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

Dated: 03.07.2023

Meeting ID: IA/IND2/13523/26/06/2023

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 26th June, 2023

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

(i) Shri. S.C Mann, Chairman of EAC (Ind-II) intimated his inability to attend this meeting due to personal reasons and nominated Dr. J. S Sharma as Vice Chairman to Chair this meeting in his absence.

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

(iii) 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/IND2/13517/12/06/2023) held on 12th - 13thJune, 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: -

26th June, 2023 (Monday)

Agenda No. 01

Installation of New Catalytic Dewaxing Unit and Modification of Once Through Hydrocracker Unit (OHCU)for Production of Group II/III LOBS within the Existing Refinery Complex" located at Manali IndustrialArea, Taluk Ambattur, District Thiruvallur, State Tamil nadu by M/s. Chennai Petroleum Corporation Limited– Re-consideration of Environment Clearance reg.

[IA/TN/IND2/273889/2021, IA-J-11011/42/2016-IA-II(I]

The proposal is for consideration of environmental clearance for Installation of New Catalytic Dewaxing Unit and Modification of Once Through Hydrocracker Unit (OHCU) for Production of Group II/III LOBS within the Existing Refinery Complex" located at Manali Industrial Area, Taluk Ambattur, District Thiruvallur, State Tamilnadu by M/s. Chennai Petroleum Corporation Limited.

The proposal was earlier considered by the EAC (Ind-2) in its meeting ID IA/IND2/13470/25/03/2023 held during 25th March 2023 wherein the proposalwas recommended for grant of EC. During processing the case, Ministry referred back the proposal to EAC, for examining the case w.r.t (i) the joint committee report and examination of adequacy of the proposed measures by PP and; (ii) the claim of PP that it is modernization project and not expansion project be also examined.

PP has submitted Point wise Action Plan on the recommendations of the Joint Committee report are given below:

S.No.	Recommendation	Action Taken / Status of Compliance
1	Use of cleaner fuel i.e. conversion of usage of liquid fuel (such as HSD, LDO, FO, etc.) into gaseous fuel.	**Being Complied.** Fuel Gas & RLNG (Low Sulfur fuel) are being used in process

		heaters to reduce Sulfur emissions.
2	Use of low Sulphur fuel till conversion to gaseous fuel.	**Being Complied.** Conversion to use RLNG in Boilers, Furnaces, Gas Turbines and Hydrogen generation units were carried out in a phased manner as part of Environmental friendly initiative and have been completed.
3	Improving the combustion efficiency with controlled air- fuel ratio.	**Being Complied.** Excess O2 in the flue gas is monitored and maintained at optimum levels to ensure complete combustion.
4	Installation of low NOx burner.	**Being Complied.** Low NOx burners are installed in furnaces to reduce NOx emission.
5	Other large/medium red category industries (Air polluting) in Manali industrial complex shall install CEMS and connect to SPCB and CPCB servers.	**Being Complied.** All the stacks are installed with online SOx, NOx, PM & CO analyzer and are connected to both TNPCB & CPCB and real time data transfer is continuous.
6	The industries shall develop the green belt in and around the Manali area as well as road side plantation in consultation with Greater Chennai Corporation. The Green Belt Model such as Source oriented approach and Receptor oriented approach shall be adopted to reduce the impact of emission and accordingly the suitable species shall be selected based on the Guidelines for Developing Greenbelt.	**Partially Complied.** Due to land constraint in the Site, we are planning for plantation outside the project site. Green Belt Area Details • Existing -152 Acres (18.26%) • Existing (Ongoing) - 123Acres (14.78%) • Proposed- Nil • After expansion- 275 Acres (33.05%) CPCL is committed to meet the above requirement in the following manner:

		A. 10 to 15% Green Belt Coverage within Refinery: Before April 2025 By utilizing available space and landscaping zones for enhancing green cover. B. 40% green coverage: Before April 2026 By Collaboration with Tamil Nadu Green Mission & across National Highways in Tamil Nadu in collaboration with NHAI. Affidavit towards CPCL's commitment for Green Belt Development was submitted towards clarifications sought in this regard during the EAC Meeting
7	Only Orange and Green category industries and Red category industries which are not emitting the SO2 and NO2 emissions shall be allowed in the area.	The proposed project is a modernization type. No expansion of the Refinery Capacity is envisaged. Only product pattern is altered, i.e., Naphtha and Diesel are upgraded to Lube Base Oils.
8	Existing industries with no increase in pollution load as well as reducing the SO2 and NO2 emission by 30 to 50% only can be allowed for expansion.	
9	Each industry in Manali industrial area shall evolve the action plan within a month on the above points individually in addition to the CEPI action plan along with the time schedule to implement the same within a year.	**Complied.** Short term and long term action plans were submitted to TNPCB as part of CEPI Compliance report. Compliance of these action items are also monitored regularly and being submitted to TNPCB. CEPI Compliance statement was also submitted to the clarifications sought during the

		EAC meeting.

During deliberation PP has conveyed that the current proposal is only modernization rather than expansion, as the Industry refinery capacity will remain at 10.5 MMTA according to the existing EC dated 02.08.2017. Further, it was also informed that in the present proposal Group II/III LOBS will be produced by equivalent reduction of Naphtha & Diesel products, maintaining refining capacity limit at 10.5 MMTA.The specific changes in the product configuration are provided below:

Change in Refinery Product	**Existing**	**After**	**Delta**
Total Naphtha Produced, TMTPA	920	798	- 122
Total Diesel Produced, TMTPA	4,771	4,655	- 116
Total Group-II/Ill Lubes	**0**	**238**	**+ 238**

After detailed deliberations EAC sought following additional information:

- The committee found that in some cases there is increase in pollution load. Accordingly, EAC suggested to take measures to reduce the pollution load and submit the detailed analysis report in aspects such as air, water, land solid/hazardous waste. The reduction in pollution, particularly in terms of SO_2 emissions, achieved through the use of fuel Gas & RLNG.
- Efforts to be made to increase the greenbelt within the existing Industry.
- PP is also required to provide a copy of the most recent judgement in the NGT Case filed under the Environment (Protection) Act, 1986 - Original Application No. 256/2020(SZ)

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. 02

Proposed establishment of Distillery having capacity 540 KLD (Cane Juice Syrup/Grain/B or C-Heavy Molasses Distillery along with 12 MW Co gen Power at Khasra No: 1, 2, 3, 4, 5, 8, 9, 12, 13, 14, 16, 18, 19, 23, 24, 25, 26, 27, 29, 30, 31, 40, 41, 42, 43, 44, 45M, 49, 50, 51, 53, 54M, 56M, 73M, 79, 100, 106,104, & 378 M village: Maqsudapur,

Udra Tikri & Kuinyan Maholiya, Block: Banda, Tehsil: Powayan, District: Shajahanpur, Uttar Pradesh by M/s. Bajaj Hindusthan Sugar Limited Unit: Maqsudapur – Consideration of Terms of Reference.

[IA/UP/IND2/426990/2023, IA-J-11011/188/2023-IA-II(I)]

The proposal was considered in EAC Meeting ID: IA/IND2/13504/16/05/2023 held on 16th May, 2023 in the Ministry, wherein EAC deferred the proposal as PP was requested for inability to attend the meeting dated 16.05.2023.

The Project Proponent and the accredited Consultant M/s. Environmental & Technical Research Centre (NABET certificate no. NABET/EIA/2225/RA 0273 and validity 02nd November, 2025) made a detailed presentation on the salient features of the project and informed that the proposal is for Term of Reference (TOR) to the project for Proposed establishment of Distillery having capacity 540 KLD (Cane Juice Syrup (Mode – 1) /Grain (Mode- 2) /B or C-Heavy Molasses (Mode- 3) Distillery along with 12 MW Co gen Power at Khasra No: 1, 2, 3, 4, 5, 8, 9, 12, 13, 14, 16, 18, 19, 23, 24, 25, 26, 27, 29, 30, 31, 40, 41, 42, 43, 44, 45M, 49, 50, 51, 53, 54M, 56M, 73M, 79, 100, 106,104, & 378 M village: Maqsudapur, Udra Tikri & Kuinyan Maholiya, Block: Banda, Tehsil: Powayan, District: Shajahanpur, Uttar Pradesh of M/s. Bajaj Hindusthan Sugar Limited Unit: Maqsudapur.

Proposed distillery will be based on multifeedstock. Mode – 1 for 100 % Cane Juice Syrup based operation, Mode – 2, for 100 % Grain based operation and Mode – 3, for 100 % C or B Heavy Molasses based operation. Proposed Distillery will be run only on one mode at a time. Proposed Distillery will be install within existing premises of existing Sugar Unit.

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

The details of products and capacity as under:

S.No	Unit	Product/by product	Proposed Quantity
1	Distillery	Ethanol /ENA/RS	540 KLD
2	Co gen Power	Power	12.0 MW

PP has informed that no litigation is pending against the proposal.

Total land area required is 43.264 hectares and is under possession of the company as proposed distillery will be established within the existing premises of Sugar Unit. Greenbelt will be developed in total area of 14.28 Hectares i.e., 33% of total project area. The estimated project cost is Rs. 696.1 Crores. Capital cost of EMP would be Rs. 100.42 Crores and recurring cost for EMP would be Rs. 10.52 Crores per annum. Industry proposes to allocate Rs. 6.96 Crores towards CER (Corporate Environment Responsibility). Total Employment will be 200 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance. No schedule – I Species found in the study area. Water bodies: Hardoi Branch (Sarda Canal)-adjacent to the site in the East Direction. Khanaut River– 0.41 km in west.

Total fresh water requirement will be 2160 KLD (maximum) which will be met from Ground Water. Effluent in the form of spent wash will be 4050 KLD (maximum). It will be treated concentrated in Multi effect evaporator then incinerated in Slop fired boilers during Cane Juice Syrup based operation (Mode- 1) and B or C heavy Molasses based operation (Mode – 3). During Grain based (mode – 2) operation, spent wash will be fed into the decanter then concentrate in MEE and then mixed with wet cake of decanter and converted to DDGS. STP of capacity 50 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be maximum 8.3 MW among all three modes of operation (Cane Juice Syrup / Grains / B or C Heavy Molasses based operation), which will be sourced from in-house Co generation power plant of 12 MW. Two slop-fired boilers of capacity 25 TPH & 100 TPH will be used with working pressure of 45 Kg/cm^2. Slop fired boilers will be provided with ESP (Four field) to ensure the emission within CPCB norms. APCE ESP (Four Field) with a stack of height of 85 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1000 kVA & 250 kVA DG set will be used as standby during power failure and stack height (7.0 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP (Electrostatic Precipitator) with a stack height of 85 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.
- Excavation activity strictly restricted to in windy days,
- Site will be covered from all four sides by Green Nets curtains to avoid emission within construction sites.
- PUC holder trucks will be allowed at site during construction phase.
- Frequently water sprinkling will be carried out in dust emission areas.
- Use of Tarpaulin on the trucks to suppress the dust emission during transportation of raw material will be practiced.
- Internal tarred roads will be available; hence, there will be no major dust emission.
- To avoid health hazards during construction phase, personal protective equipment's will be provided to workers as and when required.

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

- The total ash generated during Mode – 1 (Cane Juice Syrup based operation) will be 90.16 TPD, Mode – 2 (Grain based operation) will be 21.6 TPD and Mode – 3 (B or C heavy Molasses based operation) will be 204 TPD.
- Yeast Sludge generated during Mode – 1 (Cane Juice Syrup based operation) will be 50 TPD and Mode – 3 (B or C heavy Molasses based operation) will be 50 TPD.
- CPU Sludge generated during Mode - 1 (Cane Juice Syrup based operation) will be 3.0 TPD, mode – 2 (Grain based operation) will be 3.0 TPD and Mode – 3 (B or C heavy Molasses based operation) will be 4.0 TPD
- Cattle Feed DDGS will be 278 TPD in mode – 2 (Grain based operation) only.
- Used Oil & Grease generation will be approx.: 2.5 Tons /Annum. authorization under Hazardous and other waste (M&TM) Rules , 2016 will be obtained from State Pollution Control Board. Hazardous waste will be provided to the Authorised Vendors of UPPCB for

further disposal. Hazardous waste will be disposed as per the Hazardous Waste Management Rules 2016.

- Domestic Waste generation during operation phase will be approx.; 50 kg /Day. Out of total waste, 40% waste will be organic in nature and rest 60% is in inorganic in nature. 40 % organic waste will be disposed through Composting within premises. Inorganic waste will be disposed as per Solid Waste Management Rules 2016.

Mitigation Measures:

- During Mode – 1 (Cane Juice Syrup based operation) and Mode – 3 (B or C heavy Molasses based operation), Ash due to high potash content, will be used as manure.
- During mode - 2 (Grain based operation), Ash will be provided to brick manufacturer.
- Yeast Sludge & CPU Sludge will be mixed with press mud of Sugar mill and sold to the farmer in all the mode of operations.
- DDGS Generated during mode – 2 (Grain based operation) operations only and will be sold as cattle feed.

During deliberations EAC discussed the following issues:

- PP has informed that proposed distillery will be established within existing Sugar unit premises which has obtained Environmental Clearance from Ministry vide letter no : J – 11011/8/2007-IA-II(I) dated 31st July 2007 for cane crushing capacity 10000 TCD along with co gen power 21 MW. In this regard, EAC has expressed its opinion that the proposed distillery cannot be considered as a separate project since it will be located within the existing sugar unit. Consequently, the EAC suggested, PP to submit a Certified Compliance Report (CCR) for the existing sugar unit's EC dated 31st July 2007 along with EIA/EMP report.
- After examining the kml file, it was observed that the Sarda Canal passes adjacent to the proposed distillery. Therefore, the EAC has recommended that the PP should formulate an action plan for prevention of pollution in in the Sarda Canal along the stretch of the proposed site and also to obtain a NOC from the Irrigation department regarding the canal.
- Additionally, during the examination of the existing sugar industry using Google Earth, the EAC noticed a vacant plot labelled as an existing greenbelt in the northwest of the proposed site, situated between the parking area and the bagasse yard. In light of this, the

EAC suggested that the PP should develop sufficient green belt covering 33% of the existing unit by the time they submit the application for Environmental Clearance.

- The EAC found the proposed fresh water requirement very high and advised the PP to consider utilizing treated effluent from the sugar unit in the distillery instead of using fresh water in order to reduce fresh water requirement in the distillery unit.

After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs alongwith public hearing for undertaking detailed EIA and EMP study in addition to the Standard ToR for establishment of molasses/cane based distillery (Annexure-II).

i. PP to submit a Certified Compliance Report (CCR) for the existing sugar unit's EC dated 31st July 2007.
ii. PP should develop a sufficient green belt covering 33% of the existing plant area by the time they submit the application for Environmental Clearance.
iii. PP shall consider utilizing treated effluent from the sugar unit in the distillery instead of using fresh water in order to reduce fresh water requirement in the distillery unit.
iv. PP should formulate an action plan for prevention of pollution in the Sarda Canal along the stretch of the proposed site and also to obtain a NOC from the Irrigation department regarding the canal.
v. PP shall provide the details of source for feed stock i.e sugarcane juice/ molasses and also provide availability of sufficient feed stock for operating the proposed plant.
vi. One season fresh base line data shall be collected for preparation of EIA/EMP reports.
vii. PP shall prepare Layout plan earmarking space for development of peripheral green belt.
viii. Transportation details and their impact on road network to be submitted in the EIA/MEP report.
ix. Impact due increase traffic shall be assessed and incorporated in the environmental management plan.
x. Risk assessment study shall be carried out of hazardous chemical storage.
xi. EIA/EMP report shall include details such as (i) Details of advertisements for Public Hearing (ii) Copy of forwarding letter of SPCB to MoEF&CC (III) Legible copy of public hearing proceedings duly signed by the presiding officer. (iv) Attendance sheets (v) Action plan to address the issues raised during public hearing along with

budget allocation and time line. (vi) Copy of written grievances/submissions if any.

Agenda No. 03

Onshore Development and Production of oil and gas from 28 wells and establishment of Kasomarigaon EPS and GGS at SUAB drill site in forest area in 6 PML Blocks, Golaghat district, Assam located at Village Kasmari Gaon, Tehsil Sarupathar, District Golaghat, State Assam by M/s. Oil and Natural Gas Corporation Limited– Consideration of Environmental Clearance.

[IA/AS/IND2/423980/2023, IA-J-11011/149/2023-IA-II(I)]

The Project Proponent M/s Oil and Natural Gas Corporation Limited and the accredited Consultant. M/s. AECOM Indian Private Limited (NABET certificate no. NABET/EIA/2124/RA 0247 and validity 19thNovember,2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Onshore Development and Production of oil and gas from 28 wells and establishment of Kasomarigaon EPS and GGS at SUAB drill site in forest area in 6 PML Blocks, Golaghat district, Assam located at Village Kasmari Gaon, Tehsil Sarupathar, District Golaghat, State Assam by M/s. Oil and Natural Gas Corporation Limited.

The proposed project is included under activity 1(b) "Offshore and onshore oil and gas exploration, development & production" are listed at S.N 3 of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

PP informed that TOR was obtained for drilling in 28 locations in six PML Blocks i.e Golaghat District PML (52.12 Sq. Km.), Kasomarigaon PML additional area (56 Sq. Km), Kasomarigaon PML (20 Sq. Km), East Lakhibari PML (8.5 Sq. Km), Khoraghat Extn – I PML (83 Sq. Km) and Nambor PML (26 Sq. Km). All the PMLs are located in the forest area of Nambor and Dayang Reserve Forest. ONGC has also proposed to set up a Group Gathering station (GGS) at Kasomarigaon PML (Additional area), and an Early Production system (EPS) at Kasomarigaon PML. Further, PP informed that out of the proposed 28 wells, forest clearance has been accorded to 16 wells, Kasomarigaon EPS and GGS at SUAB. The forest clearance for the rest

of the 12 well locations are pending and therefore ONGC has dropped the proposal for drilling of remaining 12 wells from EC application) in forest Area in 6 PML Blocks Golaghat District, Assam. Development and production in these locations would augment the production of hydrocarbons in the present scenario of growing demand of oil and gas in the country.

The details of products and capacity as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total quantity (Estimated)
1	Development & production well	None	The estimated production of crude oil is 330 m^3/day and natural gas of 1.115 LSCMD. The proposed EPS would be established with a capacity of 800 m^3/day and 1 Lakh SCMD of natural gas. The GGS at SUAB would be established with a capacity of 400 m^3/day and 25,000 SCMD of natural gas.	The estimated production of crude oil is 330 m^3/day and natural gas of 1.115 LSCMD. The proposed EPS would be established with a capacity of 800 m^3/day and 1 Lakh SCMD of natural gas. The GGS at SUAB would be established with a capacity of 400 m^3/day and 25,000 SCMD of natural gas.

Drilling will be carried out up to the desired depth of 2200-3300. Drilling is a temporary activity which will continue for about 30-60 days for each well in the block. If the well is found to be a successful hydrocarbon bearing structure, it will be sealed off for future development and would be connected to GGS. Water based mud (WBM) will be used to the possible extent.

Oil produced during development phases will be transferred to the nearby GGS /EPS by Oil tankers/Pipeline network. A Group Gathering Station (GGS) has been proposed for this project in kasamarigaon PML (Additional area). The set up is meant for Oil/Gas/Water separation from the development drilling site, along with oil treatment and stabilisation gas treatment and compression.

Ministry has issued Environmental Clearance for exploration activity vide certificate number J-11011/620/2007-IA-II(I) dated 22.10.2007. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Guwahati vide File no- RO-NE/EIA/AS/MI/9/3910-12 dated 04.05.2023. Action Taken Report has been submitted to IRO, MOEFCC, ONGC/Jorhat Asset/HSE/CCR/KSAB dated 26.05.2023. EAC was satisfied with the response.

Standard Terms of Reference have been obtained vide F. No IA-J-11011/99/2019-IA-II(I) dated 20th April 2019. It was informed that no litigation is pending against the project.

Public Hearing for the proposed project had been conducted by the Assam Pollution Control Board on 30thSeptember 2020 at Borbali ME School field, Sarupathar of Golaghat districts chaired by Additional District Magistrate. The main issues raised during the public hearing and their action plan:

Issues raised during Public Hearing (Golaghat District) along with their responses

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
1	Dipak Ch. Bora from Upper Lengtha Gaon	He raised some concern, and those were: Ground water has been affected by the bombing activity by ONGC from 1971 onwards, and at the present scenario the water has become oily and full of iron. He also suggested that	To the answer of the first concern regarding water quality, ONGC replied, iron content is naturally high in the area. He also stated that, during drilling	To ensure Safe drinking water supply through installation of Borewell and Iron Filter (Capacity 2000 lit/ day) for the local villagers.	Rs. 40 lakhs.	It would be completed within two years from the commencement of the project.

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
		ONGCL should hang a hoarding, mentioning their activities, where they have done their CSR activities. He also stated that land acquisition process of ONGC is a one-sided decision. He himself gave his land, but till now he didn't get the agreement of the land and he called himself a sufferer for this.	ground water is only used for domestic purpose, otherwise recycled water is used in the drilling process. ONGC also stated that two ETP have been installed in Khoraghat and Nambar area, and mobile ETPs are also being used in many sites. He also assured that the reinjection of water is done with the suggestion of ASPCB, and it is much below the ground water level.			

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
			For the second suggestion from the person, ONGC welcomed his suggestion. Regarding the land acquisition ONGC stated that as per the Government rule and with consultation with the District administration ONGC initiate the land acquisition process. In this regard ADC, Golaghat made him clear that now a days an ACT has been enacted,			

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
			land acquisition is done according to the act only. In reply, Dipak Ch. Bora state that his land was taken on lease, and the amount offered was not sufficient. Year wise consolidated list of all the CSR activities to be displayed in the area of concern by 30.04.2021			
2	Prasadi Bora, from Barogh oria Gaon	He stated that his paddy field is near to one of the ONGC's drill site and due to gas flaring production has been less in the recent years, for which he has	ADC Golaghat requested ONGC representati ve to look into the matter immediately and to take	A technical committee has been formed to assess the claim made by the complainant and due compensatio	-	-

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
		also lodged a complaint to ONGC, but till date he has not received any compensation for his loss.	necessary steps.	n would be paid by ONGC		
3	Shri Binod Gogoi, Barghoria Gaon	He alleged that due to ONGC's activities his agrifarm production is getting low. He has requested ONGC to give compensation for the damage, they have caused in agri-farm production. He also welcomed the new project prospect in the area, by ONGC. But also requested ONGC to keep an eye on the welfare of the local people. He requested ONGC to hire local people in unskilled labour category, so that job generation	In this regard ONGC stated that usually they don't allow laying of pipelines near to any house, paddy field or any other sensitive area. Moreover, personnel are already appointed to inspect the pipeline if there is any leakage. Village defence personnel are there, to report to ONGC, if any kind of unusual		-	

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
		get boosted in the area. He said that in Bebejia Goan production of crude oil has started, and it is the duty of the local people to safeguard the resources. He also stated that one pipeline has passed infront of this house, and he wanted to know from ONGC, that is there any kind of rules or protocol that local youth could be appointed as guard to keep an eye on the pipeline.	occurred in the pipeline. ONGC made it clear again that they reuse the water after treatment but does not allow discharge of untreated water. ETP and mobile ETPs are present in the site, for the treatment of water. But in case if any loss happens due to the untreated water from ONGC site, they are ready to provide the compensation.			
4	Shri Mahim Bora, from	He stated his quarries as, during the survey period or	ONGC clarified the matter by saying that	Compliance for filling the small-bore hole drilled	-	-

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
	Bobali Gaon	drilling period ONGC dug hole, but after they left the site, in case of unavailability of oil, they did not restore the place, as it was previously. For this reason, sometimes their cattle fell into that hole.	in seismic survey the wells are dug to a small depth, which is shot hole. In this process with the help of blasting artificial earthquakes are being made, so as a result the hole get filled automatically. If not, ONGC isready to fill up this hole.	for seismic survey will be ensured by ONGC.		
5	Shri Arindam Nag, Bebejia Gaon	He spoke that as a result of ONGC activity heavy vehicles ply on the road and damage it. He wanted to know whether ONGC will take the responsibility to repair the roads.	ONGC representative clarify the matter by saying that the maintenance work of the road are usually done by the ONGC, and in future they will	ONGC has approved the fund of Rs. 76 lakhs for Road repair in the working area and is expected to complete the work by 31.12.2020.	30 lakhs	(Already Completed)

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
			continue to do so.			
6	Shri Karlos Marua, Borbali Gaon	He stated that he is happy as ADC Golaghat, EE PCBA and ONGC officials are present and all the grievances are placed Infront of them. ONGC previously made some promises for the welfare of the village under CSR programme, but till date it has not been fulfilled. He also stated that guard wall near the drill site should be constructed. He also stated that installation of solar light in the village road are done by the ONGC.	ONGC stated that many people submit their grievances, but those demands should be comes from the concerned area SDO, hence they will definitely look into the matter and fulfil it. The ADC, Golaghat made it clear that the grievances should be submit at SDO office, Circle office and OC of the concerned area and the district administrati	1.ONGC have approved fund forSolar Street lights. 2.Additionally, ONGC have approved fund for Plantation activity in villages through Panchayat 3.Organizing Health and Eye Check-up Camp for village people.	1. Rs. 50 lakhs 2. Rs.10 Lakhs 3. Rs.10 lakhs	1. It would be completed within two years from the commencement of the project. 2. It would be completed within two years from the commencement of the project.

Sl. No	Name of the attendee	Concerns raised during Public Hearing	Response to the concerns/issues raised in public hearing	Activity	Estimated Expenditure (INR)	Time line
			on will go through the matter. He gave stress on ecological development of the country. He also stated that, after proper justification of the grievances the matter would be put up at the concerned level or authority.			
				Total	1.4 Cr	

Total land area required is 29.126 hectares. Greenbelt will be developed for GGS and EPS in total area of 1.1979 hectares i.e., 33% of total project area. The estimated project cost is Rs. 625 Crores. Capital cost of EMP would be Rs. 0.2825 Crores and recurring cost for EMP would be Rs. 0.1756 Crores per annum. Industry proposes to allocate Rs. 1.4 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 310 persons as direct & indirect.

PP informed that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Two reserve forests, Dayang Reserve Forest, and Nambor Reserve

Forest, are present within 10 km boundary of the PML blocks. Forest clearance is already obtained for 16 wells and Kasomarigaon EPS and SUAB GGS located within reserve forest. Forest clearance for rest of 12 wells is pending and would be dropped from EC application. Nambar wildlife sanctuary is present towards northwest direction of the block. The nearest PMLs are Kasomarigaon PML (additional area III) and East Lakhibari PML, which are 11.86 km and 10.55 km in Northwest from the ESZ boundary of the Nambar WLS respectively. The Nambar wildlife Sanctuary is located at a distance of 13 Km in Northwest direction from the nearest well (ELDD). ESZ notification for same is still not published. No activity is planned within the default ESZ of 10 km of Number wildlife sanctuary. Dhansiri river flows in the western side of all the PMLs, from south to north direction. The nearest PML is Golaghat District PML (Cluster 1), which is almost 4 km from the Dhansiri river. Dayang River and Rengma River, a tributary of Dayang River through are the main rivers flowing through PML area, while two other minor rivers, Ghiladhari and Sesapani runs within the PML area.

Ambient air quality monitoring was carried out at 8 locations during October 2019 to January 2020 and the baseline data indicates the ranges of concentrations as: PM_{10} (69.72 - 71.41 µg/m^3), $PM_{2.5}$ (29.17 - 32.77 µg/m^3), SO_2 (8.40 - 9.0 µg/m^3) and NO_2 (13.77 - 15.21 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.18 µg/m^3, 0.63 µg/m^3, and 4.5 µg/m^3 with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

As the previous monitoring period is already three years old, additional set of monitoring was carried out from October 2022 to December 2022. The baseline data indicates the ranges of concentrations as: PM_{10} (46.2 - 66.5 µg/m^3), $PM_{2.5}$ (22.8 - 35.4 µg/m^3), SO_2 (5.2-6.8 µg/m^3) and NO_2 (23.2 - 26.1 µg/m^3).

Total fresh water requirement will be 25 CMD which will be met from tanker during drilling period. Out of which, 15 m^3 /day would be used for mud preparation and 10 m^3/d for domestic purposes (including drinking). Tankers would be deployed from nearby source through contractors. Effluent of 20 CMD quantity will be treated through Effluent Treatment Plant of capacity 25 KLPD. Mud used during the operation will flush out formation cuttings from the well hole. These cuttings will be separated from the drilling mud by thoroughly washing and stored in the HDPE lined pits and after completion of

the drilling activities, cuttings will be tested for hazardous nature and based on nature of the drill cuttings, final disposal pathway will be done. The total amount of cuttings produced during the entire drilling period is projected to be about 225 m3 per well. Once the cuttings have been separated, the drilling fluid will be reused or processed after further treatment in a system designed to remove suspended solids that are too fine for mechanical separation in solids control package producing inlet particles called 'flocs'. The flocs will be removed in the decanting centrifuges and the resultant sludge disposed off in High Density Polyethylene (HDPE) lined pits. The cleaned wastewater will also be stored in HDPE lined pits and disposed off, after testing and any necessary treatment, to meet the regulatory requirements. The estimated amount of drilling fluid and drilling wastewater generated from the whole process would be 700 m^3 and 15 - 20 m^3 /day for each well. STP of capacity 25 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement during the site preparation and construction phase would be met by 4 Nos. of DG Sets. The power requirement for drilling will be met by using the four Diesel Generator Sets of 750 kVA, 3 working and 1 standby. Stack of 7.7 m will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

The emission would be generated from activities such as flaring, functioning of DG sets, etc. The management of emission is given in the following points

- All vehicles used for transportation of raw material and personnel would have valid Pollution under Control Certificate (PUC). Vehicular exhaust would be complying with the CPCB specified emission norms for vehicular Emission.
- Adequate stack height would be provided to DG sets in accordance with CPCB standards.
- Exhausts of diesel/Gas generators would be positioned at a sufficient height to ensure dispersal of exhaust emissions; engines would not be left running.
- Preventive maintenance of GEG/DG sets would be undertaken;
- Flaring would be undertaken in accordance with the CPCB Guidelines for Gaseous Emissions for Oil & Gas.

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

Waste type	Quantity	Characteristics	Disposal
Kitchen waste	10- 15 kg/day	Organic waste (Non HW)	The waste would be segregated at source (organic/inorganic) and disposed as per Solid Waste Management Rules, 2016.
Drill cuttings	225 m^3/well	Mainly Inert material Consisting of shales, sands and clay; about 1% of drilling mud. (Non HW)	Drill cuttings will be disposed off in a well-designed pit lined with impervious liner located on site as per S No. 72 C.1.a Schedule I Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005.
Waste Drilling Mud (Fluid)	700 m^3	Barite, Bentonite and Traces of Heavy metals	The mud will be tested for hazardous contaminants and will be disposed as per S No. 72 C.1.a Schedule I Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005.
Waste oil/ Used oil	-	Used and waste oil	Hazardous waste (waste and used oil) would be managed in accordance with Hazardous Waste (Management, & Transboundary Movement) Rules, 2016.
Recyclables viz. plastic packaging, paper waste etc.	-	Depending on usage	Proper segregation and storage of recyclable waste in designated bins onsite. Recyclables will be periodically sold to local waste recyclers.

Total land of 29.126 Hectares of forest land is under possession of the company.

Detail of Forest clearance is presented below:

S.N.	Well	FC Status
1	DPDD	In-Principle Approval obtained. (Annexure-A)
2	DPDJ	
3	DPDI	
4	DPDL	
5	DPDH	
6	DPDK	
7	DPDM	In-Principle Approval obtained. (Annexure-B)
8	DPDN	
9	DPDO	
10	DPDP	
11	DPDQ	
12	DPDR	
13	KSDC	The approval for forest land diversion is granted. (Annexure-C)
14	KSDD	
15	ELDA	The approval for forest land diversion is granted. (Annexure-D)
16	NRDJ	The approval for forest land diversion is granted. (Annexure-E)
A	Kasomarigaon EPS	In-Principle Approval obtained. (Annexure-F)
B	GGS Suphayam-1 drill site	The approval for forest land diversion is granted. (Annexure-G)

List of Wells where Forest Clearance are Pending and would be dropped:

S.N.	Well	FC Status
1	DPDA	Forest land diversion process is in advanced stage. These well locations will be dropped from the EC application
2	DPDB	
3	DPDC	
4	DPDE	
5	DPDF	
6	DPDG	
7	KHDE	Forest land diversion process is in advanced stage. These well locations will be dropped from the EC application
8	NRDK	These well locations will be dropped from the EC application
9	NRDE	
10	NRDG	

S.N.	Well	FC Status
11	NRDH	
12	NRDL	

Co-ordinates of proposed wells for 1(b) projects:

Sl. No.	Oil Field	Wells to be Drilled/EPS/GGS	Well Coordinate
1	Nambor	NRDJ	NRDJ- 93° 53′ 35.170″ E 26° 3′ 1.540″ N,
2	Kasomarigaon	KSDC, KSDD	KSDC- 94° 2′ 48.430″ E 26° 17′ 38.790″ N, KSDD- 94° 3′ 26.196″ E 26° 17′ 58.452″ N
3	East Lakhibari	ELDA	ELDA- 94° 2′ 58.190″ E 26° 22′ 4.730″ N
4	Kasomarigaon	EPS under GAGD project	A 94° 02′ 51.73″ E 26° 17′ 37.33″ N, B 94° 02′ 57.25″ E 26° 17′ 38.85″ N C 94° 02′ 55.32″ E 26° 17′ 44.53″ N, D 94° 02′ 45.29″ E 26° 17′ 41.77″ N E 94° 02′ 45.27″ E 26° 17′ 40.08″ N, F 94° 02′ 50.36″ E 26° 17′ 41.34″ N
5	Dayalpur (Kasomarigaon PML additional area, cluster 3)	DPDM, DMDN, DPDO, DPDP, DPDQ DPDR	DPDM- 94° 0′ 30.421″ E 26° 14′ 16.320″ N, DPDN- 94° 0′ 30.220″ E 26° 14′ 16.330″ N DPDO- 94° 0′ 30.020″ E 26° 14′ 16.330″ N, DPDP- 94° 0′ 30.411″ E 26° 14′ 16.030″ N DPDQ- 94° 0′ 30.210″ E 26° 14′ 16.040″ N, DPDR- 94° 0′ 30.010″ E 26° 14′ 16.040″ N
6	Dayalpur (Kasomarigaon PML additional area, cluster 2)	DPDD, DPDH, DPDI, DPDJ, DPDK and DPDL	DPDD- 94° 0′ 4.261″ E 26° 13′ 36.320″ N, DPDJ- 94° 0′ 4.060″ E 26° 13′ 36.330″ N

Sl. No.	Oil Field	Wells to be Drilled/EPS/GGS	Well Coordinate
			DPDI- 94° 0′ 4.250″ E 26° 13′ 36.140″ N, DPDL-94° 0′ 4.050″ E 26° 13′ 36.150″ N DPDK- 94° 0′ 3.850″ E 26° 13′ 36.150″ N, DPDH- 94° 0′ 3.860″ E 26° 13′ 36.330″ N
7	Suphyam	GGS at Suphyam - 1	A 94° 0′ 41.199″ E 26° 13′ 16.444″ N, B 94° 0′ 38.309″ E 26° 13′ 19.501″ N C 94° 0′ 35.179″ E 26° 13′ 16.537″ N, D 94° 0′ 38.296″ E 26° 13′ 13.490″ N

Capital cost and recurring cost of EMP are given below:

Sr. No.	Mitigation/Management measures	Total Capital Cost (in INR)	Recurring Cost (in INR)
1	Wastewater and effluent Management • Modular STP • Water Quality Monitoring	10,00,000	 40,000 40,000
2	Fuel, Lubricant and Chemical Management	15,00,000	65,000
3	Noise and Vibration Mitigation • Acoustic Enclosure and Personal Protective Equipment • Noise Monitoring • Maintenance cost of equipment	1,75,000	 35,000 58,000
4	Solid Waste Management	1,50,000	50,000
5	Air emission mitigation • Maintenance of D.G. sets • Air monitoring	-----	 10,00,000 1,25,000
6	Soil Quality	------	43,000
7	Training to Staff	------	1,25,000

Sr. No.	Mitigation/Management measures	Total Capital Cost (in INR)	Recurring Cost (in INR)
8	General Awareness in Local Public	------	1,75,000
Total		**28,25, 000**	**17,56,000**

Details of CER with proposed activities and budgetary allocation:

S. no.	District	Particulars	Activity	Timeline	Total in INR
1	Golaghat	Community infrastructure	• Solar Street lights • Safe drinking water supply through installation of Borewell and Iron Filter (Capacity 2000 lit/ day) for the local villagers.	Within 2 years from the commencement of the project	0.40 Crores 0.50 Crores
2		Environment	Plantation Activity in villages through Panchayat		0.10 Crores
3		Health	Health and Eye Check-up Camp		0.10 Crores
4		Infrastructure	Road Preparation		0.30 Crores
Total funds under CER					**Rs. 1.4 Crores**

During deliberations, EAC discussed following issues:

- PP informed that TOR was obtained for drilling in 28 locations in six PML Blocks i.e Golaghat District PML (52.12 Sq. Km.), Kasomarigaon PML additional area (56 Sq. Km), Kasomarigaon PML (20 Sq. Km), East Lakhibari PML (8.5 Sq. Km), Khoraghat Extn – I PML (83 Sq. Km) and Nambor PML (26 Sq. Km). All the PMLs are located in the forest

area of Nambor and Dayang Reserve Forest. ONGC has also proposed to set up a Group Gathering station (GGS) at Kasomarigaon PML (Additional area), and an Early Production system (EPS) at Kasomarigaon PML. Further, PP informed that out of the proposed 28 wells, forest clearance has been accorded to 16 wells, Kasomarigaon EPS and GGS at SUAB. The forest clearance for the rest of the 12 well locations are pending and therefore ONGC has dropped the proposal for drilling of remaining 12 wells from EC application) in forest Area in 6 PML BlocksGolaghat District, Assam. PP has also submitted revised form 1 for the project.

- The Committee deliberated on 12 observations of IRO on CCR. PP has submitted Reply/action plan on observations raised. Regarding condition no ii, there are 2 existing pits at KSAB site, which will be used for upcoming drilling activities. Regarding Condition No V, -PP informed that ONGC has rate contract with OTBL for bio-remediation of oily sludge. For restoration of drill site, ONGC has SOP in place. Regarding condition no vi, the form IV is being submitted to APCB on annual basis wherein year wise details of oily sludge and spent oil are provided. Regarding condition No xii, at present there is no flaring at KSAB site and gas is flared at KSAG. Also the present facility at KSAG is temporary and the provision of flaring as per OSD Norms would be taken up. Regarding condition No. Xvi, PP informed that ONGC has an approved SOP of site restoration. Condition no xvi, PP informed that exploratory location KSAB was drilled and put on extended production testing. After wards the development EC has been obtained vide no J 11011-563-2011 IA II (I) dated 8th December, 2020 and KSAB well was converted into development wells. Further two development wells KSDB and KSDC are planned to be drilled from KSAB for which EC has been applied. The Committee suggested the PP to train their Officers for compliance management as well as to provide all project related details alongwith documents to the IRO while they visit the project site for inspection. PP also informed action taken report related to General Conditions. PP also submitted the information in writing.
- PP has submitted the information desired by EAC such as Correlation of 2 seasons baseline data; SOP for restoration of drill site; Revised Action Plan for Public Hearing; Input data used for Air quality modelling; Revised EIA report with new baseline report as addendum; Soft copy of wild life conservation plan (10 years); Clarity on incremental value of NOx, SOx; Revised ATR action plan with timeline; Clarification on transportation plan of hydrocarbons; Proof of maintaining separate head/account for Environmental management

plan implementation; Clarification regarding status of road preparation.

- The Committee suggested to develop Greenbelt in GGS and EPS in total area of 1.1979 hectares i.e., 33% of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Indigenous species shall only be planted as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall plant at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted.

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 proposed by the Project Proponent, out of 28 wells, the proposal for drilling of 12 wells from EC application (where forest clearance is pending) in 6 PML Blocks Golaghat District, Assam has been dropped. Now, PP has to apply separately for the consideration of environmental clearance for the remaining 12 wells located in the forest area in case they want to drill the said wells.

(ii). 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.

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

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

(v). Total fresh water requirement shall not exceed 25 CMD and will be met from surface water. Prior permission shall be obtained from the concerned regulatory authority.

(vi). The project proponent will treat and reuse the treated water within the drilling site 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 a way that outside rainwater shall not enter into the drilling site. Alternatively, if possible, pit less drilling be practiced instead of above.

(vii). PP shall ensure the compliance of standards stipulated for flaring in the Environmental (Protection) Rules, 1986. In case of elevated flaring, the minimum stack height shall be 30 m. Height of stack shall be such that maximum GLC never exceeds the prescribed ambient air quality limit.

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

(ix). 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.

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

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

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

(xiii). 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.

(xiv). 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 HOW(M&TM) 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.

(xv). 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.

(xvi). 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.

(xvii). 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.

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

(xix). 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.

(xx). PP proposed to allocate Rs. 1.40 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed within 2 years of commencement of project activities in consultation with District Administration.

(xxi). End of life lead acid batteries shall be disposed in compliance with the rules specified in Battery Waste Management Rules,

(xxii). 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.

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

(xxiv). 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.

(xxv). 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

(xxvi). 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 drilling operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.

(xxvii). Greenbelt will be developed for GGS and EPS in total area of 1.1979 hectares i.e., 33% of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per

the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xxviii). 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

Expansion of Grain based distillery from 450 KLPD to 1100 KLPD along with Co-generation power plant from 11.35 MW to 23.5 MW under Ethanol blending programme at Village Banur, Tehsil & District Mohali (SAS Nagar), Punjab by M/s. Chandigarh Distillers & Bottlers Limited –Consideration of Environment Clearance.

[IA/PB/IND2/423383/2023, IA-J-11011/454/2011-IA II (I)]

The Project Proponent and the accredited Consultant M/s. J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th August, 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for Expansion of Grain based distillery from 450 KLPD to 1100 KLPD along with Co-generation power plant from 11.35 MW to 23.5 MW under Ethanol blending programme at Village Banur, Tehsil & District Mohali (SAS Nagar), Punjab by M/s. Chandigarh Distillers & Bottlers Limited.

As per the MoEF&CC, Notification number S.O. 345(E), dated 17th January, 2019, notification number S.O. 750(E), dated 17th February, 2020, S.O. 980 (E) dated 02nd March, 2021 & S.O. 2339(E), dated 16th June, 2021 a special provision in the EIA Notification, 2006 (Schedule 5 (g)), a special provision in the EIA Notification, 2006-(Schedule 5(g)) "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:

Units	Name of the product/by-product	Existing production Capacity	Additional production Capacity	Total production Capacity
Distillery (**Grain - b**roken Rice, Sorghum, Bajra, Maize etc.)	Ethanol	450 KLPD 1) 285 KLPD (Rectified Spirit, Extra Neutral Alcohol, out of which 165 KLPD Ethanol Option) 2) 165 KLPD (Standalone Ethanol)	650 KLPD *(Ethanol only)*	1100 KLPD 1) 285 KLPD (Rectified Spirit, Extra Neutral Alcohol, out of which 165 KLPD Ethanol Option) 2) 165 KLPD (Standalone Ethanol) & 650 KLPD (Ethanol)
Co-generation Power Plant	Power	11.35 MW (Biomass based with 15% Coal as Auxiliary fuel)	12.15 MW (Biomass based only)	23.5 MW
IMFL/CL Bottling Plant	IMFL/CL bottles	6 lakhs cases per Month	Nil	6 lakhs cases per Month
DWGS dryer	Animal Feed Supplement (AFS)	185 TPD	260 TPD	445 TPD
Fermentation unit	Carbon dioxide	315 TPD	455 TPD	770 TPD

Note: Capacity of distillery shall not exceed 1100 KLPD at any point of time.

Ministry has issued Environmental Clearance to the existing industry for Expansion of Grain/Molasses based Distillery (from 330 KLPD to 660 KLPD) by addition of Grain based Distillery along with Captive Power Plant (8.25 MW) at Village Banur, Tehsil & District Mohali (SAS Nagar), Punjab vide File no. J-11011/454/2011-IA II (I) dated 12th March, 2013. Certified Compliance report of the Existing EC was obtained from Integrated Regional Office, MoEFCC Chandigarh vide File no. 5-438/2013/IRO CHD dated 12.06.2023. Regional Office has pointed 5 observations for which PP has submitted action taken report vide letter dated 15.06.2023 for observations which are given below:

S. No	Observation of IRO	ATR by PP
1.	A few quantity of the rice husk lying openly outside the shed area of the rice husk was lying openly outside the shed area [Sp. Cond. No. (ii)].	They are having proper shed for storage of rice husk. Due to sudden rains few trucks got soggy. To keep them segregated it was unloaded outside and covered properly. It is not a permanent feature
2.	PP has not submitted the latest status w.r.t. commitments made during the public hearing held on 08.08.2012 [Sp. Cond. No. (xviii)l.	All the commitments made during the public hearing held on 08.08.2012 has been fulfilled already. Details were presented in meeting which are also uploaded on parivesh portal.
3.	PP has not submitted details of activities carried out under eco-development during the last financial year [GC No. (xii)].	The confusion is created by the online software where in EC/GC-20 say *"A separate Environment management cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environment Management and Monitoring functions"* and EC/GC-21 says *"The company shall undertake the eco developmental cell equipped with fully fledged laboratory facilities shell be set up to carry out the environmental management work/functions."* However The eco-development and CSR activities are carried out jointly under the same account head.
4.	PP has not provided the latest details regarding the funds to implement the Environment management/ pollution control measures [GC No. (xiv)].	Funds to implement the Environment management/ pollution control measures have been submitted in CCR application as EC/GC-29
5.	PP is not submitting six monthly reports and copy of Environment Statement to the IRC), MoEFCC, Chandigarh regularly [GC No.	They have submitted the six monthly compliance reports along with Environment statement (Form-V) for each year. For the last financial year they have submit compliance report

	(xvii)].	online on Parivesh Portal twice as per the ministry guidelines.

Further, committee suggested to impose the following condition while issuing EAC "PP shall construct proper permanent shed for storage of biomass. Accordingly, State Pollution Control Board 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 implement the said condition." EAC was satisfied with the response.

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 pending against the project.

Total plant area after expansion will be 53.40 Ha which is under the possession of the company and plant area is 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 32.72 hectare has already been developed as greenbelt & plantation and the same will be maintained under greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 236.60 Crores. Capital cost of EMP would be Rs. 53.3 Crores and recurring cost for EMP would be Rs. 4.5 Crores per annum. Industry proposes to allocate Rs. 3.5 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 325 persons as direct.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve Forest etc. within 10 km distance. protected forests: Bir Hansala PF is at a distance of 8.5 km in ESE direction & Bir Barauli PF is at a distance of 9.2 km in East direction. Water bodies: Nandialiwala Choa passing through plant premises, Tangauri Choi ~0.3 km in North direction, Banur Canal ~2.0 km in SE direction, Satluj Yamuna Link ~2.5 km in West direction, Ghagghar River ~6.5 km in East direction & Narainawala Choa ~8.5 km in NW direction. NOC has been obtained from Executive Engineer, Chandigarh W/S Department, I&WR Deptt Chandigarh vide Letter No. 217 dated 02.02.2023 stating that the site of Chandigarh Distillers & Bottlers at Village Banur, Tehsil & District Mohali (SAS Nagar), Punjab does not fall in flood prone area since last 25 years.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the expansion project would be 0.516 µg/m^3, 0.207

μg/m^3, 0.853 μg/m^3 and 0.94 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 freshwater requirement after expansion will be 5090 CMD which will be met from ground water. EAC suggested that PP shall restrict the water requirement @ 4kl /kL of alcohol produced. Accordingly, fresh water requirement of the Industry shall not exceed 4400 CMD. NOC has been obtained by company for extraction of 9994 KLPD groundwater from Punjab Water Regulation and Development Authority vide permission no. PWRDA/05/2021/L3/79 dated 27.05.2021 valid till 26.05.2024. Existing effluent generation (MEE condensate, Fermentation Cleaning) is 1963 CMD, which is treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 2200 CMD & Effluent (Boiler blow down, DM/RO Reject, CT blow down) is 547 CMD from distillery which is treated through WWTP of capacity 650 CMD. Proposed effluent generation (MEE condensate, Fermentation Cleaning & Bottle washing) will be 2335 CMD from distillery, which will be treated through Condensate Polishing Unit (Capacity 2900 CMD proposed) & effluent generation (Boiler blow down, DM/RO Reject, CT blow down) will be 495 CMD, which will be treated through WWTP (Capacity 600 CMD proposed). With the latest advancements made by Companies engaged in the manufacture of enzymes/ chemicals/ additives for the Ethanol industry; process condensate from MEE can be directly used in slurry preparation after addition of these chemicals. The committee suggested that MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., will be treated in the 'Condensate Polishing Unit' (CPU) followed by reverse osmosis. Raw stillage (7538 TPD) will be sent to decanter followed by MEE and dryer to produce DDGS. DDGS will be used as cattle feed. Domestic waste water is being treated in existing STP of capacity 25 KLPD. As a part of expansion, a new STP of 25 KLPD capacity will be installed to treat domestic waste water. Entire treated effluent/water will be recycled/reused as a cooling makeup/ manufacturing process and no effluent/ treated water will be discharged outside the factory premises.

Total power requirement after expansion will be 15 MW, which will be sourced from 23.5 MW Co-generation power plant. Existing distillery has 30 TPH & 55 TPH Rice Husk/Paddy straw/Cane Trash/mustard straw/ cow dung/poultry waste & other biomasses along with 15% coal as auxiliary fuel fired boilers. APCE Treema Cyclone followed by Wet Scrubber for 30 TPH boiler & Electrostatic Precipitator (ESP) for 55 TPH boiler with a stack of height of 52 m & 56 m respectively are installed with the existing boilers. As part of expansion, APCE for 30 TPH boiler will be replaced with ESP for

controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. APCE Electrostatic Precipitator (ESP) with 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 110 TPH boiler. Industry has 4 x 1000 KVA DG sets & proposed 2x1250 KVA which will be used as standby during power failure and stack height (8 m) has been/will be provided as per CPCB norms.

Details of Process emissions generation and its management:

- APCE Treema Cyclone followed by Wet Scrubber for 30 TPH boiler & Electrostatic Precipitator (ESP) for 55 TPH boiler with a stack of height of 52 m & 56 m respectively are installed with the existing boilers. As part of expansion, APCE for 30 TPH boiler will be replaced with ESP for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. APCE Electrostatic Precipitator (ESP) with 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 110 TPH boiler. The proposed boiler will be based on Rice Husk, Paddy straw, mustard straw, cane trash, cow dung, poultry waste, and other biomasses only as fuel.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (770TPD) generated during the fermentation process is being/will be collected and sold to authorized vendors as per local demand.

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

- AFS (Animal Feed Supplement) (445 TPD) is being/will be sold as cattle feed.
- Boiler ash (225 TPD) is being/will be supplied to brick manufactures for brick manufacturing and nearby farmers for farm filling in covered vehicles only.
- Used oil & grease (2.0 Kilolitres per annum) is being/ will be sold to authorized recyclers.
- ETP/CPU sludge (0.4 TPD) and STP Sludge (0.025 TPD) is being/will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the

proposed expansion capacity of distillery 650 KLPD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

S. No.	Section	Capital Cost in (crores)	Recurring cost (Crores)
1	Air Pollution - ESP+Stack	8.50	1.00
2	ZLD - Decanter, Dryer, CPU/ETP and STP	40.00	2.70
3	Environment Monitoring-Lab instruments, Online Monitoring, 3rd Party monitoring & Audit	1.00	0.40
4	Solid Waste Management-Ash Handling & Management	2.50	0.30
5	Green belt development	0.80	0.10
6	Rain Water Harvesting	0.50	0.00
	Total EMP Cost in Rs. Crores	**53.30**	**4.50**

Details of CER with proposed activities and budgetary allocation:

S. No.	Activities	1st Year (Rs. in lakhs)	2nd Year (Rs. in lakhs)	Expenditure (Rs. In lakhs)
1	**Up gradation of School infrastructure & Educational facilities**- Provide Interactive smart class equipment's /gadgets/solar panels like desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments etc. to students, Seating Benches, installation of potable water facilities,	Rs. 50 Lakhs (Govt school at Village Banur) (4 nos potable water facilities - Rs. 2 lakhs, 4 nos. sanitized toilets- Rs 18 lakhs, solar panels installation- Rs. 20 lakhs, Rs 10 lakhs for desktop computers, projectors,	Rs. 50 Lakhs (Govt school at Village Gobindpura) (4 nos potable water facilities - Rs. 2 lakhs, 4 nos. sanitized toilets- Rs 18 lakhs, solar panels installation- Rs. 20 lakhs, Rs 10 lakhs for desktop computers,	100

	construction of sanitized toilets etc.	Interactive White Boards and distributing study materials, school bags, sports equipments, etc)	projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, etc)	
2	**Social Infrastructure Development-** Installation of Solar Street Light, Solar Lanterns, assistance to Anganwadi centres, Village Pond & RWH pond Infrastructure Development, etc.	Rs. 30 Lakhs Village- Gobindpura (Rs. 6 Lakhs for 150 nos. solar street light, Rs. 10 Lakhs for local ponds & RHW pond development, Rs. 14 lakhs will be provided to give assistance to Anganwadi Centres)	Rs. 30 lakhs Village- Banur (Rs. 6 Lakhs for 150 nos. solar street light, Rs.10 Lakhs local ponds & RHW pond development, Rs. 14 lakhs will be provided to give assistance to Anganwadi Centres)	60
3	**Skill development for youth**- Organizing Training programmes for youth/residents in Skill Development centre in collaboration with District/State government	Rs. 20 Lakhs Village- Banur (Benefit to be extended to 125 persons)	Rs. 20 Lakhs Village- Gobindpura (Benefit to be extended to 125 persons)	40
3	**Up gradation of Healthcare facilities-** Provision of oxygen cylinders, ambulance, medical instruments	Rs. 50 Lakhs (PHC at Village Gobindpura) (Provision of 10 oxygen	Rs. 50 Lakhs (PHC at Village Banur) (Provision of 5 oxygen	100

	etc.	cylinders- Rs. 5 lakhs, 1 ambulance facility-Rs 10 lakhs, Medical instruments-Rs 35 lakhs etc.)	cylinders- Rs. 5 lakhs, 1 ambulance facility-Rs 10 lakhs, Medical instruments-Rs 35 lakhs etc.)	
4	**Plantation**–Plantation/ Avenue plantation along roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan boundaries, etc.	Rs. 35 lakhs Village Banur in schools, colleges, hospitals & health centres, Govt land(6000 no. of plants to be planted)	Rs. 15 Lakhs Village-Gobindpurain schools, colleges, hospitals & health centres, Govt land (3000 no. of plants to be planted)	50
			TOTAL	**350**

During deliberations, EAC discussed following issues:

- EAC found estimated cost of Rs. 236.6 Crores to be lower side for proposed expansion of distillery unit from 450 KLPD to 1100 KLPD along with Co-generation power plant from 11.35 MW to 23.5 MW. In this regard, PP informed that parent group has been in the Distillery field over a very long period of time due to direct involvement in budgeting, cost effective procurement, monitoring & execution the Group has been able to keep a check on the overall project cost.
- As suggested by EAC, PP has submitted detailed breakup of revised capital cost of EMP, recurring cost for EMP as Rs. 53.30 Crores and Rs. 4.5 Crores per annum respectively.
- EAC suggested company shall increase provision of solar power from 10% to 15% of total power consumption of the unit. Accordingly, PP has given commitment that 2.25 MW solar power will be installed in the form of in form of solar lights/solar plant/solar panels/solar gadgets etc. within plant and to the nearby areas.
- As desired by EAC, PP has given commitment that the approach road to the plant will be repaired & maintained by the company.
- EAC suggested PP to increase budget allocated to socio-economic developmental activities from Rs. 3 Crores to Rs. 3.5 Crores and to submit revised break by increasing funds allocated up gradation of

schools &upgradation of health facilities. Accordingly, PP has submitted the revised breakup.

- EAC has also suggested that PP shall provide training to 10 local youth every quarter on environment management including air pollution control device, ETP, solid waste management, fly ash based brick manufacturing, green belt development as part of skill development programme.
- EAC suggested that indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Accordingly, PP has submitted revised list of plant species for densifying the greenbelt.
- PP shall restrict the water requirement @ 4kl /kL of alcohol produced. Accordingly, fresh water requirement of the Industry shall not exceed 4400 CMD.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have

found the proposal in order and have **recommended** for grant of environmental clearance.

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

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed expansion capacity of 650 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). PP shall construct proper permanent shed for storage of biomass. Accordingly, State Pollution Control Board 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 implements the said condition.

(v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing Ground Water for the distillery activities, State Pollution Control Board 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 obtains such permission.

(vi). Total Fresh water requirement shall not exceed 4400 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.

(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 Electrostatic Precipitator (ESP) with stack height of 60 m shall be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm^3 for the proposed biomass based 110 TPH biomass fired boiler. APCE Treema Cyclone followed by Wet Scrubber along with 52.0m stack is provided with 30 TPH biomass along with 15% coal as auxiliary fuel fired boiler & Electrostatic Precipitator (ESP) along with 56.0m stack is provided with 55 TPH biomass fired boiler . As part of expansion, APCE for 30 TPH boiler will be replaced with ESP for controlling the particulate Matter emissions within the statutory limit of 30 mg/Nm^3.Low sulphur coal with maximum sulphur content of 0.5% shall only be used. SO2 and NOx emissions from the 30TPH biomass along with 15% coal as auxiliary fuel fired boiler shall be maintained below 100mg/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 (225 TPD) after expansion of distillery will be supplied to brick manufactures for brick manufacturing and nearby farmers for farm filling in covered vehicles only. PP shall install 2.25 MW solar power in the form of in form of solar lights/solar plant/solar panels/solar gadgets etc. within plant and to the nearby areas. The approach road to the plant will be repaired & maintained by the Industry from time to time.

(x). CO_2 (770 TPD) generated during the fermentation process is being/will be collected and sold to authorized vendors as per local demand.

(xi). PP shall allocate at least Rs. 0.5 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). 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 5-10 m width shall be developed in nearly 32.72 hectares including green belt already been developed i.e., 33 %of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvii). PP proposed to allocate Rs. 3.5 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. Industry shall provide training to 10 local youth every quarter on environment management including air pollution control device, ETP, solid waste management, fly ash based brick manufacturing, green belt development as part of skill development programme.

(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. 05

Proposed Integrated Carbon Complex having 1. Coal Tar Distillation (CTD) Unit having capacity 500,000 TPA 2. Coal Tar Value Added (CTVA) Unit having capacity 400,000 TPA 3. Continuous Zero QI (CZQ) Unit having capacity 150,000 TPA 4. Carbon Black (CB) Unit having capacity 300,000 TPA 5. 54 MW Captive Power Plant (CPP) 6. Synthetic Graphite Anode (SGA)Unit having capacity 100,000 TPA and 7. Natural Graphite Anode (NGA)Unit having capacity 25,000 TPA"located at Sripura Village, Jharsuguda Tehsil, Jharsuguda District, Odisha State by M/s. Epsilon Carbon Ashoka Pvt Ltd (ECAPL) - Consideration of Environmental Clearance.

[IA/OR/IND2/418514/2023, IA-J-11011/490/2021-IA-II(I)]

The project proponent and the accredited consultant M/s. Visiontek Consultancy Services Pvt. Ltd., Odisha (Schedule 4(b) ii), (NABET certificate no. NABET/EIA/20232/RA 0209 Valid up to: 16.12.2023) & M/s. Hubert Enviro Care Systems (P) Ltd,Chennai, (Schedule 5(e) & 1(d)) (NABET

certificate no. NABET/EIA/1922/RA 0172 Valid up to: 13/10/2022 and the validity extension till 20.03.2023 letter vides QCI/NABET/ENV/ACO/22/2622 dated 20.12.2022 is for environmental clearance to the project"Proposed Integrated Carbon Complex having 1. Coal Tar Distillation (CTD) Unit having capacity 500,000 TPA 2. Coal Tar Value Added (CTVA) Unit having capacity 400,000 TPA 3. Continuous Zero QI (CZQ) Unit having capacity 150,000 TPA 4. Carbon Black (CB) Unit having capacity 300,000 TPA 5. 54 MW Captive Power Plant (CPP) 6. Synthetic Graphite Anode (SGA)Unit having capacity 100,000 TPA and 7. Natural Graphite Anode (NGA)Unit having capacity 25,000 TPA"located at Sripura Village, Jharsuguda Tehsil, Jharsuguda District, Odisha State by M/s. Epsilon Carbon Ashoka Pvt Ltd (ECAPL).

All Products are listed at S. No. 5(e) – Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes), 4 (b)ii -Coal tar processing unit and 1(d)- Thermal Power Plants 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 Name	Unit	Proposed Configuration
1	Coal Tar Distillation (CTD) Unit	TPA	5,00,000
2	Coal Tar Value Added (CTVA) Unit	TPA	4,00,000
3	Continuous Zero QI (CZQ) Unit	TPA	1,50,000
4	Carbon Black (CB) Unit	TPA	3,00,000
5	Synthetic Graphite Anode (SGA)Unit	TPA	1,00,000
6	Natural Graphite Anode (NGA)Unit	TPA	25,000
7	Captive Power Plant (CPP) Unit	MW	54

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/490/2021-IA-II(I) dated 03.12.2021. It was informed that there is no litigation is pending against the project.

Public Hearing for the proposed project had been conducted by the State Pollution Control Board, Odisha on 14.09.2022 at New Panchayat Office, Indira Colony, Sripura village chaired by Shri Prabeer Kumar Nayak, Additional District Magistrate, Jharsuguda supervised and presided over the public hearing process, assisted by Sri Hiranya Kumar Nayak, Regional Officer, State Pollution Control Board, Jharsuguda and representatives of State Pollution Control Board, Odisha. The main issues raised during the public hearing and their action plan:

The total fund allotted for the commitment made on the requirement of public during public hearing is INR 9 Cr under CER.

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
1	Sri Hira Lal Bag, Ex Sarpanch Sripura G.P., Village Sripura	Sri Bag, welcome the project and asked the Project Proponent to clarify whether the company planned to provide employment to the local youth. He further apprehended that with this upcoming project many educated youth will get employment.	ECAPL will give preference to Local employment as per requirement and eligibility of candidates. ECAPL will provide local employment as per state government labor law.	-
2	Sri. Digamber Bag, Village Sripura	He welcome the project and, said that Company must do all required CSR Activities towards making Sripura as model Gram Panchayat and the project proponent should follow rule and regulation framed by the govt. He supported the project with a demand of employment for the local youth.	ECAPL will be making the model villages by following activities under the scope of CSR for the betterment of life of the nearby villagers: EDUCATION - Setting up labs and libraries in schools and providing educational resource support to educationists to improve quality. INFRASTRUCTURE - A need-based approach to repairing, maintaining, and upgrading school infrastructure in the geographies in which we operate. SANITATION AND HYGIENE - Solid waste management, supporting SHEs for hygiene activities and supplying safe drinking water to villages. SPORTS - Supporting sports activities at both school and professional athlete levels Health and medical facilities.	Rs. 900.0 Lakh over 5 years for providing Health care facility to nearby area/ Green Belt development outside the premises/ Sanitation facilities to nearby village school/ Drinking water facilities to nearby village/ Providing solar panel to nearby schools.
3	Smt. Jasobanti Pandey, Sarpanch Sripura GP, Village Sripura	Smt. Pandey, She demanded right compensation for the land along with employment for	ECAPL will give preference to Local employment as per requirement and eligibility of candidates.	-

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
		the local youth. She supported the project.		
4	Sri Prafulla Kumar Tripathy, Village Sripura	Sri Tripathy welcomed the project, enquired about the health hazards, environmental pollution. He said, we welcome the project & the authority of the project should give priority to peripheral development, road communication. Environment and pollution aspect. The project proponent should follow rule and regulation framed by the govt.	The project aims for produce its product with due respect to environmental sensitivity as well techno economic feasibility. All preventive measures should be taken to mitigate the environmental impact. Will provide Green Belt development and renovation of nearby villages road.	Rs. 100.0 Lakh over 5 years for Green Belt development for reduce Environment pollution load.
5	Sri DigdhanChhatria, Village Sripura	Sri Chhatria, demanded right compensation for the land and local employment to be given. If there will be over all development of the area, road, society, employment for the local youth then we all welcome the project.	ECAPL will provide good roads, green belt development and good infrastructure, community center and local employment.	Rs. 100.0 Lakh over 5 years for Green Belt development and Rs. 250 Lakh for Roads and Sanitation facilities.
6	Sri Ganesh Pradhan, Village Sripura	Sri Pradhan, urged that, industrial establishment is good as well as bad. He declared that we are the owners of the land, this land is our ancestral property hence we should not handover the land to anybody. If the company really come to our village first agreement should be done what plant it is and should fulfill the development of the locality, direct employment to be given for each family, drinking water, hospital and electricity should be arranged by project proponent in priority basis then we welcome the project.	ECAPL is aware of the role & responsibility of taking care of its surroundings. ECAPL provides drinking water supply, medical & health amenities, sanitation, education & scholarship, skill development, self-employment assistance to villagers. Will provide preference to Local employment as per requirement and eligibility of candidates.	Rs. 150.0 Lakh over 5 years for supply of Drinking water and Rs. 250.0 Lakh for Health care facility and Rs. 150Lakh for Schools &providing solar panel.
7	Sri Biranchi Majhi, Village Sripura	Sri majhi, Welcomed the project demanding drinking water, electricity and hospital facility of the village. He also urged that the project proponent should facilitate doctors to the village hospital and old age people, pregnant ladies	Mobile ambulance will be made available for villagers use, medical care center will setup into local village for regular visit of doctors for villagers' treatments, Day care will be established to assist the old age, pregnant ladies, growth of children who are suffering	Rs. 250.0 Lakh over 5 years for Health care system and Rs. 250 Lakh for Sanitation and hygiene

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
		should be given treatment on priority.	malnutrition.	facilities.
8	Sri BaishakhuDila, Village Sripura	Sri Dila, also welcomed the project demanding doorstep Drinking water to the village and direct employment to every youth as per eligibility.	Good drinking water infrastructure will be provided to villagers and will provide local employment for youth.	Rs. 150.0 Lakh over 5 years for supply of Drinking water
9	Sri NimaiCharana Dubey, Village Sripura	Sri Dubey, said that we welcome the project but the pollution should be under control with proper precautions. Local employment to be given in priority basis. Land compensation should be given after proper valuation.	ECAPL will give preference to Local employment as per requirement and eligibility of candidates. We will take all precautions to control pollution in the area. Land compensation will be paid as per Rule.	Rs. 100.0 Lakh over 5 years for Green Belt development for reduce Environment pollution load in surrounding area.
10	Sri GobardhanBhoi, Village Sripura	Sri Bhoi, Welcomed the project and requested right compensation for the land and employment for the land less people of the village.	ECAPL will give preference to Local employment as per requirement and eligibility of candidates. Land compensation will be paid as per Rule.	_
11	Sri Subrata Pradhan, Village Sripura	Sri Pradhan said that everyone should welcome the project but the developmental work should be done before setup of the project. Those who are land owner may decide to give their land to the company or not.	ECAPL will do Developmental work from time to time like Green Belt development, Solid Waste management system.	Rs. 100.0 Lakh over 5 years for Green Belt development and Rs.250 Lakh for Sanitation and Hygiene system facility.
12	Sri Dharmu Parekh, Village Sripura	Sri Parekh, Welcomed the project as the unemployed youth will be benefitted. He also demanded the development of the Road of the village.	ECAPL will give preference to Local employment as per requirement and eligibility of candidates and will provide good road and infrastructure, community center for local villagers.	Rs. 250.0 Lakh over 5 years for Health care and Infrastructure system.
13	Sri Dillip Kumar Panda, Village Sripura	Sri Panda, Said that many people welcomed the project before me and I also welcome again. He requested the project authority to give proper compensation for the land and employment as per Govt. rule.	Land compensation will be paid as per rule.	_
14	Sri BhutuluBhoi, Village Sripura	Sir Bhoi, Welcomed the project demanding direct employment to local youth as per their educational qualification	Epsilon will give preference to Local employment as per requirement and eligibility of candidates.	_

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
		and other developmental work should be taken up.		
15	Sri PurandarNeti, Village Sripura	Sri Neti, Said, we welcome the project and demanded employment for local youth for their livelihood, Drinking water supply, road development and electricity to be provided.	ECAP will provide finance assistant to talented and poor students for higher studies, education & scholarship, skill development, self-employment assistance, provide drinking water supply, good road and electricity infrastructure.	Rs. 150.0 Lakh over 5 years for Schools and studies, Rs. 150 Lakh for supply of Drinking water and Rs. 250.0 Lakh for electricity and Infrastructure system.
16	Sri Santosh Kumar Kisan, Village Sripura	Sri Kishan, irritated and not supported to the project. He asked against the system and bureaucrats he told we are farmer if our land will be taken by the company how we will survive. If project comes here, then we should fight against the govt. He also told no body of the system support them as they always write against the peripheral industry. He also demanded proper demarcation of the proposed project land. M/s Vedanta Ltd, M/s Aditya Aluminium Ltd. and M/s JSW Steel are disposing ash in our village. Everywhere there is problem of ash and we are welcoming the project. So, we will fight to stop the project.	Adequate budgetary provisions have been made for execution of environmental management plan and we informed that our project is Zero discharge project and no pollution will happen and we will meet all the pollution control norms. And we are not using any coal, hence no fly ash generation is there. We will develop a Green Belt system for reducing the adverse environmental impacts due to the proposed industrial activity.	Rs. 100.0 Lakh over 5 years for Environment Management system by Green Belt development for reduce Environment pollution load in and around surrounding area.
17	Smt. Minati Patra, Ex Zilla Parisad member and Village SHG President	Smt. Patra, warmly welcome the project and urged that employment should be given to the new generation as per qualification, Proper training for SHG group members should be arranged. Every member of SHG should be trained. All needs of village SHG should be fulfilled and other developments like water, electricity and road etc. we have a charitable	ECAPL plans to positively touch the lives of communities in a multitude of ways and maintain clear CSR objectives in Direct Impact Zones to improve the quality of life of all stakeholders. And will involve SHG development activities. And will provide drinking water supply, good road and electricity infrastructure. They will take all precautions to control pollution in the area.	Rs. 900.0 Lakh over 5 years for providing Health care facility to nearby area/ Green Belt development outside the premises/ Sanitation facilities to nearby village

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
		trust namely "Maa DurgatiNashini" comprising of 80 women and their development to be taken care off. Land rate should be in discussed with the villagers. Proper precautions should be taken to control pollution.		school/ Drinking water facilities to nearby village/ Providing solar panel to nearby schools.
18	Sri Puspak Chandra Nayak, Village Sripura	Sri Nayak, asked what is carbon and what kind of problem we will face due to this and what benefit we will get by this project. We want another meeting regarding this.	The project aims for produce its product with due respect to environmental sensitivity as well techno economic feasibility. All preventive measures should be taken to mitigate the environmental impact. The project would bring forward an overall social development with emphasis in the areas of education, training, health, and infrastructure. Will get socioeconomic development for nearby villages.	Rs. 100.0 Lakh over 5 years for Environment Management system by Green Belt development and Rs. 150.0 Lakh for Schools, Education and Training studies,
19	Sri. Gananath Tripathy, Village Sripura	Sri Tripathy, asked 80% of the local population depend upon the peripheral industry, hence it's our pleasure that one new plant will come to our village. This plantsbrings us prosperity as local employment, other developmental work should be done under CSR activities. Those who are against the project are financially sound, but we should focus to the poor villagers to strengthen them. If the plant comes to our village the villagers should be deploy in different sector and it will bring us financial and social wellness. Hence we all welcome the project and thankful to the govt.ofodisha and district administration forchoosing our village. Those who are losing their land may discuss with the project proponent and district administration to discuss the land rate.	ECAPL will give preference to Local employment as per requirement and eligibility of candidates. The project would bring forward an overall social development with emphasis in the areas of education, training, health, and infrastructure. Supporting sports activities at both school and professional athlete levels, Health and medical facilities. Financial assistance to talented and poor students for higher studies. (Management /Engineering / Medical studies etc.)	Rs. 900.0 Lakh over 5 years for providing Health care facility to nearby area/ Green Belt development outside the premises/ Sanitation facilities to nearby village school/ Drinking water facilities to nearby village/ Providing solar panel to nearby schools.
20	DebendraPadhee, Village Sripura	Sri Padhee, Welcomed the project as the unemployed	For unemployed youth we will provide Setting up labs and	_

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
		youth will be benefitted. He also demanded a good land rate and measures to control pollution.	libraries in schools and providing educational resource support to educationists to improve their quality and land compensation will be paid as per rule, and we will take all precautions to control pollution in the area measures.	
21	Jagadish Panigrahi, Village Sripura	Sri Panigrahi, welcomed the project and demanded local employment and goodcompensation for the land.	Land compensation will be paid as per rule.	_
22	Abhisekh Dixit, Village Sripura	Sri Dixit, asked to provide job as per the educational qualification and training, an engineer should be deployed as engineer. He welcomes the project.	We will give preference to local youths as per their education and training skills.	Rs. 150.0 Lakh over 5 years for Schools, Education and Training studies.
23	Hitesh Dixit, Village Sripura	Sri Dixit, welcomed the project and demanded local employment.	We will give preference to local youths as per state government labor law	_
24	RamakantaRohidas, Village Sunamal, Sripura	Sri Rohidas, welcome the project but asked about the peripheral plants like M/s Vedant Ltd. and M/s Aditya Aluminium Ltd. How much pollution they made may clarify by pollution department. The new company should come, we welcome the project.	The project aims for produce its product with due respect to environmental sensitivity as well techno economic feasibility. All preventive measures should be taken to mitigate the environmental impact.	Rs. 250.0 Lakh over 5 years for Environment Management system and mitigation works and Rs. 100 Lakh forGreen Belt development for reduce Environment pollution load in and around surrounding area.
25	NilamaniKalo, Village Sripura	Sri Kalo, he demanded some financial benefits for the land less villagers and local employment. He welcomes the project.	ECAPL will give preference to local youths as per their education and training skills.	Rs. 150.0 Lakh over 5 years for Schools, Education and Training studies.
26	Binod Rohidas, Village SunamalSripura	Sri Rohidas, he did not supported the project, questioned about what the other nearby industry did in this area, exasperated about the employment given by the other industry. He also questioned that this meeting is conducted	The meeting is conducted with only prior notice, which was published in a local and English language newspaper on August 1, 2022. We will provide local employment as per state government labor law.	_

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
		by the govt. official without any prior intimation, hence another meeting should be arrange cancelling the meeting. As the other company are not given employment to the locals this project also will not provide. He blamed the local leaders and administration as they have not supported to provide local employment. He wants to sit before the plant gate of there plants for the same. He asked land is ours, but service provided to other state people. Asked how much employment generated here may please declare. Land demarcation should be done before		
27	PadmalocahRohidas, Village Sunamal, Sripura	Sri Rohiodas, welcome the project, he demanded employment to all villager, and Precaution should be taken against environmental pollution. If all these demands will be fulfilled by the project proponent we welcome the plant otherwise we will protest.	We work with continual environment improvement philosophy for better life to nearby population.	Rs. 250.0 Lakh over 5 years for Environment Management system and mitigation works and Rs. 100 Lakh for Green Belt development for reduce Environment pollution load in and around surrounding area.
28	SudamRohidas, Village Sunamal, Sripura	Sri rohidas, welcome the project and demanded local employment for local youth, he said if 90 of 100 people agree to give their land for the project what should the rest 10 people do. So the project proponent should go ahead towards setup of the project. But they should look into the local problem and all round development of the village	We will provide local employment as per state government labor law and eligibility of candidate.	_
29	Girish Chandra Tripathy, Village	Sri Tripathy, he said that those people are opposing	ECAPL will provide local employment as per state	Rs. 150.0 Lakh over 5

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
	Sripura	the project, they are looking their personal benefits, hence we all welcome the project but the project proponent should provide permanent job to the local youth.	government labor law and eligibility of candidate. And will support local youth for EDUCATION - Setting up labs and libraries in schools and providing educational resource support to educationists to improve quality.	years for Schools, Education and Training studies.
30	Raju Kumbhar, Village Sripura	Sri Kumbhar, welcome the project and demanded CSR activity in his pada first, he said all our pada people are middle class, they do not have a toilet hence project proponents may provide toilets. Local youth should be engaged as per their educational qualification and experience. Other developmental work of the village should be done in proper manner	ECAPL will provide Health care and sanitation, Drinking water facilities to nearby area. ECAPL CSR activities at the proposed location will be guided by expressed needs and development preferences of the communities around the operating location. ECAPL plans to positively touch the lives of communities in a multitude of ways and maintain clear CSR objectives in Direct Impact Zones to improve the quality of life of all stakeholders.	Rs. 900.0 Lakh over 5 years for providing Health care facility to nearby area/ Green Belt development outside the premises/ Sanitation facilities to nearby village school/ Drinking water facilities to nearby village/ Providing solar panel to nearby schools.
31	Kumudini Pasayat, Village Sripura	Smt. Pasayat welcome the project, she asked for employment to all those who are land less. She said other company has already been harassed her a lot. Companypromise to provide job but do not provide after establishment. She has 3daughter how she survives without service. As local leader dump ash here and there in the locality. They fulfil their needs but no body should understand their problem hence she demanded right job to right people	ECAPL will provide employment as per vacancy and eligibility of candidates.Will support their needs by our CSR activities for self-employment development.	Rs. 150.0 Lakh over 5 years for Education and local youth development.
32	Sagar Kumbhar, Village Sunamal, Sripura	Sri Kumbhar, started with some local idioms and demand to prepare pada wise list for employment and welcome the project	ECAPL will provide employment as per vacancy and eligibility of candidates.	_
33	Satya Subham Tripathy,	Sri Tripathy, welcomed the	ECAPL will provide employment	Rs. 150.0

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
	Village Sripura	project he declared that we must setup the plant here. He demanded job for the local youth	as per vacancy and eligibility of candidates. And will support local youth for EDUCATION - Setting up labs and libraries in schools and providing educational resource support to educationists to improve quality.	Lakh over 5 years for Schools, Education and Training studies.
34	Motilal Tanty, Ex Sarpanch,VillageSripura	Sri Tanty, welcome the project. He said I have lost my land. He urged we all are here for the project all local should be given employment whatever a person who have land or no land. Our people are very much sound to do different work during the construction phase so they should facilitate and awarded work it is the hope form the project. Salary slab should be created for rationalising the payment to workers. Further he said company should give preference to the local youth than outsiders. Sripura is a peaceful village hence he requests to project proponent to provide job to all required person. Again, heartly welcome the project	ECAPL will provide employment as per vacancy and eligibility of candidates and will provide salary slab as per state government Labor law.	_
35	ManoranjanDhar, Village Sripura	Sri Dhar, we are against the project he said agriculture is our base. We are farmer so we should not give our land to the company. Already vedant and birla are polluting our area hence no more company should be allowed to establish. He ended with the slogan "Jai Jawan Jai Kishan"	ECAPL work with continual environment improvement philosophy for better life to nearby population. Adequate budgetary provisions have been made for execution of environmental management plan and we informed that our project is Zero discharge project, and no pollution will happen, and we will meet all the pollution control norms. Provide Education and public awareness near villages.	Rs. 250.0 Lakh over 5 years for Environment Management system and mitigation works and Rs. 100 Lakh for Green Belt development for reduce Environment pollution load in and around surrounding area. Green belt will act as a noise and pollution control

S.No	Issue Raised by	Issue in brief	Action plan in Brief	Budget allocated and timeline
				barrier.
TOTAL				**900 Lakh**

Total land area required is 69.642 hectares. Greenbelt will be developed in total area of 24.362 hectares i.e., 35 % of total project area. The estimated project cost is Rs. 900 Crores. Capital cost of EMP would be Rs. 132.84 Crores and recurring cost for EMP would be Rs. 14.065 Crores per annum. Industry proposes to allocate Rs.9 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 1402 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Katikela RF is at a distance of ~3.65km in ENE direction , Ghichamura RF is at a distance of ~ 4.40 km in the ESE Direction, Malda RF is ~5.01 km in the Western Direction, RF near Malda is ~5.72 km in the Western Direction, Patrapali RF is ~6.12km in the Western Direction, Khait RF is ~6.19km in the WNW Direction, Rampur RF is ~6.85 km in the Western Direction, Shriyapali RF is ~7.51 km in the ENE Direction and Maulabhanja RF is ~8.45km in the SW Direction.Bhedan R is at a distance of ~1.03km in Northern direction, IB River is at a distance of ~7.93 in WNW Direction, Kharkhari Nala is at a distance of ~1.60 km in Northern direction, Makarkurha Nala is at a distance of ~ 9.70 km in the SE Direction, MatwaliNadi is ~8.51 km in the Southern Direction, TelenNadi is ~8.55 km in the Eastern Direction, Hirakud Reservoir is ~4.70km in the SSW Direction, Pond near Sonamal is ~0.40km in the ESE Direction, Pond near Shripura is ~0.76 km in the Eastern Direction.

With respect to the Conservation Plan for Schedule – I species application letter has been submitted to Regional Chief Conservator of Forest (RCCF) and the acknowledgement copy of the same has been obtained. With reference to the Memo No 3332/CWLW/-FDWC-MISC-0028-2021 dated 16.04.2021 the conservation plan will be provided by the DFO.

Copy of Wildlife Conservation Plan (WCP) For Schedule – I Species as approved by Chief Wildlife Warden will be obtained before commissioning of the project.

Ambient air quality monitoring was carried out at 8 locations during March 2021 to May 2021 and the baseline data indicates the ranges of concentrations as: PM_{10} (50.60 µg/m³ to 95.80µg/m³), $PM_{2.5}$ (29.50 µg/m³ to 57.50µg/m³), SO_2 (5.60 µg/m³ to 21.40µg/m³), NO_x (10.40 µg/m³ to 28.20µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 9.54 µg/m^3, 38.13 µg/m^3, 10.28 µg/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 7865 m^3/day which will be met from Government of Odisha, Department of Water Resources (DoWR). DoWR has given approval of 4.2 Cusec (10,275 KLD) of water in letter vide No.21321/WR.,WR-MAJII-WRC-0064/2022 (OSWAS) Irr.-II-WRC-65/2022 (Physical) dated 12.08.2022 and valid for a period of three years front the date of execution subject to the renewal of agreement by the S.E/E.E. Effluent of 2132 m^3/day quantity will be treated through ETP capacity of 2500m^3/day followed by MEE and ATFD. Sewage of 135 m^3/day quantity will be treated through STP capacity of 150m^3/day. The plant will be based on Zero Liquid Discharge (ZLD) system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 133000 kVA (133 MW) and will be met fromState Grid and the the application form has been submitted and acknowledged vide Ref no. 4131012200041 . In addition to it, further requirement is under progress.2 x 15 TPH capacity Mixed gas fired Boiler , 1 x 70 TPH capacity Tail gas fired Boiler, 2 x 90 TPH capacity Tail gas fired Boiler, 1x 13 TPH capacity Tail gas fired Boiler and 2x 15 TPH capacity CTVA common Mixed gas fired Boilers will be installed for the proposed project. Stack height of 48 m for 2 x 15 TPH capacity Mixed gas fired Boiler, Stack height of 100mfor 1 x 70 TPH capacity Tail gas fired Boiler, Stack height of 100mfor 2 x 90 TPH capacity Tail gas fired Boiler, Stack height of 50mfor 1x 13 TPH capacity Tail gas fired Boiler and Stack height of 48mfor 2x 15 TPH capacity CTVA common Mixed gas fired Boilers will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boilers. EMDG set of 5x1000 kVA is proposed and will be kept as standby during power failure.Stack height of 35m will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

Sl No	Stack Attached to Equipment	Capacity	Type of Equipment	Tag No	No. of stacks	Type of Fuel	UOM	Fuel Consumption	Stack Details				Emission(g/s)					APC measures
									Temp K	Height (m)	Dia (m)	Exit Velocity(m/s)	PM	SO2	NOX	CO	VOC	
A	**Stack**																	
1	CB Flare Stack -1	NA	Flare Stack	FS 1	1	Tail Gas	m3/Hr	198000	450	100	2.3	16	2.2	22.42	2.75	8.25	-	Stack
2	Zero QI Flare Stack - 1 & 2	NA	Flare Stack	FS 2&FS 3	2	Kerosene	m3/Hr	448	429.15	50	0.8	10	0.08	0.01	0.09	0.04	-	Stack
3	Dryer stack - (For 6 Dryers)		Stacks	DS1,2,3	2	Tail Gas	m3/Hr	72000	454.65	50	1.2	7	0.8	5.61	1	1.6	-	Stack
B	**Furnaces**																	
1	Coal Tar Tube furnace	4.81 Gcal / Hr	Furnace	F1 & F2	2	Mixed Gas	m3/Hr	5531.61	423.15	35	1.5	10	0.03	0.43	0.07	0.15	-	Stack
2	Naphthalene Tube Furnace	1.88 Gcal / Hr	Furnace	F3 & F4	2	Mixed Gas	m3/Hr	2155.17	425.15	35	1.2	10.35	0.01	0.17	0.03	0.06	-	Stack
3	Modified Pitch Furnace	1.25 Gcal / Hr	Furnace	F5 & F6	2	Mixed Gas	m3/Hr	1436.78	426.65	30	1	10	0.01	0.11	0.02	0.04	-	Stack
4	Heavy wash Oil removal colum Furnace	1 Gcal / Hr	Furnace	F7	1	Mixed Gas	m3/Hr	573.33	424.15	35	0.9	10.5	0	0.04	0.01	0.02	-	Stack
5	Carbosol Furnace	2.8 Gcal / Hr	Furnace	F8	1	Mixed Gas	m3/Hr	1611.26	423.15	35	1.5	10.2	0.01	0.13	0.02	0.04	-	Stack
6	Methylnaphthalene column furnace	2.4 Gcal / Hr	Furnace	F9	1	Mixed Gas	m3/Hr	1379.95	424.65	35	1.5	9.8	0.01	0.11	0.02	0.04	-	Stack
7	Industrial acenaphthene furnace	5 Gcal / Hr	Furnace	F10	1	Mixed Gas	m3/Hr	2876.55	427.15	35	1.7	12.1	0.02	0.22	0.04	0.08	-	Stack
8	Dibenzofuran tube furnace	3.6 Gcal / Hr	Furnace	F11	1	Mixed Gas	m3/Hr	2065.98	425.65	35	1.5	10	0.01	0.16	0.03	0.06	-	Stack
9	Fluorene column furnace	3.6 Gcal / Hr	Furnace	F12	1	Mixed Gas	m3/Hr	2065.98	424.65	35	1.5	10.6	0.01	0.16	0.03	0.06	-	Stack
10	Delightening column tube furnace	1.2 Gcal / Hr	Furnace	F13	1	Mixed Gas	m3/Hr	691.95	423.65	35	1.5	10.8	0	0.05	0.01	0.02	-	Stack
11	β-methyl naphthalene column furnace	6 Gcal / Hr	Furnace	F14	1	Mixed Gas	m3/Hr	3449.89	428.15	35	1.7	12	0.02	0.27	0.04	0.1	-	Stack
12	Overflow Furnace 1	2.43 Gcal / Hr	Furnace	F15	1	Mixed Gas	m3/Hr	1398.74	426.15	35	1.5	11	0.01	0.11	0.02	0.04	-	Stack
13	LQI Furnace 1	1.19 Gcal / Hr	Furnace	F16	1	Mixed Gas	m3/Hr	683.91	425.65	35	1.2	10.15	0	0.05	0.01	0.02	-	Stack
14	Underflow Furnace 1	1.07 Gcal / Hr	Furnace	F17	1	Mixed Gas	m3/Hr	614.94	423.15	35	1.2	9.9	0	0.05	0.01	0.02	-	Stack
15	Overflow Furnace 2	4.87 Gcal / Hr	Furnace	F18	1	Mixed Gas	m3/Hr	2797.47	424.65	35	1.7	10.6	0.02	0.22	0.03	0.08	-	Stack

Sl No	Stack Attached to Equipment	Capacity	Type of Equipment	Tag No	No. of stacks	Type of Fuel	UOM	Fuel Consumption	Stack Details				Emission(g/s)					APC measures
									Temp K	Height (m)	Dia (m)	Exit Velocity(m/s)	PM	SO2	NOX	CO	VOC	
16	LQI Furnace 2	2.38 Gcal / Hr	Furnace	F19	1	Mixed Gas	m3/Hr	1367.82	425.65	35	1.5	10.1	0.01	0.11	0.02	0.04	-	Stack
17	Underflow Furnace 2	2.14 Gcal / Hr	Furnace	F20	1	Mixed Gas	m3/Hr	1229.89	423.9	35	1.5	10.8	0.01	0.1	0.02	0.03	-	Stack
C	**Thermic Fluid Heater**																	
1	TFH Furnace Liquid Pitch	3 Gcal / Hr	Thermic Fluid Heater	TFH 1 & TFH 2	2	Mixed Gas	m3/Hr	3448.28	444.9	35	0.55	9.8	0.0192	0.27	0.04	0.1	-	Stack
2	TFH furnace Phenol Oil	3 Gcal / Hr	Thermic Fluid Heater	TFH 3 & TFH 4	2	Mixed Gas	m3/Hr	3448.28	443.15	35	0.55	9.2	0.0192	0.27	0.04	0.1	-	Stack
3	TFH furnace ATO	3 Gcal / Hr	Thermic Fluid Heater	TFH 5 & TFH 6	2	Mixed Gas	m3/Hr	3448.28	445.65	35	0.55	9.5	0.0192	0.27	0.04	0.1	-	Stack
4	TFH furnace Wash Oil	3 Gcal / Hr	Thermic Fluid Heater	TFH 7 & TFH 8	2	Mixed Gas	m3/Hr	3448.28	446.15	35	0.55	9.3	0.0192	0.27	0.04	0.1	-	Stack
5	TFH Furnace - CZP 1 & 2	2 Gcal / Hr	Thermic Fluid Heater	TFH 9 & TFH 10	2	Mixed Gas	m3/Hr	2298.85	440.65	35	0.55	9	0.0128	0.18	0.03	0.06	-	Stack
6	TFH Furnace-BMC	3 Gcal / Hr	Thermic Fluid Heater	TFH 11 & TFH 12	2	Mixed Gas	m3/Hr	3448.28	446	35	0.55	9.6	0.0192	0.27	0.04	0.1	-	Stack
A	**Coal Tar Distillation Plant**																	
1	Scrubber Vent -1 &2	-	-	V1,V2	2	-	-	-	273.15	23	0.6	4.91	-	-	-	-	0.2643	Scrubber system
2	Scrubber Vent - 3 & 4	-	-	V3, V4	2	-	-	-	313	23	0.3	11.79	-	-	-	-	0.1587	Scrubber system
3	Scrubber Vent - 5 & 6	-	-	V5, V6	2	-	-	-	313	23	0.6	4.91	-	-	-	-	0.2643	Scrubber system
4	Scrubber Vent - 7 & 8	-	-	V7, V8	2	-	-	-	313	23	0.35	8.66	-	-	-	-	0.1586	Scrubber system
5	Dedusting Bag Filter - Naphalene package area -1 & 2	-	-	S1,S2	2	-	-	-	313	20.5	0.5	10.93	0.2043	-	-	-	-	Impulse dust Collector
B	**Carbon Black Plant**																	
6	Process Bag Collectors (PBC) Stacks	-	-	S3 - S6	4*	-	-	-	503	35	1.2	17.9	2.24	6.4	1.12	-	-	Scrubber system

Sl No	Stack Attached to Equipment	Capacity	Type of Equipment	Tag No	No. of stacks	Type of Fuel	UOM	Fuel Consumption	Stack Details				Emission(g/s)					APC measures
									Temp K	Height (m)	Dia (m)	Exit Velocity(m/s)	PM	SO2	NOX	CO	VOC	
7	Dense Bag Collector (DBC) Stacks	-	-	S9 - S14	6	-	-	-	383	35	0.75	35	1.4968	-	-	-	-	Scrubber system
8	Vapour Bag Collector (VBC) Stacks	-	-	S15 - S18	4**	-	-	-	483	35	0.5	23	1.1304	0.904	0.565	-	-	Scrubber system
10	Reactor Emergency Scrubber Vent	-	-	ES1 -ES8	8***	-	-	-	503	24	0.6	20	2.24	6.8	1.12	-	-	Scrubber system
C	**Continious Zero QI**																	
11	Scrubber Vent -1 &2	-	-	V9, V10	2	-	-	-	313	23	0.6	4.91	-	-	-	-	0.2643	Scrubber system
12	Scrubber Vent - 3&4	-	-	V11,V12	2	-	-	-	313	23	0.35	8.66	-	-	-	-	0.1586	Scrubber system
D	**CT Value added Products**																	
13	Scrubber Vent -1 &2 & 3	-	-	V13,V14V15,	3	-	-	-	313	23	0.6	4.91	-	-	-	-	0.3965	Scrubber system
14	Scrubber Vent - 3&4	-	-	V16, V17,	2	-	-	-	313	23	0.35	8.66	-	-	-	-	0.1586	Scrubber system
15	Scrubber Vent -5	-	-	V18	1	-	-	-	313	23	0.3	11.79	-	-	-	-	0.0793	Scrubber system
E	**SGA**																	
16	Scrubber Vent -1 &2 & 3	-	-	V19,V20,V21	3	-	-	-	313	23	0.3	11.79	-	-	-	-	0.238	Scrubber system
F	**NGA**																	
17	Scrubber Vent -1 &2 & 3	-	-	V22,V23,V24	3	-	-	-	313	35	0.35	8.66	1.2	2.55	-	-	-	Scrubber system
18	Dust Bag Collector	-	-	S21-S29	9	-	-	-	313	24	0.5	10.93	0.81	-	-	-	-	Scrubber system
Total(g/s)													**15.277**	**74.508**	**10.618**	**20.591**	**2.14**	

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

Solid waste generation

Construction phase

- The organic waste generation during construction phase will be 270 kg/dayand disposed to local authority through local bins
- The organic waste generation during operation phase will be 180 kg/day and disposed to local authority through local bins
- Total Municipal Solid waste Generation and Management during Construction phase will be 450 kg/day

Operation phase

- The inorganic waste generation during construction phase will be 379 kg/day and disposed to local authority through local bins
- The inorganic waste generation during operation phase will be 252 kg/day and disposed to local authority through local bins
- Total Municipal Solid waste Generation and Management during operation phase will be 631 kg/day

Hazardous waste generation

- Residual Oil generation of quantity 4 TPA will be sold to Authorised Re-processor.
- Used or Spent Oil generation of quantity 5.52 TPA will be sold to Authorised Re-processor.
- Sludge Containing Oil generation of quantity 0.4 TPA will be sold to Authorised Re-processor or CHWTDSF
- Sludge/ salt from ETP/ZLD generation of quantity 1000 TPA will be Sent to CHWTDSF
- Oily Cotton Waste / Leather Hand Gloves / Cotton Hand Gloves generation of quantity 0.7 TPA will be Sent to CHWTDSF

Solid and Hazardous waste management

- The solid wastes and hazardous wastes will be packed in double lined PP bags and stored in an isolated room, exclusively ear marked for the purpose.

- As and when sufficient stock is accumulated, Organic Waste will be handover to Municipal Authority and Inorganic will be sent to TSDF for further treatment and safe land fill.
- Industry will be entered into an agreement with concerned Hazardous Waste Management unit. Hazardous waste will be stored and disposed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Amendment Rules, 2016.

Total land of 69.642 Hectares, in that 10.95 Hectares is under possession of the company and land use conversion application has been submitted for 1.55 Hectares to Office of the Tahasildar, Jharsuguda dated 05.01.2023. The possession of remaining 58.691 Hectares is in under process.

Capital cost and recurring cost of EMP are given below:

Sl No	Description	Capital Cost in crores	Recurring Cost in crores/ Annum
A	**Air Pollution Control**		
1	Thermic Fluid Heaters, Bag collector and Furnaces	4.28	10.70
2	Bag Filters	60.80	
3	Dryer and Boiler Stacks	22.50	
4	Scrubbers	12.50	
	Subtotal A	**100.08**	
B	**Water Pollution Control - ETP, WTP, MEE and STP**		
1	Civil Cost	4.48	2.70
2	Equipment Cost	18.20	
3	Structural & PEB	2.08	
4	Piping	0.94	
5	Electrical and Instrumentation	1.96	
6	Miscellaneous	0.50	
	Subtotal B	28.16	
C	Noise Pollution Control	0.32	0.028
D	Ambient air an online system set up	0.88	0.08
E	Green belt development	2.92	0.40
F	Storm Water and Rain water harvesting management	0.26	0.045
G	Waste Management	0.22	0.112

	Total	**132.84**	**14.065**

Details of CER with proposed activities and budgetary allocation:

No	Proposed activity CER	CER Budget, Amount in Lac				
		2023-2024	**2024-2025**	**2025-2026**	**2026-2027**	**2027-2028**
1	Providing Health care facility to nearby area.	30	40	50	60	70
2	Green Belt development outside the premises	10	20	30	20	20
3	Sanitation facilities to nearby village school	30	40	50	60	70
4	Drinking water facilities to nearby village	10	20	30	40	50
5	Providing solar panel to nearby schools	10	20	30	40	50
	Sub Total	**90**	**140**	**190**	**220**	**260**
	Total	**Rs. 900.0 Lakh (Rs. 9.0 Crores in INR)**				

During deliberations, EAC discussed following issues:

- EAC noted that M/s. Visiontek Consultancy Services Pvt. Ltd., Odisha& M/s. Hubert Enviro Care Systems (P) Ltd, Chennai have jointly prepared EIA/ EMP report whereas M/s. Kadam Environmental Consultants was presenting the proposal. In this regard, PP has informed that aaccredited Consulting Organizations (ACO) for the

subject project were M/s. Visiontek Consultancy Services Pvt. Ltd. & M/s. Hubert Enviro Care Systems (P) Ltd, Chennai. As both of them have relinquished their role and PP has engaged M/s. Kadam Environmental Consultants, to complete the project. M/s. Kadam Environmental Consultants vide letter dated 19.06.2023 informed that consultancy has commenced review of the EIA report for the purpose of validation and will submit the same shortly. In this regard the committee suggested that M/s. Kadam Environmental Consultants should visit the project site and update the EIA/ EMP report considering all the remedial measures. M/s. Kadam Environmental Consultants shall clearly mention that they own the data submitted in the updated EIA/EMP reportand submit updated EIA/EMP report with original signatures of consultant and its team.

- PP clarified that there is no change in breakup of plot area 172 acre as well as no change in survey numbers.
- PP has to take protection measures for the natural drain passing within the plot area.
- PP has to submit detailed compliance w.r.t Ministry's OM 22-23/ 2018-IA.III (Pt) dated 31st October, 2019 for CPA.
- Risk Assessment report shall be submitted and Industry shall ensure that risk threat shall be confined within the boundary.
- Background concentration on PM_{10} is reported as 99 µg/m^3. PP shall mention the reasons for such high concentration and action plan to maintain ambient air quality within the prescribe standards.
- Monitoring of VOC, non methane hydrocarbon, ozone shall be carried out as per standard monitoring procedure and submit the data.
- Incremental SO_2 level is very high. PP shall provide measures to be taken to reduce the incremental SO_2. Accordingly, revise GLC shall be submitted.
- Treatment method for Cyanide and Phenol in the waste water.
- PP shall provide action plan to address all the written representations received during the public hearing along with budgetary allocation and timeline to achieve it.
- EAC suggested that all existing trees within the proposed site shall be preserved. Accordingly, PP shall provide action plan.
- PP shall also submit action plan to reduce the sulphur level in the coke oven gas to be used as fuel in the proposed project.
- PP shall submit action plan to reduce fresh water requirement and shall submit the revised water balance.

- Risk Assessment shall be carried out for all the storage facilities for rupture 5mm,10 MM,25 MM scenario, jet fire, pool fire ,toxic gas dispersion ,explosion along with its impact which shall not go out of the boundary level .Risk of connecting pipeline and leakage from valve shall also be undertaken. Lifecycle assessment of toxic compounds including cost benefit analysis. It must be noted that PP has changed 3 consultant. Third one only presented without owning the data. Therefore it must be ensured that the consultant shall formally own the data being changed 3 times. No further change will be permitted.

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

Agenda No. 06

Proposed Expansion of Petrochemical Complex located at Village - Dahej, Tehsil – Vagra, District - Bharuch, State - Gujarat by M/s. Reliance Industries Limited- Consideration of Environmental and CRZ Clearance.

[IA/GJ/IND2/289667/2021, IA-J-11011/39/2016-IA II (I)]

The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd. (NABET/EIA/1922/RA 0177_Rev 01, valid till 20thJuly 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 Expansion of Petrochemical Complex located at Village - Dahej, Tehsil – Vagra, District - Bharuch, State - Gujarat by M/s. Reliance Industries Limited.

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

Regarding CRZ Clearance for Intake and Outfall facilities of proposed Sea Water Reverse Osmosis (SWRO) plant at Luwara, Dahej – GCZMA vide its letter no. ENV-10-2022-126-T dated 15-06-2023 has recommended for grant of CRZ Clearance.

RIL-DMD is currently planning to expand its production capacities by setting up additional manufacturing plants. Details for the proposed expansion are given below:

- PET: The capacity of PET production is proposed to be increased by 1,300 KTA (from 1,000 KTA to 2,300 KTA) by setting up an additional PET unit;
- PTA: The capacity of PTA production is proposed to be increased by 3,500 kilo tons per annum (KTA) (from 3,000 KTA to 6,500 KTA) by setting up a new PTA unit; „
- Polyacrylonitrile (PAN) Precursor – Carbon Fiber (CF): It is proposed to install new plants for PAN precursor of 60 KTA and Carbon Fiber of 30 KTA; „
- CPVC: The capacity of CPVC plant is proposed to increase by 105 KTA (from 70 KTA to 175 KTA); „
- Sea Water Reverse Osmosis (SWRO) Plant: The source of water for RIL-DMD is Narmada River water supplied by Vadodara Irrigation Department (VID) and the Gujarat Industrial Development Corporation (GIDC). However, due to increased industrial activity in the region, RIL proposes to setup an SWRO plant to ensure water security to the complex, in addition to the existing water allocation, RIL proposes to install SWRO plant of 1,63,680 m3/day capacity. The intake and outfall lines of the proposed SWRO plant will be located in the Gulf of Khambhat; and
- Change in fuel in Coal-based Captive Cogeneration Power Plant (CCPP): The complex has a gas-based CCPP of 195 MW and coal-based CCPP of capacity 270 MW (90 MW x 3 nos.). To reduce the carbon footprint of the operations, RIL proposes to use biomass as a fuel in the CCPP boilers to the extent of its availability.

The proposed expansion (i.e., PET, PTA, PAN Precursor – CF, CPVC and SWRO plants) will be set up within the existing land owned by RIL-DMD. The entire area is located within the notified industrial area declared by GIDC and is spread over ~652.6 hectares. Also, it has a close linkage to feedstock availability, product disposal and utilities within the facility. Moreover, this

will also provide advantage of the infrastructure already existing in the facility for the proposed expansion.

The rationale behind the proposed expansion Project is:

- The facility is located within the notified Industrial area and proposed Project activities will also be within the existing RIL-DMD facility with availability of requisite infrastructure facilities and land. The additional land for the SWRO plant is already in RIL possession and it is also located in notified Industrial area;
- Lower capital cost compared to the grass root Project and optimization of power and utilities assets;
- Adequate systems certified under the IMS standards can be build in the design;
- Well established location connectivity by rail/ road within country and sea route for export/ import;
- Availability of infrastructure for raw water pumping from Narmada River and GIDC reservoir;

The details of products and capacity as under:

Plant	Products	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
Ethane Propane Recovery Unit (EPRU)	Ethane/ Propane	6,50,000	0	6,50,000
Gas Cracker Unit (GCU)	Ethylene	7,00,000	0	7,00,000
	Propylene	1,60,000	0	1,60,000
	Mixed C4+	47,450	0	47,450
	RARFS (Pyrolysis Gasoline)	54,750	0	54,750
	Fuel Oil	40,000	0	40,000
	Tar Residue	5,472	0	5,472
Vinyl Chloride Monomer (VCM)	Ethylene Dichloride (EDC)	10,88,000	0	10,88,000
	Vinyl Chloride Monomer (VCM)	15,60,000	0	15,60,000
	Light Ends	16,100	0	16,100
	HCl	2,15,800	0	2,15,800
Polyvinyl Chloride	Polyvinyl Chloride (PVC)	15,60,000	0	15,60,000
Chlorinated Polyvinyl	Chlorinated Polyvinyl	70,000*	1,05,000	1,75,000

Plant	Products	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
Chloride	Chloride (CPVC)			
Chlor-Alkali	Chlorine	1,87,000	0	1,87,000
	Caustic Soda	2,21,000	0	2,21,000
	Sodium Hypochlorite	11,000	0	11,000
	Dilute H_2SO_4	4,600	0	4,600
	HCl	15,000	0	15,000
	Hydrogen	4,000	0	4,000
Ethylene Oxide (EO) / Ethylene Glycol (EG)	EO	1,50,000	0	1,50,000
	EG	3,08,350	0	3,08,350
	Di Ethylene Glycol	30,550	0	30,550
	Tri Ethylene Glycol	1,270	0	1,270
	PEG	19,850	0	19,850
	TEG Bottom	2,880	0	2,880
	CO_2	90,000	0	90,000
High Density PolyEthylene (HDPE)	HDPE-I/II	2,40,000	0	2,40,000
	UHMW-PE	2,500	0	2,500
Ethylene Vinyl Acetate (EVA)	Ethylene Vinyl Acetate (EVA)	15,000	0	15,000
Purified Terephthalic Acid (PTA)	PTA	30,00,000	35,00,000	65,00,000
	Crude Benzoic Acid Mix	60,000	60,000	1,20,000
	Pure Benzoic Acid	0	25,000	25,000
Polyethylene Terephthalate (PET)	PET	10,00,000	13,00,000	23,00,000
	Wet PET	0	10,000	10,000
Polyester Complex	Polyester Complex Polyester Staple Fibre (PSF) Polyester Fibre Yarn (PSY)	8,00,000	0	8,00,000
Ethylene Oxide Derivatives	Pure Ethylene Oxide	2,00,000	0	2,00,000
	Ethanol Amines	60,000	0	60,000
	Glycol Ethers	60,000	0	60,000
	Glycol Ether Acetates	30,000	0	30,000
	Ethoxylates – Ethylene Oxides Condensates	2,00,000	0	2,00,000
Acrylic Acid and Esters	Crude Acrylic Acid	1,60,000	0	1,60,000
	Glacial Acrylic Acid/ High Purity Acrylic Acid	40,000	0	40,000
	Butyl Acrylate	1,20,000	0	1,20,000

Plant	Products	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
	Ethyl Acrylate	20,000	0	20,000
	Methyl Acrylate	20,000	0	20,000
	Acrylate (2EHA)	40,000	0	40,000
Phenols	Phenol	2,50,000	0	2,50,000
	Acetone	1,55,000	0	1,55,000
Ethane Storage Tank	Ethane Storage Tank	90,000 Tons	0	90,000 Tons
Co-polyester/ PET-G	Co-polyester/ PET-G	2,00,000	0	2,00,000
	CHDM	50,000	0	50,000
	Methanol	15,000	0	15,000
Carbon Fiber, *New*	PAN Precursor	0	60,000	60,000
	Carbon Fiber	0	30,000	30,000
SWRO, *New*		0	1,63,680 m^3/day	1,63,680 m^3/day
Captive Cogeneration Power Plant				
Gas Based		195 MW	0	195 MW
Coal Based[#]		270 MW	0	270 MW

**CPVC – EC obtained for manufacturing of 70 KTA CPVC. Plant is yet to be established.*

[#]Biomass is proposed to be used as a fuel, instead of coal, to the extent of its availability, to reduce carbon footprint.

During construction phase local labours from the nearby region will be employed based on their skill sets. For the operation phase of the proposed Project, ~150 persons will be employed in addition to existing manpower of ~1,896 persons.

Ministry had issued Environment Clearance to the existing capacity of products as detailed in the EC vide file no. J-11011/39/2016-IA II (I); dated 19th August 2021. Detailed Engineering for this EC is being carried out. Certified Compliance report of ECs granted vide file no. J-11011/39/2016-IA II (I), dated 3rd April 2017 and 19th August 2021 has been obtained from Integrated Regional Office, MoEFCC, Bhopal vide File no J-11/71-2022-IROGNR dated 14th October 2022.Action Taken Report has been submitted to IRO, MOEFCC, Gandhinagar dated 19th October 2022 for 3 partial compliances. EAC was satisfied with the response of PP.

Standard Terms of Reference have been obtained vide F. No. J-11011/39/2016-IA II (I) dated 21st September 2021. It was informed that there is no litigation is pending against the project. Public hearing is not applicable to the project as the proposed expansion is located in GIDC notified industrial area under para 7(i) III Stage (3)(i)(b) of EIA notification, 2006 as per Ministry's OM J-11011/321/2016-IA.II(I) dated 27th April, 2018.

Total plant area after expansion will be 652.6 Ha (existing plant area – 652.6 Hectares and additional land required - 0 Hectares for proposed capacity) which is under possession of the company. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 215.3 Hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained. The estimated project cost is Rs. 21,200 Crores. Capital cost of EMP would be Rs. 420 Crores and recurring cost for EMP would be Rs. 40 Crores per annum. Industry proposes to allocate Rs. 2.52 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 5,150 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: -Dahej and Luvara at a distance of 2 km in North-West direction and 0.2 km in West direction, respectively.

Ambient air quality monitoring was carried out at 10 locations during December 2019 to May, 2021 and the baseline data indicates the ranges of concentrations as: PM_{10} (41.5 – 98.4 µg/m^3), $PM_{2.5}$ (12.6 – 43.8 µg/m^3), SO_2 (5.1 – 32.4 µg/m^3) and NO_2 (4.7 – 34.6 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.9 µg/m^3, 3.6 µg/m^3 and 12.9 µg/m^3 with respect to PM, SO_2 and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Fresh water requirement will be 86,000 m^3 /day which will be met from Vadodara Irrigation Department, VID (Narmada River), GIDC water supply and desalinated seawater from proposed SWRO. Permission for the same has been obtained by RIL-Dahej vide agreement no. IN-GJ96721842038247U dated 28th January 2022 and agreement no. IN-GJ96724737821041Udated 28th January 2022 from VID and GIDC

respectively. After proposed expansion of RIL-DMD petrochemical complex, the total water requirement will increase to 3,24,150 m^3/day from the present 2,38,150 m^3/day. The existing water allocation is 1,61,345 m^3/day. The permeate from proposed SWRO will be 1,63,680 m^3/day. Considering availability of recycled treated effluent (27,835 m^3/day) and SWRO permeate (1,63,680 m^3/day), the total water available for RIL-DMD will be 3,52,860 m^3/day.

The total quantity of wastewater generation after proposed expansion will increase to 90,897 m^3/day (i.e., existing Project - 67,587 m^3/day and proposed Project – 23,310 m^3/day), out of which 27,835 m^3/day will be recycled and remaining 63,062 m^3/day will be discharged into the sea through the proposed return seawater discharge pipeline, into the Gulf of Khambhat. The additional effluent generated will be treated in the Effluent Treatment Plant (50,000 m^3/day). Domestic wastewater will continue to be treated in biological section of ETP.

Total power requirement after expansion will be 455 MW (including proposed project requirement of 208 MW) which will be sourced from existing 465 MW power plants. Unit has 12 nos. of boilers which generate 2,965 TPH steam. No additional boilers are required to be installed for the project. APCE - ESP with a stack of height of 220 m is installed with the existing boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. Industry has 16 nos. of DG Sets with a combined capacity of ~22,300 KVA which are used as standby during power failure. Additionally, emergency DG sets will be planned during detailed design stage and adequate stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

Flue gas stacks

- There are 32 nos. of existing stacks attached to furnaces in Gas Cracker Unit and VCM Plant, HRSGs, Heaters, Thermal Oxidizer and Boilers.
- Adequate APCM like Low NO_x Burners, Steam injection in GT for reducing NOx emissions, ESP and usage of Low sulphur fuel are in place to mitigate the emissions from existing Stacks.
- Additionally, 15 stacks attached to RTOs & DFTOs and 5 stacks attached to HTM Heaters will be installed.

- Regenerative Thermal Oxidizer and low NOx burners will be provided as APCM for the proposed stacks.

Process Stacks

- There are 25 stacks attached to equipment including Incinerators, Dryers, Vent scrubbers, Off gas scrubbers, atmospheric scrubbers, Chlorine scrubber, PVC Unloading system.
- Adequate APCM like Cyclone separators, Water / Caustic Scrubbers, Chlorine absorbers are provided for existing stacks.
- Additional 7 stacks attached to scrubbers and dryers will be installed.
- Proposed vent of PTA Plant will be provided with Hydrosonic Scrubber followed by Cyclone separator to control process emissions.
- Proposed vent of CPVC plant will be provided with scrubber to control emission of Cl2.
- Proposed Dryer vent of CPVC plant will be provided with bagfilter/scrubber.

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

- The existing unit has been granted authorization for 16 numbers of hazardous wastes which are collected, stored, transported, and disposed of as per HOW (M&TM) Rules 2016.
- Quantity of 8 of the above wastes is expected to increase due to the proposed project. Solidified Dope Waste and Dope Filter is expected to be generated from the proposed CF Plant. This additional hazardous waste will also be disposed in line with HOW (M&TM) Rules, 2016 and the existing established procedures.
- About 3,480 MT/Day Hazardous wastes is proposed to be generated from the project of which about 2,180 MT/Day (63%) will be recycled / co-processed and the remaining will either be sold / disposed in TSDF.

Details of extended EMP (CER) with proposed activities and budgetary allocation:

During deliberations, EAC discussed following issues:

- PP informed that the CRZ map has been prepared based on Bharuch CZMP Map (Sheet No. F43M10/NW, Map No. GJ84). NCSCM visited the Site on 20 February 2021.
- The GCZMA vide its letter no. ENV-10-2022-126-T dated 15th June, 2023 recommended grant of CRZ Clearance for intake and outfall facilities of the proposed Seawater Reverse Osmosis Plant (SWRO).
- Regarding utilisation of biomass as a fuel in coal-fired boilers, PP informed that they have planned to replace coal with biomass in the coal-fired boilers to the extent of its availability. As suggested by the EAC, PP will endeavour to replace 50% of coal consumed in boilers with biomass briquettes in 2 years-time.
- There were 2 partially complied conditions in EC dated 3rd July 2017 and 1 partially complied condition in EC dated 19th August 2021 as reported by IRO. PP informed that Action Taken Report against these conditions pertaining to details of hazardous waste disposed to authorised agencies, details of submission of Environment Statement for the year 2021-22 and details of water consumption in the unit was submitted to IRO Gandhi Nagar vide email dated 19th October 2022.
- PP informed that the projects that are granted EC in 2017 and 2021 are in the planning stage and the detailed engineering for these projects is being carried out. They are expected to be established within the period of validity of the respective ECs. The projects of 2017 which include Cracker de-bottlenecking and PVC plant will be completed in about three years and are expected to be commissioned by 2026.
- PP has submitted revised Maximum GLC of PM, SO_2 and NO_x for the proposed expansion projects, which was estimated using AERMOD considering various mitigation measures. The software also considers the terrain layout in the 10 Km study area which includes a major area as sea / water bodies. Thus, the effect of sea on the dispersion has been included in the modelling results. The baseline concentration at monitoring stations, predicted GLC at these locations, on a 24 hourly average basis, and predicted ambient air quality at these locations after implementation of proposed projects is tabulated below for PM_{10}, SO_2 and NO_x:

Baseline, Predicted GLC and Predicted Ambient Air Concentration of PM_{10}					
S.No.	**Receptor Code**	**Receptor Name**	**Baseline 24 hourly maximum concentration ($\mu g/m^3$)**	**Predicted 24 hourly maximum concentration ($\mu g/m^3$)**	**24 hourly maximum concentration, (Baseline + Predicted), ($\mu g/m^3$)**
1	AAQ1	RIL Site Guest House	80.0	0.4	80.4
2	AAQ2	Jageshwar	98.0	0.2	98.2
3	AAQ3	Luvara	98.4	0.1	98.5
4	AAQ4	Lakhigam (GCPTCL)	98.3	0.1	98.4
5	AAQ5	Ambetha	97.7	0.2	97.9
6	AAQ6	Dahej Hospital	94.2	0.2	94.4
7	AAQ7	Near Salt Pans	82.1	0.0	82.1
8	AAQ8	Vadadla	71.7	0.2	71.9
9	AAQ9	Suva	80.5	0.1	80.6
10	AAQ10	Vav	63.9	0.2	64.1
National Ambient Air Quality Standard for PM_{10} ($\mu g/m^3$)					100

Baseline, Predicted GLC and Predicted Ambient Air Concentration of SO_2					
S.No.	**Receptor Code**	**Receptor Name**	**Baseline 24 hourly maximum concentration ($\mu g/m^3$)**	**Predicted 24 hourly maximum concentration ($\mu g/m^3$)**	**24 hourly maximum concentration, (Baseline + Predicted), ($\mu g/m^3$)**
1	AAQ1	RIL Site Guest House	23.3	0.8	24.1
2	AAQ2	Jageshwar	28.4	0.6	29.0

3	AAQ3	Luvara	26.8	0.3	27.1
4	AAQ4	Lakhigam (GCPTCL)	27.7	0.2	27.9
5	AAQ5	Ambetha	26.0	0.4	26.4
6	AAQ6	Dahej Hospital	32.4	0.3	32.7
7	AAQ7	Near Salt Pans	19.9	0.1	20.0
8	AAQ8	Vadadla	23.2	0.6	23.8
9	AAQ9	Suva	14.2	0.1	14.3
10	AAQ10	Vav	14.3	0.2	14.5
National Ambient Air Quality Standard for SO_2 ($\mu g/m^3$)					80

Baseline, Predicted GLC and Predicted Ambient Air Concentration of NO_2					
S.No.	**Receptor Code**	**Receptor Name**	**Baseline 24 hourly maximum concentration ($\mu g/m^3$)**	**Predicted 24 hourly maximum concentration ($\mu g/m^3$)**	**24 hourly maximum concentration, (Baseline + Predicted), ($\mu g/m^3$)**
1	AAQ1	RIL Site Guest House	32.2	5.9	38.1
2	AAQ2	Jageshwar	32.0	1.5	33.5
3	AAQ3	Luvara	29.9	0.9	30.8
4	AAQ4	Lakhigam (GCPTCL)	30.6	1.1	31.7
5	AAQ5	Ambetha	29.0	1.2	30.2
6	AAQ6	Dahej Hospital	34.6	2.2	36.8
7	AAQ7	Near Salt Pans	21.4	0.3	21.7
8	AAQ8	Vadadla	32.8	1.3	34.1
9	AAQ9	Suva	19.1	0.8	19.9
10	AAQ10	Vav	20.6	1.1	21.7
National Ambient Air Quality Standard for NO_2 ($\mu g/m^3$)					80

- Under EMP, capital expenditure will be incurred towards Air Pollution

Control Measures, ETP construction and commissioning, analysers for online monitoring of emissions from stacks, Greenbelt development, etc. Operational expenses will be incurred towards power supply for APCM and ETPs, sampling and analysis of emissions from stacks, ambient air quality, sampling and analysis of effluent, greenbelt maintenance, etc.

The breakup of capital and recurring EMP expenditure is tabulated below.

Sl. No	Description	Capital Cost (crores)	Recurring Cost (crores/annum)
1	Water Environment	05	38
2	Air Environment	410	
3	Noise Environment	01	--
4	Hazardous Waste Management	--	0.5
7	Green Belt Development	01	1.0
8	Environment Monitoring	03	0.7
	Total	**420**	**40**

- <u>Corporate Environment Responsibility (CER)</u>

  RIL-DMD initiates and participates in activities and programmes in the areas of education, infrastructure, health & sanitation, and skill development for the overall development of people in surrounding areas.

  RIL-DMD organizes health camps and creates awareness in surrounding villages through its health and sanitation initiatives. A 50-bed hospital operated by a trust formed jointly by RIL & Gujarat Industrial Development Corporation (GIDC) known as Dahej Health & Welfare Society (DHWS) provides medical facility to the surrounding villages at Dahej. This hospital has facilities such as operation theatre, 8 bed ICU, delivery room and staffed by a full-time physician, surgeon, gynaecologist, paediatrician, anaesthetist, and other supporting staff.

- Under "Kaushalya Vikas Karyakram", RIL-DMD organizes vocational training camps in tailoring and jewelry making. It also organizes camps to develop skill sets of residents so that they are employable by RIL-DMD and other industries in surrounding areas. As requested by the EAC, we will train 10 residents per quarter to develop their skill sets after the projects are implemented. Budgetary allocation for activities under extended EMP (CER) is tabulated below.

Sl. No	Area / Activity	Budgetary allocation (crores)
1	Education	0.01
2	Infrastructure development	0.50

3	Health and sanitation initiatives	1.00
4	Skill development	0.01
5	Disaster management	1.00
	Total	**2.52**

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 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 and CRZ 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 & CRZ Clearance subject to clearance by the CRZ division of the Ministry.

The Committee noted that as per the extant rules of the Ministry, the projects involving Environmental & CRZ clearance needs to be examined as

per the CRZ Notification, 2011/2019. The Committee has taken cognizance of the recommendations of the GCZMA for CRZ clearance.

The Environmental and CRZ 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 and CRZ clearance subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

(i). PP shall comply with all the conditions stipulated in the recommendations of GCZMA issued vide its letter no. ENV-10-2022-126-T dated 15th June, 2023 for grant of CRZ Clearance for intake and outfall facilities of the proposed Seawater Reverse Osmosis Plant (SWRO).

(ii). PP shall comply with all conditions stipulated in the EC issued vide No. J-11011/27/90-IA-II dated 14.03.1991; No. J-16011/45/96-IA-III dated 26.12.1996 ; No. J-11012/11/97-IA II dated 21.05.1998; No. J-11011/482/2006-IA II(I) dated 11.06.2007; No. J-11011/402/2007-IA II(I) dated 20.03.2008 ; No. SEIAA /GUJ/EC/5(e) & 1(d) /124/2011 dated 23.06.2011and amendments therein; No. SEIAA/GUJ/EC/1(d) & 7(e)/96/2015 dated 02.03.2015 and amendment therein.; No. J-11011/39/2016-IA II(I) dated 03.04.2017; No. J-11011/39/2016-IA II(I) dated 19.08.2021.

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

(iv). All pollution control and monitoring equipments shall be installed, tested and interlocked with the process. SPCB shall grant 'Consent to Operate' after ensuring that all the mentioned pollution control equipments, construction of storm water drain, Greenbelt, uploading of compliance report on the website etc have been implemented.

(v). Total fresh water requirement shall not exceed 86,000 m^3/day, proposed to be met from Vadodara Irrigation Department, VID (Narmada River), GIDC water supply and desalinated seawater from proposed SWRO. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The fresh water requirement shall be reduced after installation of rainwater harvesting system in the unit/project area.

(vi). Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

(vii). All the effluent generated from the existing unit and proposed expansion shall be treated in the efficient ETP. Effort shall be made to recycle the treated effluent for cooling make up water and process. PP shall ensure that discharge of treated effluent into sea shall not exceed 63,062 m^3/day and meet the water quality standard for discharge stipulated by CPCB /SPCB.

(viii). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

(ix). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.

(x). Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.

(xi). Regular VOC monitoring shall be done at vulnerable points.

(xii). The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.

(xiii). Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.

(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 cleaning etc. to reduce wastewater generation.

(xv). The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

(xvi). PP proposed to allocate Rs. 2.52 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). 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.

(xviii). 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.

(xix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent is to be utilized for gardening, real time monitoring system shall be installed at the ETP outlet.

(xx). PP shall instal 03 CAAQMS to monitor ambient air quality for parameters PM_{10}, $PM_{2.5,}$ SO_2 , NO-NO_2-NO_X, O_3, VOC's and HC.

(xxi). PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. 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.

(xxii). The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.

(xxiii). Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.

(xxiv). The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.

(xxv). PP shall provide training to 10 local youth every quarter on environment management including air pollution control device, ETP, solid waste management, fly ash based brick manufacturing, green belt development as part of skill development programme.

(xxvi). 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 Development Drilling wells and Testing of Hydrocarbons in Dipling, Sarojini and Saekhati Block in Sivasagar and Dibrugarh District, Assam By M/s. Ramayana Ispat Pvt. Ltd.– Re-consideration of Environment Clearance reg.

[IA/AS/IND2/71519/2017, IA-J-11011/564/2017-IA-II(I)]

The proposal is for consideration of environmental clearance for development drilling of wells and testing of Hydrocarbons by M/s Ramayana Ispat Pvt Ltd in an area of28.3 sq km located at Dipling, Sarojini and Sapekhati Blockin Sivasagar (now Charaideo) and Dibrugarh Districts, Assam. Block area allotted for the project is 28.3 sq km (Dipling -10.14 sqkm {Forest area-3.06 ha}, Sarojini-8.72sqkm, Sapekhati-9.44 sqkm).

The proposal was considered in EAC in its 17th EAC meeting held during 25th–27th February, 2020 wherein the proposal was recommended for grant of EC subject to submission of letter from the SPCB/State Govt. regarding conduct of public hearing for complete three blocks mentioned in the present proposal, and Stage-1 forest clearance.

During processing competent authority refer back the proposal to EAC for the clarification given by SPCB does not address the requirement of conducting PH district-wise as only one PH has been conducted in spite of the fact that project falls in two districts. Further, the PH advertisement and the PH proceedings both mention only one district. In view of above, PP and SPCB may be asked to conduct public hearing for Dibrugarh District separately as required in EIA Notification 2006. Based on above, EAC may re-examine the proposal as per SOP given in Ministry's OM dated 19.06.2014.

During deliberations EAC discussed following things:

(i) As per EIA report, drilling of 11 wells will be conducted at Dipling Block and Sapekhati Block in Charaideo district of which 4 wells will be drilled at Sarojini Block, in Dibrugarh district. EAC opined proposed project falls in two districts i.e. Charaideo and Dibrugarh and PH needs to be conducted in Dibrugarh also. In this regard, PP has informed that 4 wells proposed to be drilled in Dibrugarh district will be dropped and the instant proposal shall be restricted to 11 wells that are proposed to be drilled in Charaideo district. The committee suggested that PP shall submit the request in writing for new proposal for dropping of 4 wells proposed in Dibrugarh district including revised form I. However, PP has not submitted the new proposal in writing along with revised form I. Accordingly, committee suggested the PP to carry out Public Hearing for the Dibrugarh district separately.

(ii) Revised EIA/EMP report shall include details such as (i) Details of advertisements for Public Hearing for dibrugarh district (ii) Copy of forwarding letter of SPCB to MoEF&CC (III) Legible copy of public hearing proceedings duly signed by the presiding officer. (iv) Attendance sheets (v) Action plan to address the issues raised during public hearing along with budget allocation and time line. (vi) Copy of written grievances/submissions if any.

Accordingly, proposal was returned in present form. Above all additional information and other relevant shall be submitted online to the PARIVESH portal for further consideration by EAC.

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.

ANNEXURE –II

GENERIC TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. **Executive Summary**
2. **Introduction**
   i. Details of the EIA Consultant including NABET accreditation
   ii. Information about the project proponent
   iii. Importance and benefits of the project

3. **Project Description**
   i. Cost of project and time of completion.
   ii. Products with capacities for the proposed project.
   iii. Details of existing sugar, distillery and cogen power plant with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   iv. List of raw materials required and their source along with mode of transportation.
   v. Other chemicals and materials required with quantities and storage capacities
   vi. Details of Emission, effluents, hazardous waste generation and their management.
   vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
   viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
   ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
   x. Hazard identification and details of proposed safety systems.
   xi. Expansion/modernization proposals:
      a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA-EMP report.

b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. **Site Details**

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
iii. Co-ordinates (lat-long) of all four corners of the site.
iv. Google map-Earth downloaded of the project site.
v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
vii. Land use break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
ix. Geological features and Geo-hydrological status of the study area shall be included.
x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xii. R&R details in respect of land in line with state Government policy.

5. **Forest and wildlife related issues (if applicable):**

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).

ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha).*

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.
viii. Soil Characteristic as per CPCB guidelines.
ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
xi. Socio-economic status of the study area.

7. **Impact Assessment and Environment Management Plan**

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
v. Details of stack emission and action plan for control of emissions to meet standards.
vi. Measures for fugitive emission control
vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the

concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**

i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.

iii. Annual report of health status of workers with special reference to Occupational Health and Safety.

iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. **Corporate Environment Policy**

i. Does the company have a well laid down Environment Policy

approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. To address the Public Hearing issues, provisions contained under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 30/09/2020 shall be complied.
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
13. A tabular chart with index for point wise compliance of above ToRs.
14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

<u>The following general points shall be noted:</u>

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
vii. While preparing the EIA report, the instructions for the proponents and

instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.

viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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SPECIFIC ToR FOR EIA STUDIES FOR DISTILLERY

1. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
2. Number of working days of the distillery unit.
3. Details of raw materials such as molasses/grains, their source with availability.
4. Details of the use of steam from the boiler.
5. Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
6. Plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
7. Proposed effluent treatment system for molasses/grain based distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).
8. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
9. Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank.
10. Action plan to control ground water pollution.
11. Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.
12. Details of bio-composting yard (if applicable).
13. Action plan to control odour pollution.
14. Arrangements for installation of continuous online monitoring system (24x7 monitoring device)

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

S. No.	Name and Address	Position
1.	Dr. J. S. Sharma	Vice-Chairman
2.	Prof. Y. V. Rami Reddy	Member
3.	Shri. J.S. Kamyotra	Member
4.	Dr. Sanjay V. Patil	Member
5.	Dr. Rahul Rameshrao Mungikar	Member
6.	Dr. Onkar Nath Tiwari	Member
7.	Dr. Siddhartha Singh	Member
8.	Shri A. N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
9.	Dr. Mahendra Phulwaria	Scientist 'C'
10.	Mr. Kanaka Teja	Research Assistant

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