Distillery from 120 KLPD to 250 KLPD at Village Jawaharpur, Tehsil Misrikh, District Sitapur, Uttar Pradesh by M/s Dalmia Chini Mills, Distillery unit- Jawaharpur– Consideration of amendment of Environmental Clearance

[. IA/UP/IND2/297963/2023, IA-J-11011/316/2020-IA-II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. J-11011/316/2020-IA-II (I) dated 04th February, 2021 for the project Expansion of Molasses based Distillery from 120 KLPD to 250 KLPD at Village Jawaharpur, Tehsil Misrikh, District Sitapur, Uttar Pradesh by M/s DalmiaChini Mills, Distillery unit- Jawaharpur.

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

No.	Particulars of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ reasons

1	Para 4 on Page 1 of 7	Total land area is 20.23 ha.	Total land area is 9.73 ha.	Company has earmarked 10.5 ha land for grain based ethanol plant. Earlier distillery was based on bio compost technology + Lagoon, due to change treatment technology from bio compost to Incineration, company has left out redundant / useless area of 10.5 Ha (covered by Compost/yard/lagoon etc.), hence to make the vision of bio fuel blending up to 20 %, the company has proposed a green field Grain plant on compost + lagoon area.
2	Para 4 on Page 2 of 7	Greenbelt 6.7 ha (33% of total area)	Greenbelt 4.53 ha (46% of total area)	46% of total area is developed as greenbelt.

- The company obtained Environment Clearance from MoEFCC, New Delhi vide letter no. J-11011/316/2020-IA-II (I) dated 4th February, 2021 for Expansion of Molasses based Distillery from 120 KLPD to 250 KLPD by Modernization and Enabling usage of Cane juice/Cane syrup at Village Jawaharpur, Tehsil Misrikh, District Sitapur, Uttar Pradesh.
- CTO has been obtained for 250 KLPD Distillery & 6.5 MW Cogeneration power plant vide no. 170537/UPPCB/Lucknow (UPPCBRO)/CTO/both /SITAPUR/2022 dated 27.12.2022 valid till 31.12.2024.
- PP vide email dated 11.03,2022 has informed that due to unavailability

of land inside the premises, the company has agreed to develop greenbelt in an area of 6 acres (2.43 ha) outside the plant premises, hence agreement has been done with Sitapur Pinjrapol Society, Gaushala Sitapur dated 11.03.2023 for the same. Copy of the agreement and other relevant documents has been submitted.

- Prior to expansion, earlier distillery was based on bio compost technology + Lagoon, due to change in treatment technology from bio compost to Incineration, company has left out redundant / useless area of 10.5 Ha (covered by Compost/yard/lagoon etc.), hence to make the vision of bio fuel blending up to 20%, the company has proposed a green field Grain plant on compost + lagoon area with following changes in existing EC – limited to land area allocation only;

i. Total Plant area in existing EC is 20.23 Ha.

ii. 9.73 Ha is earmarked for existing molasses-based distillery, In the existing molasses-based distillery, 4.53 ha land i.e., 46% of total area is developed and will be maintained.

10.5 Ha is earmarked for Grain based Distillery of 500 KLPD, out of that 3.48 ha land i.e., 33% of total area will be developed as greenbelt

EAC found the justification for amendment sought satisfactory and recommended for amendment in EC as proposed by the project proponent subject to the following condition:

(i) As proposed, PP shall develop additional greenbelt in an area of 6 acres (2.43 ha) outside the plant premises, which is located at Sitapur Pinjrapol Society, Gaushala Sitapur. Compliance report shall be submitted to Regional Office on quarterly basis.

All other terms and conditions issued vide EC vide letter no. J-11011/316/2020-IA-II (I) dated 04th February, 2021 remain unchanged.

Agenda No. 10

Expansion of Sugarcane Crushing capacity from 8000 TCD to 11000 TCD and Distillery Capacity from 54 KLPD to 150 KLPD based on Sugar cane juice/ Syrup/C/B Heavy Molasses as Raw material

located at Sankeshwar village, Hukkeri tehsil,Belgaum district, Karnataka by M/s. Shri Hiranyakeshi Sahakari Sakkare Karkhane Niyamit- Consideration of Environmental Clearance.

[IA/KA/IND2/415589/2023, IA-J-11011/54/2009-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. Dr. Subbarao's Environment Center, Sangli. (NABET Certificate no: - NABET/EIA/2023/SA0174 and validity – DEC 12, 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project expansion of Sugarcane Crushing capacity from 8000 TCD to 11000 TCD and Distillery Capacity from 54 KLPD to 150 KLPD based on Sugar cane juice/ Syrup/C/B Heavy Molasses as Raw material located at Sankeshwar village, Hukkeri tehsil, Belgaum district, Karnataka by M/s. Shri HiranyakeshiSahakariSakkareKarkhaneNiyamit.

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:

Sr. No.	Name of Unit	Name of the product/ by product	Existing production capacity	Additional production capacity	Total production capacity

1	Sugar Crushing capacity	Sugar	8000 TCD	3000 TCD	11000 TCD
2	Co-generation	--	52 MW	--	52 MW
3	Distillery	Ethanol	54 KLPD	96 KLPD	150 KLPD
4	Fermentation unit	Carbon dioxide	--	100-120 TPD	100 - 120 TPD

Ministry/SEIAA has issued Environmental Clearance to the existing Industry for a capacity of 5000 TCD to 11000 TCD sugar unit, 54 KLPD to 84 KLPD distillery unit and 41 MW to 52 MW Co-generation unit vide J-11011/54/2009-IA-II (I) dated 9th April 2009 which was extended on 8th September 2014 for a period of three years. At present the industry has 8000 TCD sugar unit, 52 MW co-generation unit and 54 KLPD distillery unit. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Bengaluru vide File no-EP/12.1/604/Karnataka/824 dated 19th Oct. 2022. The Committee deliberated the ATR on non compliance/partial compliance report of IRO. PP has provided month wise greenbelt development in order to comply with the recommendations of IRO. PP will develop greenbelt between March – August 2023 and plant 7300 saplings every month under guidance of Forest Department. Budget earmarked Rs. 10.33 lakh every year. EAC found the information satisfactory.

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

Total plant area after expansion will be 81.15 Ha (existing plant area 81.15 Hectares and no additional land is required for proposed project) 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 27.38 Hectares i.e. 33.75 % of the total plant area is reserved. 36.52 % greenbelt

has been developed and the same will be maintained. Remaining 63.48 % will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 120Crores. Capital cost of EMP would be Rs. 19.75 Crores and recurring cost for EMP would be Rs. 2.95Crores per annum. Industry proposes to allocate Rs. 90 Lakhs towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 50 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Hiranyakeshi river is flowing at a distance of 2 km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.69µg/m^3, 0.46 µg/m^3, 6.41µg/m^3 and 6.35µg/m3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

NOC vide letter no TMC/SKV/PWD/2022-23/099 dated 24.01.2023 has been obtained from office of Town Municipal Council, Sankeshwar, Government of Karnataka for expansion project.

Total fresh water requirement after expansion will be 0 CMD for sugar mill and for distillery 480 CMD) which will be met from Hiranyakeshi river vide letter no. IN-KA77033900498065U dated 16th July 2022 and validity 31st March 2024. Existing Effluent generation shall be 1340 CMD and proposed effluent of 430 CMD, in total 1770 CMD from Sugar unit which is being treated in the upgraded sugar ETP and recycled back into process. Existing 600 CMD effluent from distillery which is treated through Condensate Polishing Unit. Proposed effluent generation from distillery unit will be 1035 CMD which will be treated through proposed/upgraded Condensate Polishing Unit. In distillery, spent wash generated from the analyser column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be converted into powder form by spray dryer (ATFD) technology. Domestic waste water shall be treated in STP of capacity 100 CMD. 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 sugar unit after expansion will be 2 MW and distillery unit after expansion will be 2.5 MW, in total 4.5 MW for proposed project which will be sourced from existing 52 MW co-generation power plant. Existing unit has 2*100 TPH boiler for sugar unit and 1*20 TPH boiler for distillery unit. Distillery boiler of 20 TPH shall be upgraded to 32 TPHBagasse Briquette fired/coal fired boiler. Existing 2*100 TPH boiler of sugar unit has common stack of 85 m along with ESP as APCE. 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 bagass briquette + coal fired 32TPH boiler. Industry has 1750 KVA DG set which will be used as standby during power failure and stack height (6 m) is already provided as per CPCB norms to the proposed DG sets. PP informed that the existing ESP will be upgraded to achieve particulate emission from 150 mg/m3 to 50 mg/m3.

Details of Process emissions generation and its management

- APCE as ESP is already installed with stack height of 85 m for sugar and co-generation boiler. APCE as Bag Filter witha stack of height of 60m will be installed for controlling the particulate emissions within the statutory limit of 30mg/$Nm^3$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.
- CO2(120 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

Details of solidwaste/Hazardous waste generation and its management

- Concentrated spent wash (240 m3/day) for "C" Molasses will be converted to powder by ATFD/spray dryer.
- Boiler ash (33 TPD from existing 2*100 TPH boiler and 11 TPD from 32 TPH boiler) will be supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (1.5 Kiloliters per annum) will be sold to authorized recyclers.
- Press mud (440 TPD) will be used as manure in sugar mill.
- Bagasse (2160 TPD) will be used as fuel in sugar mill.
- Molasses (660 TPD) will be used as raw material for distillery.

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 96 KLPD & 3000 TCD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

- PP informed that the existing ESP will be upgraded to achieve particulate emission from 150 mg/m3 to 50 mg/m3.
- Exisitng bio-composting shall be abandoned within 2 years from the date of issue of ec.
- Biomethantion followed MEE and dryer will be provided to achieve zero discharge.
- PP has provided month wise greenbelt development in order to comply with the recommendations of IRO. PP will develop greenbelt between March – August 2023 and plant 7300 saplings every month under guidance of Forest Department. Budget earmarked Rs. 10.33 lakh every year.

Capital cost and recurring cost of EMP are given below:

Sr. No.	Component	Particulars		Capital in Lakhs	Recurring in Lakhs
1	Air	Up gradation of APC equipment		200	20
2	Water	• Sugar CPU, Distillery CPU. • MEE and Drier for Distillery Spentwash treatment`		2300	50
3	Noise	Acoustic enclosures, Silencer pads, ear plugs etc.		20	5
4	Environment monitoring and Management	Monthly Environment Monitoring (Per Year)		--	20
		Ambient air monitoring	PM10, PM2.5, SO2, NOx		
		Boiler & DG Set Monitoring	TPM, SO2, Nox		
		Effluent (Treated &Untreated)	pH, COD, BOD, TSS, TDS, Oil &		

		Grease		
5	Occupational Health	Glares, Breathing Masks, Gloves, Boots, Helmets, Ear plug and ear mask etc. & annual health-medical checkup of workers, Occupational Health (training, OH center)	60	10
6	Greenbelt	Green belt development activity	50	20
7	Solid Waste Management	Solid Waste Management	50	20
8	Rain water harvesting	Rain water harvesting	25	5
9	Storm water drainage	Storm water drainage design and construction	20	5
10	Carbon and Water Foot Print	Maintain the data of raw materials consumption, steam consumption, vehicle frequency for transport of raw materials, effluent generation, air emissions, hazardous waste generation, and raw material recovery	--	20
11	Solar Power & Energy Conservation (0.5 MW)	Street lights installation with Solar Systems	--	100
12	Fire and Safety	Fire and Safety Management	--	20
13	Laboratory	Testing and Analysis	50	10
Total Cost (In Lakhs)			2775	305

Details of CER with proposed activities and budgetary allocation:

Sr. No.	Activity	Cost in Lakhs
1	Sanitation, Drainage and waste treatment plant facilities	50
2	Drinking water facility	30
3	Electrification facility	20
4	Solid waste & management	20
5	Educational aids such as computers, E-learning materials etc., in the command area, Primary schools	20

	High-schools & Agricultural engineering college.	
6	Medical camps	10
	Total	150

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 96 KLPD & 3000 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). Exisitng bio-composting shall be abandoned within 2 years from the date of issue of ec.

(v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the distillery 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. No ground water shall be used for the plant operations.

(vi). Total fresh water requirement after expansion of sugar, distillery and cogeneration power plant shall not exceed 480m^3/day, which will be met from Hiranyakeshi 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.

(vii). The spent wash shall be treated in biomethanation plant followed by concentrated in MEE and concentrated spent wash shall be converted in to powder form by spray dryer (ATFD) Technology. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three stage RO. The treated permeate will be reused in cooling tower water makeup and for molasses dilution. The RO rejects will be taken back to MEE. Treated effluent will be recycled/reused for make up water of cooling towers/process etc. No wastewater 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 all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall ensure to implement Zero Liquid Discharge (ZLD) in existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

(viii). 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.

(ix). For sugar unit ESP is already installed with stack height of 85 m for 2x100 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 For distillery unit PP shall upgrade existing 20 TPH boiler to 32 TPH Bagasse Briquette fired/coal fired boiler. 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 32TPH boiler. ESP alongwith stack of 85 m will be installed with proposed 40 TPH boiler incineration boiler for controlling particulate emission within 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 shall be conducted annually. Existing ESP shall be upgraded to achieve particulate emission from 150 mg/m^3 to 50 mg/m^3.

(x). Boiler ash (44 TPD) will be 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.

(xi). CO_2 (120 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and /collected in installed bottling plant.

(xii). PP shall allocate at least Rs. 0.50 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(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. Fire fighting 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.

(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 has already been developed in 27.38 hectares i.e., 33.75 % of total project area shall be maintained 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.

(xviii). PP shall ensure the compliance of month wise greenbelt development plan submitted to comply with existing conditions. PP shall develop greenbelt between March – August 2023 and plant 7300 saplings every month under guidance of Forest Department. Budget earmarked Rs. 10.33 lakh every year.

(xix). PP proposed to allocate Rs. 0.90 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xx). 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.

(xxi). 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.

(xxii). 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.

(xxiii). 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.

(xxiv). 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.

ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, 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 Rameshrao Mungikar	Member
7.	Dr. Sanjay V. Patil (VSI)	Member
8.	Prof (Dr.) Dilip Majumdar	Member
9.	Dr. Seshagiri Rao Ambati (10.03.2023)	Member
10.	Shri A. N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
11.	Dr. Mahendra Phulwaria	Scientist 'C'
12.	Mr. Kanaka Teja	Research Assistant

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