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

Dated: 09.05.2023

Meeting ID: IA/IND2/13493/03/05/2023 MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE (INDUSTRY-2 SECTOR PROJECTS) HELD ON 03rd - 04th May, 2023

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

- (i) Opening Remarks by the Chairman: The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.
- (ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its Meeting (ID: IA/IND2/13482/17/04/2023) held on 17th April, 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: -

03rdMay, 2023 (Wednesday)

Agenda No. 01

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

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

The proposal was earlier considered by the EAC (Ind-2) in its 50th meeting/meeting held during 11.02.2022 wherein EAC deferred the proposal and desired certain requisite information/inputs.

The proposal was again considered by the EAC (Ind-2) in its meeting dated 09.03.2023, meeting ID IA/IND2/13456/09/03/2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S No.	ADS by MoEF&CC	Reply by PP
1	PP shall assess the reasons for high incremental GLCs of NOx and reduce the overall incremental GLC w.r.t. NOx by considering various pollution control measures.	• The air model run has been repeated and there is no change in the max 90 day 24-hourly average value as compared to the reported figures. The AERMOD air modelling exercise predicts incremental increase of GLC of pollutants over a specified averaging period. For an oil exploration setup, high-power DG sets along with Ground level flaring arrangements have been considered as point emission sources – both of these sources are known to emit elevated concentrations of NOx because of high temperature combustion,

S	ADS by MoEF&CC	Reply by PP
No.		
S No.	ADS by MoEF&CC	involve no control equipment and have release height of about 10 m (max) thus allowing for lesser dispersion of pollutant gases after getting released from emission source(s). The incremental GLC of NOx has been modelled for one scenario (involving the 3-point sources) considering a 3-month meteorology collected at hourly frequency in the block. Max 24-hour average concentration and period average concentrations accounting for a total of 2160 hours at 441 cartesian grid points were estimated in the model output. The incremental max. value of 11.85 of μg/m³ at a distance of 506 m from the source has been predicted for 1 instance and with the distribution of high concentration values falling sharply for the remaining 440 instances viz. 1 instant for >10 μg/m³; 2 instances for 5-9.9 μg/m³; 2 values for 3 – 4.9 μg/m³ and all remaining predicted values being less than 3 μg/m³ which is less than 2% percentage of total values. In addition, the incremental average period value at the same grid point reflecting the max 24-hour average is 2.58 μg/m³, showing that the high values at a specific location occurs only for particular conditions of worst case meteorological conditions which are very short-lived and has been potentially caused by occasionally severe temperature inversions
		caused in winter season and leading to fumigation like dispersion conditions for air pollutants. Logically then, an estimation basis
		, 3
		leaving aside the outliers, provides for an
		added to the 98 percentile value of all
		incremental value of 2.62 µg/m ³ which when added to the 98 percentile value of all Page 3 of 29

S No.	ADS by MoEF&CC	Reply by PP
		monitored values i.e. 27.32 µg/m³ is lesser than the than the 30 µg/m³ annual average concentration for NOx delineated in the NAAQS. Control measure for reduction in GLC of NOx: Among the available technologies/pollution control measures for the reduction of NOX emission from DG sets, the only possible pollution control measure that can be implemented to reduce the GLC of NOX is providing adequate stack height as per CPCB guidelines for effective dispersion of emissions. In addition to implementation of above pollution control measure, regular maintenance of DG sets will be carried out.
2	Details of court case against the project/proposed block if any.	There is no court case against the proposed project/block.
3	As per information provided, among the available technologies/pollution control measures for the reduction of NOX emission from DG sets, the only possible pollution control measure that can be implemented to reduce the GLC of NOX is providing adequate stack height as per CPCB guidelines for effective dispersion of emissions. Please	The modelling exercise was carried out for 1250 kVA DG set, 250 kVA DG set and operation of flaring during well testing. The incremental maximum GLC for NOx was found to be 11.85 µg/m³ which has been predicted for 1 instance and with the distribution of high concentration values falling sharply and predicted values >3 µg/m³ were found to be less than 2% of total predicted values. The high values at a specific location occurs only for particular conditions of worst case meteorological conditions which are very short-lived and has been potentially caused by occasionally severe temperature inversions caused in winter season and leading to fumigation like dispersion conditions for air

S ADS by MoEF&CC Reply by PP No. provide details of pollutants. height of stack for proposed DG sets. It An estimation basis the max. 24-hourly high concentration, leaving aside the outliers, seems that provides for an incremental value of 2.62 information provided is not clear. Please µg/m³ which when added to the 98 percentile submit complete value of all monitored values i.e. 27.32 information. $\mu g/m^3$ is lesser than the than the 30 $\mu g/m^3$ annual average concentration for NOx delineated in the NAAQS. Hence, taking into account the feasibility of implementation of mitigation measures for DG sets, no control measures for reducing NOx emissions at source is recommended. However, to improve the dispersion of the emitted flue gases, increasing the height of the 1250 kVA DG set stack (from current height of 7 m) to 9 m will be considered by OIL, in effect further reducing the GLC of NOx in the area adjacent to the drill site. Increased stack height of 9m for the 1250 reduce the kVA stack will maximum incremental value of NOx to $7.78 \mu g/m^3$. Moreover, predicted values $>3 \mu g/m^3$ were found to be less than 1.17% of the total predicted values. The same could be attributed to worst case meteorological conditions which are very short-lived and has been potentially caused by occasionally severe temperature inversions caused in winter season and leading to fumigation like dispersion conditions for air pollutants.

PP informed that they have increased the stack height from 7 to 9 metres of DG sets. The committee suggested that PP should follow CPCB criteria while finalising the stack height of the DG sets. Accordingly, the committee suggested to refer the accredited consultant M/s. ERM India Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA 0177_Rev 01 and validity 20.06.2024) to QCI/NABET for assessing the training requirement/capacity building with emphasis on air quality modelling.

The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA 0177_Rev 01 and validity 20.06.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Onshore Oil & Gas development drilling and production in Tinsukia and Dibrugarh Districts under Hugrijan, Naharkatia & Naharkatia Extn, Sapkaint and few parts of Dumduma (Block A&B), Borhat and Moran Extension PMLs located at Villages Borjan, Chapatali No.4, Gelipung, Borpather, Chapatoli Na Gaon, Balimora Cha Bagicha, Galaibangali, Chariali, Naga Gaon, Usha Gao, Uttar Somdar, Borhat Bagicha under Dibrugarh, Charaideo and Tinsukia districts State Assam by M/s. Oil India Ltd.

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

The details of products and capacity as under:

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

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

NE/E/IA/AS/MI/59/1744-46 dated 27.12.2021.EAC found the information satisfactory.

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

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

Public Hearing Action Plan and budgetary allocation at Dibrugarh District

S.	Raised by Public	Comments/Suggestion by	Response /Commitment	Action Items	Tentative
No		Public	of OIL as Project Proponent		Budget (INR)
1.	MriduPabanPhukan (Environmentalist) (Naharkaia)		 Venue for PH was selected based on its close proximity to the said EC block. Though it is located in M/S OIL's area, the auditorium is used by the public to conduct meetings and it is located in a prime location where public can easily access and attend for PH. As per EIA Notification, 2006 advertisement regarding PH needs to be published in one major National daily and one Regional vernacular Daily/ Official State Language newspaper. Accordingly, PCBA published the advertisement in Times of India and in a vernacular Daily DainikJanambhumi. Apart from advertisement in the newspaper, announcement was also carried out through mobile vans equipped with Loudspeakers for information to the local public. PCBA clarified that the information regarding the 		- Budget (INR)
			 also carried out through mobile vans equipped with Loudspeakers for information to the local public. PCBA clarified that the 		

S.	Comments/Suggestion by	Response /Commitment	Action Items	Tentative
No 2.	Public He added that the analysis period of EIA should have been summer and winter phrases but this EIA is prepared only in two weeks.	Representative of EIA consultant ERM India Pvt. Ltd informed that Terms of Reference (ToR) was issued by MoEF&CC on 29.04.2017. As per ToR, one season (non-monsoon) Baseline environmental monitoring data was collected during October-December 2017. As the data was more than three years old, EAC asked to collect additional 15 days of environmental monitoring.	• Fresh Baseline Environmental monitoring was carried out for a period of 15 days during February 2022 – March 2022.	-
3.	He further said that the fund allotted for preservation of animal life is not sufficient.	OIL stated that, INR 58 lakhs was allotted for Wildlife Conservation Plan of Schedule-I species in the Block. The plan was submitted to the Chief Wildlife Warden, Assam for approval	Schedule-I species OIL has allotted INR 58	Budget for Wildlife Conservation Plan for Schedule-I species is INR 58 lakhs
4.	As the EIA preparing agency does not have knowledge about local species of pythons, vulture etc. in the area.	Representative of EIA consultant ERM India Pvt Ltd. informed that information on vulture, python and other species is presented in the draft report and the data was collected from various reliable websites.	The data presented in EIA contains primary surveys as well as secondary information obtained through consultation with Forest department	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				&locals and also from	
				relevant veritable Govt.	
				reports (Forest	
				Management Plans)	
				and research articles.	
				The data presented in	
				EIA contains primary	
				surveys as well as	
				secondary information	
				obtained through	
				consultation with	
				Forest department &	
				locals and also from	
				relevant veritable Govt.	
				reports (Forest	
				Management Plans)	
				and research articles.	
				Relevant literature	
				used for reference are	
				mentioned in Section	
				3.4: Biological	
				Environment Baseline	
				and also included in	
				detailed checklist of	
				fauna presented in	
				Table 3.8- Table 3.11	
				of the EIA report. The	
				relevant literatures	
				cited are provided	
				below.	
				 Management 	
				plan for	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			Bherjan- Borajan- Padumoni Wildlife Sanctuary Mazedul Islam and Prasanta Kumar Saikia. 2014. A study on the road-kill herpetofauna of Jeypore Reserve Forest, Assam NeBIO I An international journal of environment and biodiversity Vol. 5, No. 1. Soumyadeep Datta. 2014. Dihing Patkai Abhayaranya. Nature's Beckon. Anwaruddin Choudhury. 2009. The Hoolock Gibbon (Hoolock hoolock) in Tinsukia and Dibrugarh districts of	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			Assam, India, Asian Primates Journal 1(2). Right of Passage 2017. Elephant Corridors of India [2nd Edition]. Menon, V, Tiwari, S K, Ramkumar, K, Kyarong, S, Ganguly, U and Sukumar, R (Eds.). Conservation Reference Series No. 3.WIldlife Trust of India, New Delhi. Saikia PK and Devi OS. 2011. A checklist of avian fauna at Jeypore Reserve Forest, eastern Assam, India with special reference to globally threatened and endemic species in the Eastern	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			Himalayan biodiversity hotspot. J Threatened Taxa 3 (4): 1711–1718. Rajat Bhattacharjee and Aruna Deb Roy. 2014. Eco -Tourism and Its Socio Economic Effects Tourism and Its Socio Economic Effects - A Study on Jeypore Rainforest, International Journal of Scientific and Research Publications, Volume 4, Issue 2. Management Plan- Dehing Patkai Wildlife Sanctuary (2011-12-2015-16)	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				Pythons were not	,
				recorded during	
				primary survey in	
				proximity to the	
				proposed well site.	
				Information on python	
				species in the area	
				obtained from Datta	
				(2014) and from	
				Management Plan for	
				Dehing Patkai Wildlife	
				Sanctuary (currently	
				Dehing Patkai National	
				Park).	
				Vultures were not	
				recorded during	
				primary survey in	
				proximity to the	
				proposed well site	
				Information on the	
				vulture species in the	
				area obtained from	
				study conducted by	
				Saikia and Devi (2011)	
				and from Management	
				Plan for Dehing Patkai	
				Wildlife Sanctuary	
				(currently Dehing	
				Patkai National Park).	
				Common Leopard was	
				not recorded during	
				primary survey in	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
	Public	of OIL as Project Proponent	proximity to the proposed well site. However, their presence was reported by the local villagers. Information on leopard species in the area obtained from Datta (2014) and Management Plan for Bherjan- Borjan Podumoni WLS. The Wildlife Conservation Plan for Schedule I species was prepared and submitted to the Chief Wildlife Warden, Assam for approval	
5.	Also the data produced in the EIA report on the Black Panther and Leopard of this locality is based on very poor facts.	Representative of EIA consultant ERM India Pvt Ltd. informed that data on Leopard presented in the draft report was collected from various reliable websites and community consultation.	Common Leopard was not recorded during primary survey in proximity to the proposed well site (Refer Table 3.12 of EIA report). However, their presence was reported by the local villagers. Information on leopard species in the area obtained from Datta (2014) and Management Plan for	-

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			Bherjan- Borjan Podumoni WLS.	
6.	He further mentioned about the oil spillage of B-2 rig of which the local people gave a written complain to the Installation Manager of Balimara QPS. But no measures were taken to prevent the oil spillage in nearby areas by M/S OIL. This news was even published in Newspaper and other News medias.	OIL took immediate action to prevent the spillage and also remedial measures to collect the spilled oil and disposed the same following the Hazardous and Other Waste (Management and Transboundary) Rules, 2016.	OIL always take preventive measures and follow best practices to avoid/contain any spill of oil as per the Spill Management Plan mentioned in Section 10.1.8 of the EIA report. Planning, Designing and Procurement As best practices to avoid/contain any spill, OIL would ensure: All chemicals will be stored in designated area and to an extent possible all such areas would away from drainage channels; The flooring of the area would be impervious (paved or HDPE lining) and bunding to be	Budget for oil spill management included in the drilling budget

S. No	Raised by Public	Comments/Suggestion by Public	Response / Commitment	Action Items	Tentative
NO		Public	of OIL as Project Proponent	nunciida an all sides	Budget (INR)
				provide on all sides	
				of the chemical	
				storage areas;	
				o The chemical	
				storage area to be	
				covered to ensure it	
				has the minimum	
				runoff;	
				o All transfers of	
				chemicals to be	
				done with proper	
				care and under the	
				supervision of the	
				Store Supervisor;	
				Preventive and	
				Mitigative Measures	
				o Once a spill incident	
				has occurred,	
				identify the	
				chemical involved	
				and check	
				hazardous property	
				of the chemical	
				from the Material	
				Safety Datasheet	
				(MSDS);	
				 Person wearing 	
				required PPE will	
				apply necessary	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			absorbent like saw dust for a liquid spill to ensure that the spill does not spread over a wide area or reach any surface water body or drainage channels; Thereafter, the substance will be properly collected and stored in a separate labelled container marked "hazardous waste – do not burn"; and dispose in accordance with Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.	
7.	He said that PCBA does not upload the final EIA report, only the draft EIA report is uploaded in the website.	Final report will be prepared incorporating the Public Hearing proceedings along with the action plan. Once the Final report is prepared it will submitted to	-	-

S. No	-	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			MoEF&CC and PCBA for uploading in their websites.		
8.		He also said that better co- operation and commitment is needed to prevent pollution from M/S OIL.	OIL is following best practices and taking adequate steps to prevent pollution.	OIL willtakemeasures as per the as mentionedbelow	Cost of air quality management plan, noise
				Air Quality Management Plan	management plan, water quality
				 Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. 	management plan, soil quality management plan, Municipal Solid Waste and
				• Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells.	Hazardous Waste Management have been presented as part of EMP
				• Flare stacks of adequate height would be provided.	
				DG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			• Periodic monitoring of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards.	
			Noise Management Plan	
			 Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc. 	
			 Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment. 	
			 All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC). 	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			 All high noise generating equipment will be identified and subjected to periodic preventive maintenance. 	
			 No night time operation of vehicles and construction activities will be undertaken. 	
			 Use of noise barriers 	
			Soil Quality Management Plan	
			 Drip trays to be used during vehicular/equipment maintenance and during re-fuelling operations. 	
			 Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately. 	
			 Dedicated paved 	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			•	storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites.	
				• 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings.	
				Surface Water Quality Management Plan	
				• Levelling and grading operations will be undertaken with minimal disturbance to the existing site contours thereby maintaining the general slope and topographical profile of the site.	
				 Spill kits will be used to contain chemical spillages. 	
				 During site preparation and construction, surface water run-off will be channelized through appropriately designed 	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				drainage system.	
				 Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses. 	
				 Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system. 	
				 Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. 	
				Ground Water Quality Management Plan	
				 Water based mud would be used as a drilling fluid for the proposed project. 	
				 Eco-friendly synthetic based mud if required for deeper 	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
		•	sections, will be used after providing intimation to the Pollution Control Board;	
			 The drill cutting along with spent mud will be stored in HDPE lined pit. 	
			Waste Management Plan	
			 Use of low toxicity chemicals for the preparation of drilling fluid. 	
			 Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission 	
			or Discharge of Environmental Pollutants from Oil Drilling and Gas	
			Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an	

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
			ETP and will be reused.	
			• The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.	
			• The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors.	
			 The sewage generated will be treated through septic tank and soak pit system. 	
			 Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001. 	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				 The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon. 	
				Wildlife Conservation Plan	
				 Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; 	
				 Appropriate shading of lights to prevent scattering; 	
				 Strict no hunting policy to be implemented by contractors. 	
				 Sedimentation tank and oil-water separator will be installed at peripheral drains developed along the well pad sites to control any accidental discharge before it 	

S. No	-	Comments/Suggestion by Public	Response / Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
110				water body;	Judget (IIII)
				• Spill kits to be used for removal of any oil or chemical spillage on site;	
				Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody.	
				Contributing to Forest Departments habitat improvement program	
				Capacity building of forest department staffs	
				Awareness Generation Meetings at villages	
				• Engaging a NGO for Identification of Hoolock Gibbon roosting sites.	
9.	Indra Kumar Gupta (Local resident)	He said that in this public hearing, he take the opportunity to express his grievances, like the dust pollution caused due to frequent vehicular movement in the area.	All the approach roads to the drilling locations and production Installations are made metalled/pucca roads to minimise dust generation.	As part of Air Quality Management Plan, the following mitigation measures will be undertaken by OIL: • Dust suppression	Cost of air quality management plan has been presented as part of EMP

S	. Raised by Public	Comments/Suggestion by Public	Response / Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				through water sprinkling in the internal unpaved roads Maintenance of paved internal road and transport route Ambient Air Quality Monitoring during different phases i.e., site development, drilling and decommissioning. Stack emission monitoring for DG sets used for drilling.	
	0.	He suggested that if fire brigade vehicles are used for sprinkling water in the roadways and steps like tree plantation will reduce pollution great extend.	OIL is taking adequate measures to prevent dust generation by regularly maintaining roads, water spraying etc., and plantation in the abandoned drill sites.	OIL shall deploy water tankers for dust suppression along the unpaved roads as part of Air Quality Management Plan. OIL shall carry out plantation works in the abandoned well sites	Cost of water sprinkling has been presented as part of EMP Plantation at abandoned drill sites Rs. 2 lakh per site x 7 sites= Total Rs. 14 lakhs
1	1. Mr. Joy Sankar Sarmah (ACS, ADS, Dibrugarh)	He hoped that, clarification from M/S OIL have been able to clarify the doubts of the public. He said	OIL is committed to comply with all the environmental protection measures and safeguards stipulated	Development of the local area will be done as per Corporate	Mobile health services

S.	Raised by Public	Comments/Suggestion by	Response /Commitment	Action Items	Tentative
No	-	Public	of OIL as Project Proponent		Budget (INR)
NO		these projects are of National importance and are profitable projects. Therefore, requested all to co-operate for successful completion of such project. He also said that, as the EIA (draft) has already been prepared, M/S OIL will follow the EIA and other guidelines in future. He observed that, the concerned are related to environment, therefore hoped M/S OIL in future will proceed with following all the environment related guidelines and in this regard common people should also co-operate. He also assured that district administration is always ready to help and do the needful as when required. The hearing ended with vote of thanks from the chair.	by the MoEF&CC and PCBA from time to time.	Environment Responsibility (CER) budget based on the PH action plan	Rs. 0.5 crores per year for 2 years = Total Rs. 1 crore Drinking water facilities Rs. 0.005 crore per hand pump x 100 pumps= Total Rs. 0.5 crore Infrastructure improvement work across schools in 50 schools Rs. 0.02 crore per school x 80 schools = Total Rs. 1.6 crore Training support for skill development among women Rs. 0.01 crore per training

S. No	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				program x 10 training programs in 2 years = Total Rs. 0.1 crores Industrial training for students Rs. 0.005 crore per student x 100 selected students = Rs. 0.5 crore Barricading the abandoned well sites Rs. 0.001 crores per well x 7 wells= Total Rs. 0.007 crores Provision for street light at major traffic intersections Rs. 1 crore Plantation at abandoned drill sites Rs. 0.02

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

Public Hearing Action Plan and budgetary allocation at Tinsukia District

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
1.	Mr. Rajen Das, a resident of Balijan	Complained about the publicity of M/S OIL regarding this public hearing as he expected more people to gather in this hearing.		All the advertisements are published in DainikJanmabhumi in Assamese and in Assam Tribune in English one month prior to the public hearing by PCBA.	-	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
2.		Expressed concern about the safety of the existing gas gathering centre in the Balijan.	OIL has conducted risk assessment study to take all the safety required. OIL also follows all the guidelines of PCBA and MoEF&CC.	OIL has dedicated team for management of pipeline operations. Regular patrols and inspections of pipelines conducted. Pressure testing and inspection of equipment and pipelines conducted regularly.	-	Only management time required
3.		Complained the land mining done by M/S OIL in forest areas for various purpose.	OIL also follows all the guidelines of PCBA and MoEF&CC.	-	-	-
4.		Hoped for the proper implementation of M/S OIL's CSR activities, like	Mr. GaganathCheti, an official of M/S OIL, said that M/S OIL is	OIL is playing an important role in Assam economy.	CSR budget will include 2% of profit	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
		developmental works in Health Services and Schools of the local area.	not only a cooperation / Ltd. but also a responsible PSU. OIL is always ready for developments in areas where projects are laid. OIL is responsible for the cultural, economic and social development of the people. Certain CSR activities sanctioned M/s OIL does take some time but it finally takes place. He hoped for people's cooperation to point out certain specific areas where M/S OIL could contribute.	OIL is implementing CSR activities for socio-economic development of the area. OIL will continue to invest on CSR activities. M/s OIL has developed a 7 years developmental plan for the area. The developmental plan will utilize the CSR fund for development of the area.	Following CER plans will be implemented • Mobile health services Rs. 0.20 crores • Infrastructure improvement work in 10 schools including improvement of latrines Rs. 0.02 lakh per school x 10 schools= Total Rs. 0.2 crore • Plantation at nearby forest area Rs. 0.05 crore per year for 2 years= Total Rs. 0.10	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
					crore Repair of local roads Rs. 0.3 crore Provision for Street light in the area Rs. 0.2 crore Providing fund to locals villagers for construction of household latrines Rs. 0.01 crore per unit X 20 units= Rs. 0.2 crore	
5.		Praised M/S OIL for its service rendered to the country and the people and also hoped for its longevity.	-	-	-	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
6.		Asked M/S OIL to take adequate measures to balance the ecology and environment of the locality.	OIL will prepare an action plan and will try to implement as far as possible to protect the environment.	OIL is committed to preserve the natural resource and environment. OIL has dedicated team for management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary guidelines from PCBA and MoEF&CC.	OIL will do plantation in the abandoned drill sites Refer SI. No. 4 of this table	Budget for environmental control measures presented in Table 10.8 of EIA report Budget for Wildlife Conservation plan presented in Table 10.5 of EIA report
				Air Quality Management Plan		
				 Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. 		
				 Sprinkling of water on 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells.		
				• Flare stacks of adequate height would be provided.		
				• DG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases		
				 Periodic monitoring of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				with CPCB DG set exhaust standards.		
				Noise Management Plan		
				Selection and use of low noise generating equipment with inbuilt engineering controls viz. mufflers, silencers, etc.		
				• Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment.		
				• All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				Control Certificates (PUC). • All high noise generating equipment will be identified and		
				subjected to periodic preventive maintenance. • No night time		
				operation of vehicles and construction activities will be undertaken.		
				Use of noise barriersSoil Quality		
				Management PlanDrip trays to be		
				used during vehicular/equipment maintenance and during re-fuelling operations.		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				• Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, reported and cleaned up immediately.		
				• Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites.		
				• 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings.		
				Surface Water Quality Management Plan • Levelling and grading operations		

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

S. Rai	ised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				sediment before it enters water courses.		
				 Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system. 		
				 Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. 		
				Ground Water Quality Management Plan		
				 Water based mud would be used as a drilling fluid for the proposed project. Eco-friendly 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				synthetic based mud if required for deeper sections, will be used after providing intimation to the Pollution Control Board;		
				• The drill cutting along with spent mud will be stored in HDPE lined pit.		
				Waste Management Plan		
				 Use of low toxicity chemicals for the preparation of drilling fluid. 		
				 Management of drill cuttings, waste drilling mud, waste oil and domestic 		
				waste, wastewater in accordance with Standards for Emission or		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.		
				• The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.		
				• The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				handling contractors.		
				 The sewage generated will be treated through septic tank and soak pit system. 		
				• Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001.		
				• The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon.		
				OIL will also implement conservation plan		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				for protection of wildlife in the area. Wildlife Conservation Plan for Schedule I species will include • Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; • Appropriate shading of lights to prevent scattering; • Strict no hunting policy to be implemented by contractors. • Sedimentation tank and oilwater separator will be installed at peripheral		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				drains developed along the well pad sites to control any accidental discharge before it reaches any surface water body; • Spill kits to be used for removal of any oil or chemical spillage on site; • Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody. • Contributing to Forest Departments habitat improvement program		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				 Capacity building of forest department staffs Awareness Generation Meetings at villages Engaging a NGO for Identification of Hoolock Gibbon roosting sites. 		
7.	Mrs. TrisnaPhukanBoiragi, President of Gaon panchayat, Balijan	Requested M/S OIL to contribute for Swachcha Bharat Abhiyan in this locality.	OIL will prepare an action plan and will try to implement as far as possible for development of societies. OIL will provide funds in the CER budget forSwachcha Bharat Abhiyan in the area.	OIL will provide funds for Swachcha Bharat Abhiyan in the area	Infrastructure improvement work in 10 schools including improvement of latrines Rs. 0.02 lakh per school x 10 schools= Total Rs. 0.2 crore Providing fund to locals	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
					villagers for construction of household latrines Rs. 0.01 crore per unit X 20 units= Rs. 0.2 crore	
8.		Asked for development in local area through CSR activities like roadways, school development and unskilled employment of the locals.	Refer SI. No. 4 of this table.	Refer SI. No. 4 of this table	Refer SI. No. 4 of this table	-
9.	ADC, Tinsukia District	ADC told the public about the public hearing held in public/community hall, Baghjan TE, Baghjan on 12.03.2020, there were large public gathering. He expected the same even in today's hearing but is unhappy as only a few public gathering today. He informed that public hearing is necessary as per EIA Notification, 2006		OIL is committed to preserve the natural resource and environment. OIL has dedicated team for management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary	OIL will do plantation in abandoned drill site - Refer SI. No. 4 of this table	Budget for environmental control measures presented in Table 10.6 of EIA report Budget for Wildlife Conservation plan presented in Table 10.2 of

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
		for acquiring Environmental clearance from MoEF&CC. He stressed in his speech the degradation of Environment and Ecosystem in recent years. He wanted each citizen to be responsible to preserve and maintain tranquillity with nature.		guidelines from PCBA and MoEF&CC. OIL will also implement conservation plan for protection of wildlife in the area. Greenbelt plantation will also be undertaken at some abandoned wells		EIA report
10.		He urged Mrs. Trishna PhukanBoiragi, president Gaon Panchayat of Balijan to create awareness to plant trees and seeks any help necessary from M/S OIL.	OIL is always ready for developments in areas where projects are laid.	-	-	-
11.		He also requested Mrs. Trishna PhukarBoiragi also to create an awareness camp regarding Coronavirus. He urged M/S OIL Authorities to provide necessary help to such measures initiated	-	-	-	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
		by public.				

Public Hearing Action Plan and budgetary allocation at Charaideo District

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

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
			take necessary actions regarding public complains.			
3.		Requests not to hand over their activities/operations to private companies.	OIL officials said that OIL never handed over their operations to private sector. OIL officials said to the public to give theircomplains to OIL office during their operation in this area and they will take necessary actions regarding public complains.	Refer SI. No. 2 of this table	Refer SI. No. 2 of this table	
4.		They have many demands to Oil regarding employment and road construction.	OIL is always ready to help common people regarding employment and other problems	OIL is playing an important role in Assam economy. OIL is implementing CSR activities for socio-economic development of the area. OIL will continue to invest on CSR activities. M/s OIL has developed a 7 years developmental plan for the area. The developmental	CSR budget will include 2% of profit Local employment initiative will be undertaken	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				plan will utilize the CSR fund for development of the area. The construction phase of the project is likely to generate both direct and indirect opportunities for employment. The estimated direct employment would be approximately 50 un-skilled workers and will be sourced from local area.	As per CER plan following activities are planned in the area • Mobile health services Rs. 0.30 crores • Infrastructure improvement work in schools Rs. 0.02 lakh per school x 20 schools= Total Rs. 0.4 crore • Drinking water facilities Rs. 0.50 crores • Protection Eri Muga production done by local people Rs. 0.20 crores	

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
					 Plantation at abandoned drill sites Rs. 0.02 crore per site x 7 sites= Total Rs. 0.14 crore Repair of local roads Rs. 0.50 crore 	
5.		Requested Oil to work smoothly and cooperate with public.	OIL is always ready to help common people regarding employment and other problems	OIL is playing an important role in Assam economy. OIL is implementing CSR activities for socio-economic development of the area. OIL will continue to invest on CSR activities.	Only management time required	-

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				OIL officials are always ready to help and consult with local people to resolve any issues regarding their project.		
6.	NavadeepBarua , spoke person Tai Ahom Yuva Students Union	Pointed out the communication gap between OIL and public.	OIL is always ready to help common people regarding employment and other problems	OIL officials are always ready to help and consult with local people to resolve any issues regarding their project.	Only management time required	-
7.		Said about the security of the drilling sites regarding the environment.	They are following all the guidelines of EIA, 2006 to protect the environment and they are always ready to help common people regarding employment and other problems	OIL has EMP for managing the environmental pollution related issues at the drill sites. Air Quality Management Plan • Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions.	-	Budget for environmental control measures presented in Table 10.8 of EIA report
				• Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells.		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				 Flare stacks of adequate height would be provided. 		
				 DG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases 		
				 Periodic monitoring of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards. 		
				Noise Management Plan		
				 Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc. 		
				 Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				equipment.		
				All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates (PUC).		
				 All high noise generating equipment will be identified and subjected to periodic preventive maintenance. 		
				 No night time operation of vehicles and construction activities will be undertaken. 		
				Use of noise barriers		
				Soil Quality Management Plan		
				 Drip trays to be used during vehicular/equipment maintenance and during re- fuelling operations. 		
				 Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				reported and cleaned up immediately.		
				 Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites. 		
				• 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings.		
				Surface Water Quality Management Plan		
				 Levelling and grading operations will be undertaken with minimal disturbance to the existing site contours thereby maintaining the general slope and topographical profile of the site. 		
				 Spill kits will be used to contain chemical spillages. 		
				 During site preparation and construction, surface water run-off will be 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				channelized through appropriately designed drainage system.		
				• Sediment filters and oil- water separators will be installed to intercept run-off and remove sediment before it enters water courses.		
				 Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system. 		
				 Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. 		
				Ground Water Quality Management Plan		
				Water based mud would be used as a drilling fluid for the proposed project.		
				 Eco-friendly synthetic based mud if required for deeper sections, will be used 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				after providing intimation to the Pollution Control Board;		
				The drill cutting along with spent mud will be stored in HDPE lined pit.		
				Waste Management Plan		
				 Use of low toxicity chemicals for the preparation of drilling fluid. 		
				• Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.		
				The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling &		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				Transboundary Movement) Rules, 2016.		
				• The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors.		
				 The sewage generated will be treated through septic tank and soak pit system. 		
				 Used batteries will be recycled through the vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001. 		
				The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon.		
				OIL will also implement conservation plan for protection of wildlife in the area. Wildlife Conservation Plan for Schedule I species will		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				 Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; Appropriate shading of lights to prevent scattering; Strict no hunting policy to be implemented by contractors. Sedimentation tank and oil-water separator will be installed at peripheral drains developed along the well pad sites to control any accidental discharge before it reaches any surface water body; Spill kits to be used for removal of any oil or chemical spillage on site; Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody. 		

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				 Contributing to Forest Departments habitat improvement program Capacity building of forest department staffs Awareness Generation Meetings at villages Engaging a NGO for Identification of Hoolock Gibbon roosting sites. 		
8.		Requested OIL for social welfare, road construction, school, etc. after the completion of drilling process.	OIL will prepare an action plan and will provide fund in the PH Action Plan budget for developmental activities at the peripherical villages.	Refer SI. No. 4 of this table	Refer SI. No. 4 of this table	-
9.		equested OIL to take precautions to the environment.	They are following all the guidelines of EIA, 2006 to protect the environment and they are	OIL has EMP for managing the environmental pollution related issues at the drill sites (Refer S No. 7 of this table)	-	Budget for environmental control measures presented in Table 10.8 of

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
			always ready to help common people regarding employment and other problems			EIA report
10.	Mr.Rajive Raj Phukan,	Welcomes OIL to start their project.	-	-	-	-
11.	President Beer LachitHena. Charaideo District	Questioned about the emergency precaution measures taken by Oil India Ltd to protect the biodiversity.		OIL has conducted a detailed study on the risk assessment for their project activity based on the results OIL has developed an Emergency Response Plan. The emergency response plan will include • Drilling rig and related equipment to be used for drilling will be conformed to international standards specified for such equipment. • Blow-out preventers and related well control equipment shall be installed, operated, maintainedand tested	-	Only management time required Chapter 7 of this EIA report

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				generally in accordance with internationally recognized standards. • Appropriate gas and leak detection system will be made available at each of the drill sites. • Adequate fire-fighting equipment shall be provided at each drilling site.		
12.		Requested OIL not to hand over their operations to private sector.	-	Refer SI. No. 2 of this table	Refer SI. No. 2 of this table	-
13.	Mr. Raju Gogoi- Convener KrishakShramik Sangram Samiti	Questioned about the problems created by the drilling activities/accidents.	-	OIL is following all the guidelines of EIA, 2006 to protect the environment. OIL also has developed Environmental Management Plan to abate pollution and protect the environment. Pollution related to drilling activity in the area has not been identified yet by any	-	Only management time required Chapter 7 of this EIA report Budget for environmental control measures

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget for CER (INR)	Budget include as part of environmental control measures (INR)
				studies. OIL is also submitting EC compliance report to MoEF&CC and OIL is obeying all the clause mentioned in the EC.		presented in Table 10.8 of EIA report
14.		Said about the precautions taken by OIL during any accidents in their operation/after operation.	-	OIL is following all the guidelines of EIA, 2006 to protect the environment. OIL also has developed Environmental Management Plan to abate pollution and protect the environment.	-	Only management time required
15.		Said OIL to give compensation to the farmers and common people harmed by their drilling activities.	-	Refer SI. No. 13 of this table	-	Refer Sl. No. 13 of this table
16.		Requested OIL to take actions regarding proper water supply to public and also provide facilities/protection for Eri Muga production done by the local people.	-	OIL will provide funds for development of drinking water facility and protection of Eri Muga production.	Refer SI. No. 4 of this table	-

Total area after expansion will be 222 Ha (existing area 21 Hectares and additional land required 201 Hectares for proposed capacity). Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 15 ha. EMP Budget includes budget for Public Hearing Action Plan/CER Plan, Wildlife Conservation Plan, Greenbelt Budget and Budget for Environmental Conservation Measures. Budget for CER socioeconomic development is planned to be INR 6.847 crores for 2 years for Dibrugarh district, INR 1.2 crores for 2 years for Tinsukia district and INR 2.04 crores for 2 years for Charaideo district. Budget for Greenbelt Plan will be INR 15 lakhs. Budget for Wildlife Conservation Plan for Schedule-I species for 7 year will be INR 58 lakhs. Detail of cost breakup of implementation of Environmental Conservation measures for each well would be INR 11.3 lakhs. Capital cost of EMP would be INR 740.7 lakhs. Recurring cost for EMP would be approximately INR 134 lakhs per annum (for 2 years) for CER and INR 120.25 lakhs per annum (for 7 years) for Wildlife Conservation Plan, Greenbelt Plan and Environmental Control measures for drilling. Capital cost of environmental control measures are included within the budget for drilling.

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

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

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

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

Water consumption during drilling and testing of wells shall be 25 m³ per day. Total 39 m³ per day fresh water and 11 m³ per day recycled water will be required for drilling activities. Among 39 m³ per day fresh water requirement; 29 m³ per day freshwater will be required for drilling and 10 m³ per day freshwater will be used for domestic purposes including drinking, washings and domestic use.

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

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

Details of Process emissions generation and its management:

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

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

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

Coordinates of Proposed wells

S No.	Proposed Well Name	Latitude	Longitude
1.	524	27° 19' 32.768" N	95° 27' 10.843" E
2.	525	27° 20' 35.703" N	95° 26' 58.988" E
3.	526	27° 20' 53.555" N	95° 26' 41.265" E
4.	527	27° 20' 40.745" N	95° 25' 16.152" E
5.	Loc. DHD (Rev)	27° 20' 49.277" N	95° 27' 56.400" E
6.	Loc. A	27° 20' 41.542" N	95° 27' 51.099" E
7.	Loc. B	27° 20' 53.383" N	95° 27' 44.632" E
8.	531	27° 21' 32.634" N	95° 27' 23.744" E
9.	Loc. C	27° 20' 42.380" N	
10.	534	27° 17' 14.005" N	95° 26' 5.254" E
11.	536	27° 18' 57.203" N	95° 25' 58.088" E
12.	A2_R	27° 14' 3.059" N	95° 21' 9.014" E
13.	A3	27° 14' 51.199" N	
14.	539	27° 19' 52.790" N	95° 26' 12.651" E
15.	D2_R	27° 12' 39.684" N	95° 20' 50.584" E
16.	D1	27° 12' 26.981" N	95° 20' 50.681" E
17.	542	27° 16' 14.657" N	
18.	543	27° 18' 4.445" N	95° 18' 22.277" E
19.	D3	27° 12' 57.101" N	
20.	544	27° 18' 2.939" N	95° 16' 35.987" E
21.	547	27° 19' 22.127" N	95° 27' 4.498" E
22.	549	27° 18' 37.194" N	95° 26' 39.000" E
23.	546	27° 19' 41.172" N	95° 26' 50.987" E
24.	551	27° 19' 25.185" N	95° 26' 34.560" E
25.	552	27° 19' 59.120" N	95° 26' 44.471" E
26.	553	27° 20' 40.876" N	
27.	554	27° 20' 10.849" N	
28.	D4_R	27° 13' 29.074" N	
29.	557	27° 19' 47.372" N	95° 24' 38.691" E

S No.	Proposed Well Name	Latitude	Longitude
30.	D5 R	27° 13' 29.074" N	95° 20' 51.874" E
31.	558	27° 21' 28.610" N	95° 24' 43.394" E
32.	559	27° 21' 50.061" N	95° 24' 27.705" E
33.	560	27° 21' 33.135" N	95° 27' 43.292" E
34.	561	27° 21' 16.977" N	95° 27' 44.026" E
35.	562	27° 21' 1.077" N	95° 27' 46.730" E
36.	563	27° 20' 59.699" N	95° 27' 25.382" E
37.	564	27° 21' 10.577" N	95° 27' 16.418" E
38.	565	27° 20' 24.992" N	95° 26' 30.670" E
39.	566	27° 19' 36.807" N	95° 26' 3.354" E
40.	567	27° 19' 59.796" N	95° 25' 5.986" E
41.	569	27° 21' 43.583" N	95° 22' 0.392" E
42.	568	27° 21' 11.197" N	95° 22' 28.990" E
43.	570	27° 20' 31.380" N	95° 25' 39.192" E
44.	571	27° 21' 9.161" N	95° 27' 30.429" E
45.	572	27° 21' 25.697" N	95° 27' 32.177" E
46.	573	27° 20' 46.336" N	95° 22' 56.217" E
47.	109	27° 20' 24.463" N	95° 15' 5.096" E
48.	115	27° 22' 25.481" N	
49.	D6	27° 14' 9.667" N	95° 22' 50.078" E
50.	307	27° 20' 24.048" N	95° 14' 40.422" E
51.	T-100	27° 18' 52.202" N	95° 17' 56.533" E
52.	D7	27° 21' 32.921" N	95° 18' 3.782" E
53.	501	27° 21' 4.058" N	95° 24' 1.571" E
54.	HYQ	27° 14' 42.948" N	95° 23' 19.644" E
55.	DGR	27° 21' 55.944" N	95° 26' 51.259" E
56.	DGT	27° 15' 43.796" N	95° 23' 15.602" E
57.	DHD	27° 21' 56.040" N	
58.	NLK	27° 17' 50.685" N	
59.	507-D	27° 21' 12.361" N	
60.	T-101	27° 19' 50.731" N	
61.	Loc. B (KB2)	27° 21' 42.356" N	95° 27' 37.966" E
62.	305	27° 21' 21.575" N	95° 11' 43.118" E
63.	548	27° 18' 46.496" N	95° 27' 0.551" E
64.	K	27° 21' 23.308" N	95° 17' 43.899" E
65.	BH	27° 8' 44.037" N	95° 16' 12.812" E
66.	Α	27° 10' 55.376" N	95° 20' 17.080" E
67.	523	27° 21' 27.271" N	95° 27' 46.240" E

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Capital Cost in crores	Recurring Cost in Crores /Annum for Wildlife Conservation Plan, Greenbelt Plan and Environmental control measures for Well drilling (for 7 years)	Recurring Cost in Crores /Annum for CER (for 2 years)
1.	Wildlife	-	0.0829	-
	Conservation Plan			
2.	Greenbelt Plan	_	0.0214	-
3.	Environmental control measures for Well drilling	-	1.0982	-
4.	CER Cost	7.407		1.34
	Grant Total	7.407	1.2025	1.34

Details of cost breakup of Environmental Control measures for drilling presented below:

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 67 wells (in lakh Rs.)
1	Air Quality Management Plan		
	Dust suppression through water sprinkling in the internal unpaved roads Cost of water sprinkling - One truck hiring charge (Rs. 1,00,000 per month X 9 months=Rs. 9,00,000); - Diesel charge (50 km travel per day @ Rs. 45/km X 270 days = Rs. 6,07,500); - Total cost for one year Rs.15,07,500 Total cost for 7 years= Rs. 105,52,500 Maintenance of paved internal road and transport route (budgetary provision is included in operational cost of drilling)	1.58**	105.53
b.	Maintenance of paved internal road and transport route (budgetary provision is included in operational cost of drilling)	0	0

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 67 wells (in lakh Rs.)
C.	Ambient Air Quality Monitoring -3 monitoring locations x 2 weeks per location x Once during site development, twice during drilling and once during decommissioning (@ Rs.7500 x 24 samples)	1.8	120.6
d.	Stack emission monitoring (@ Rs. 5000 per sample x 3 DG sets x twice during drilling)	0.3	20.1
2	Noise Management Plan		
a.	Ambient Noise Monitoring – 3 locations, once during site development, twice during drilling and once during decommissioning (@Rs. 2500 X 12 samples)	0.3	20.1
b.	Workplace noise monitoring -5 locations per well, twice during drilling (@Rs.2500 per location x 5 locations x 2 times)	0.25	16.75
C.	All DG sets would be provided with acoustic enclosures (All DG sets will be procured with inbuilt acoustic enclosures budget included in drilling budget)	0	0
d.	Erection of noise barrier at drill sites (Budget for erection of noise barrier included in drilling budget)	0	0
3	Water Quality Management Plan		
a.	Construction and maintenance of double chambered sedimentation tank and oily-water separator ETP (Budget included in drilling budget)	0	0
b.	Surface Water Quality Monitoring (@ Rs. 8000 x 4 samples from natural drainages once during site construction, once during drilling, once after decommissioning)	0.96	64.32
C	Ground Water Quality Monitoring (@ Rs. 8000 x 3 sites, once during site construction, once during drilling, once after decommissioning)	0.72	48.24
d.	ETP Treated water quality (@ Rs. 8000 x 2 samples of ETP treated water per month for 4 months)	0.64	42.88
e	Sample from Oily water separator	0.05	3.35
	(@Rs. 5000 per sample X 1 sample after drilling)		
4	Soil Quality Management Plan		
a.	Soil quality monitoring(@ Rs. 8000 x 2 samples x once before site preparation; once after decommissioning/restoration)	0.32	21.44
b.	Procurement of spill kits at drill sites	0.6	40.2
	(Rs 20,000 per kit X 3 spill kits per site)		
5	Road Safety & Traffic Management		
a.	Signage in the transport route & its maintenance (@Rs. 100,000 + Rs. 10,000)	1.1	73.7

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 67 wells (in lakh Rs.)
b.	Deployment of traffic personnel in sensitive area – 5 persons (@ Rs. 6000 per month x 6 months)	1.8	120.6
6	Surface Runoff & Soil Erosion Control		
a.	Two chamber sedimentation tank at each drill site (Budgetary provision is already included in the infrastructure development cost)	0	0
7	Municipal Solid Waste		
a.	Provision of two chambered covered collection bins at well site – 2 nos	0.2	13.4
b.	Transport arrangement of waste from well sites to dumping area	0.25	16.75
8	Hazardous waste management		
a.	Construction of dedicated hazardous storage area and record maintenance (construction included under project cost; only maintenance included in this budget)	0.1	6.7
b.	Drill Cutting, waste mud and wash water pits; HDPE lined (budgetary provision in operation cost of drilling)	0	0
c.	Analysis of drill cutting and waste drilling mud (Drill cutting @Rs. 5000 per sample x 1 sample per month x 3 months drilling time; Waste drilling mud @Rs. 5000 per sample x 1 sample per month x 3 months drilling time)	0.3	20.1
9	Surface and Ground Water Protection and Management		
a.	Surface runoff control measures for chemical storage area, fuel storage area (budgetary provision is already taken care in earlier section)	0	0
b.	Paved /impervious storage area for chemical storage area, fuel & lubricant storage area (Budgetary provision is already included in the infrastructure development cost)	0	0
C.	Domestic waste water treatment facility through septic tank & soak pits at the drill sites (budgetary provision in operation cost of drilling)	0	0
10	Occupational Health & Safety Management		
a.	Provision of appropriate PPE to all workers and its maintenance (budgetary provision is included in operational cost of drilling)	0	0
b.	Provision of drinking water, sanitation facility for all workers (budgetary provision is included in operational cost of drilling)	0	0
С	Provision First aid facility (budgetary provision is included in operational cost of drilling)	0	0
d	Provision of Ambulance facility OIL has its own ambulance facility)	0	0

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 67 wells (in lakh Rs.)
е	Regular health checkup facility provided by OIL for workers)	0	0
f	Regular occupational health & safety training (@ 1 lakh per year for 7 years)	0.015**	7
g.	Safety related training for OIL drivers (@ 1 lakh per year for 7 years)	0.015**	7
	Total Cost of Implementation of EMP	11.3	768.76

Note- Capital cost of environmental control measures are included within the budget for drilling

Details of CER with proposed activities and budgetary allocation:

Dibrugarh District

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

Tinsukia District

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

Charaideo district

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Rs. 0.30 crores
2	Infrastructure improvement work in 10 schools	Rs. 0.02 crore per school x 20 schools= Total Rs. 0.4 crore
3	Drinking water facilities	Rs. 0.50 crores
4	Protection Eri Muga production done by local people	Rs. 0.20 crores
5	Plantation at abandoned drill sites	Rs. 0.02 crore per site x 7 sites= Total Rs. 0.14 crore
6	Repair of local roads	Rs. 0.50 crore
	Grant Total	Rs. 2.04 crores

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife as per the Ministry's OM

dated 8th August, 2019 and 16th July, 2020. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken. PP shall also strictly follow the conditions mentioned in existing NBWL clearance.

- (iii). The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. Therecommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State ForestDepartment. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).
- (iv). As proposed, no pipelines or its part shall be laid and drilling of exploratory/production/development wells to be carried out in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (v). PP shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.
- (vi). No drilling activities shall be carried out within 500 m from the water bodies.
- (vii). 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.
- (viii). Total fresh water requirement shall not exceed 25 CMD which will be met from tanker supply. Prior permission shall be obtained from the concerned regulatory authority.
 - (ix). 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 be installed to treat the domestic sewage. Size of the waste pit shall be equal to the hole volume and volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.

- (x). Produce water from the EPS shall be treated in the efficient ETP/ Central ETP of capacity 5000 KLD at Tengakhat/ETP of capacity 7200 KLD at Madhuban and treated effluent shall be disposed off in disposal wells located in the vicinity of the production installation after achieving the water quality standards prescribed by SPSCB/CPCB. Online effluent monitoring system shall be installed and records shall be maintained.
- (xi). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (xii). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (xiii). Approach road to drilling sites shall be made pucca to minimize generation of suspended dust.
- (xiv). 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.
- (xv). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xvi). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the

guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

- (xvii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xviii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
 - (xix). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
 - (xx). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xxi). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations. After completion of drilling of any well, the owner or operator shall restore the well site, remove or fill all pits used to contain produced fluids or industrial waste and remove all drilling supplies and equipment not needed for production.

- (xxii). As per the action plan submitted by the project proponent all activities proposed in extended EMP (CER) for corpus of Rs. 10.087 crores shall completed within 2 years.
- (xxiii). 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.
- (xxiv). Oil content in the drill cuttings shall be monitored, if oil-mud is used then its report shall sent to the Ministry's Regional Office/SPCB.
- (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 prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.
- (xxvii). PP shall 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 sixmonthly compliance report being submitted to concerned authority.

Agenda No. 02

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

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

The proposal was earlier considered by the EAC (Ind-2) in its 05th meeting held during 10.05.2022 wherein EAC deferred the proposal and desired certain requisite information/inputs.

The proposal was again considered by the EAC (Ind-2) in its meeting dated 09.03.2023, meeting ID IA/IND2/13456/09/03/2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S	ADS by MoEF&CC	Reply by PP
No.		
1	PP shall assess the reasons for high incremental GLCs of NOx and reduce the overall incremental GLC w.r.t. NOx by considering various pollution control measures.	The air model run has been repeated and there is no change in the max 90 day 24-hourly average value as compared to the reported figures. The AERMOD air modelling exercise predicts incremental increase of GLC of pollutants over a specified averaging period. For an oil exploration setup, high-power DG sets along with Ground level flaring arrangements have been considered as point emission sources – both of these sources are known to emit elevated concentrations of NOx because of high

S No.	ADS by MoEF&CC	Reply by PP
		temperature combustion, involve no control equipment and have release height of about 10 m (max) thus allowing for lesser dispersion of pollutant gases after getting released from emission source(s). The incremental GLC of NOx has been modelled for one scenario (involving the 3-point sources) considering a 3-month meteorology collected at hourly frequency in the block. Max 24-hour average concentration and period average concentrations accounting for a total of 2160 hours at 441 cartesian grid points were estimated in the model output. The incremental max. value of 11.73 of μg/m³ at a distance of 723 m from the source has been predicted for 1 instance and with the distribution of high concentration values falling sharply for the remaining 440 instances viz. 1 instant for >10 μg/m³; 2 instances for 5-9.9 μg/m³; 1 value for 3 - 4.9 μg/m³ and all remaining predicted values being less than 3 μg/m³ which is less than 1% percentage of total values. In addition, the incremental average period value at the same grid point reflecting the max 24-hour average is 2.46 μg/m3, showing that the high values at a specific location occurs only for particular conditions of worst case meteorological conditions which are very short-lived and has been potentially caused by occasionally severe temperature inversions caused in winter season and leading to fumigation like dispersion conditions for air pollutants. Logically then, an estimation basis the max. 24-hourly high concentration, leaving aside the outliers, provides for an incremental
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S No.	ADS by MoEF&CC	Reply by PP
		value of $2.81~\mu g/m^3$ which when added to the 98 percentile value of all monitored values i.e. $26.75~\mu g/m^3$ is lesser than the than the $30~\mu g/m^3$ annual average concentration for NOx delineated in the NAAQS. Control measure for reduction in GLC of NOx: Among the available technologies/pollution control measures for the reduction of NOX emission from DG sets, the only possible pollution control measure that can be implemented to reduce the GLC of NOX is providing adequate stack height as per CPCB guidelines for effective dispersion of emissions. In addition to implementation of above pollution control measure, regular maintenance of DG sets will be carried out.
2	Details of court case against the project/proposed block if any.	There is no court case against the proposed project/block.
3	As per information provided, among the available technologies/pollution control measures for the reduction of NOX emission from DG sets, the only possible pollution control measure that can be implemented to reduce the GLC of NOX is providing adequate stack height as per CPCB guidelines for	The previous modelling exercise was carried out for 1250 kVA DG set, 250 kVA DG set and operation of flaring during well testing. The incremental maximum GLC for NOx was found to be 11.73 µg/m³ which has been predicted for 1 instance and with the distribution of high concentration values falling sharply and predicted values >3 µg/m³ were found to be less than 1% of total predicted values. The high values at a specific location occurs only for particular conditions of worst case meteorological conditions which are very short-lived and has been potentially caused by occasionally severe temperature

S **ADS by MoEF&CC** Reply by PP No. effective dispersion of inversions caused in winter season and Please emissions. leading to fumigation like dispersion conditions for air pollutants. provide details of height of stack for An estimation basis the max. 24-hourly high proposed DG sets. It concentration, leaving aside the outliers, seems that provides for an incremental value of 2.81 information provided ug/m³ which when added to the 98 is not clear. Please percentile value of all monitored values i.e. submit complete 26.75 µg/m³ is lesser than the than the 30 information. µg/m³ annual average concentration for NOx delineated in the NAAOS. Hence, taking into account the feasibility of implementation of mitigation measures for DG sets, no control measures for reducing NOx emissions at source is recommended. However, to improve the dispersion of the emitted flue gases, increasing the height of the 1250 kVA DG set stack (from current height of 7 m) to 9 m will be considered by OIL, in effect further reducing the GLC of NOx in the area adjacent to the drill site. Increased stack height of 9m for the 1250 stack will reduce the maximum incremental value of NOx to $7.11 \mu g/m^3$. Moreover, predicted values $>3 \mu g/m^3$ were found to be less than 1.31% of the total predicted values. The same could be attributed to worst case meteorological conditions which are very short-lived and has been potentially caused occasionally severe temperature by inversions caused in winter season and

leading

to

fumigation

like

dispersion

S	ADS by MoEF&CC	Reply by PP	
No.			
		conditions for air pollutants.	

PP informed that they have increased the stack height from 7 to 9 metres of DG sets. The committee suggested that PP should follow CPCB criteria while finalising the stack height of the DG sets. Accordingly, the committee suggested to refer the accredited consultant /s. ERM India Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA 0177_Rev 01 and validity 20.06.2024) to QCI/NABET for assessing the training requirement/capacity building with emphasis on air quality modelling.

The Project Proponent and the accredited Consultant M/s. ERM India Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA 0177_Rev 01 and validity 20.06.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Onshore Oil & Gas development drilling and production in Naharkatiya-Deohal-Bogapani-Nagajan area for 294 wells in Dibrugarh & Tinsukia District under Nahorkatiya Extension, Tinsukia Extension, Hugrijan, Chabua, Borhapjan, Dumduma Hugrijan Extension located at Villages Hukanpukhuri Tea Estate, Monkhuli, Tingrai, Memorani, Laipuli, Borbil Gaon (Tinsukia district), Chetia Pathar, Hoogrijan, Bordubi, Madhuting,Bokulani, Naohalia (Dibrugarh district), Districts Dibrugarh, Sibsagar and Charaideo, State Assam by M/s. Oil India Ltd.

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

The details of products and capacity as under:

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

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

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

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

Dibrugarh District

S. No		Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
1.	Mridu Paban Phukan (Environmentalist) (Naharkatia)	 He said that the venue for the public hearing should have been in same public auditorium rather than in M/S OIL's area. More public would have attended the hearing had it been in other places. He resented about the advertisement published in The Time of India as it is not very popular among the masses in these places. He enquired about the other Blocks in another 2 or 3 districts. He further said that no information of previously held public hearing is available in website or any other places for information. 	the queries above he clarified that public hearing for other blocks were already completed and for this block also hearing was	Venue for PH was selected based on its close proximity to the said EC block. Though it is located in M/S OIL's area, the auditorium is used by the public to conduct meetings and it is located in a prime location where public can easily		

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project	Action Items	Tentative Budget (INR)
				Proponent		
			As per the	Language		
			venue is	newspaper.		
			concerned,	Accordingly, PCBA		
			though it is	published the		
			within M/S	advertisement in		
			OIL's area	Times of India		
			but it	and in a		
			belongs to	vernacular Daily		
			Worker's	Dainik		
			Union. It can	Janambhumi.		
			be used by	Apart from		
			common	advertisement in		
			people on	the newspaper,		
			rent and has	announcement		
			easy	was also carried		
			accessibility.	out through		
			He also said	mobile vans		
			that, he has	equipped with Loudspeakers for		
			taken note	information to the		
			of the	local public.		
			updation of	PCBA clarified		
			Public	that the		
			Hearing list	information		
			in Pollution	regarding the		
			Control	previous PH		
			Board site.	details is available		
			Board Siter	in PCBA website.		

S. No	_	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
2.		He added that the analysis period of EIA should have been summer and winter phrases but this EIA is prepared only in two weeks.		Representative of EIA consultant ERM India Pvt. Ltd informed that Terms of Reference (ToR) was issued by MoEF&CC on 11.02.2018. As per ToR, one season (nonmonsoon) Baseline environmental monitoring data was collected during October-December 2017. As the data was more than three years old, EAC asked to collect additional 15 days of environmental monitoring.	Environmental	
3.		He further said that the fund allotted for preservation of animal life is not sufficient.		OIL stated that, INR 58 lakhs was allotted for Wildlife Conservation Plan of	As part of Wildlife Conservation Plan for Schedule-I species OIL has allotted INR 58	Budget for Wildlife Conservation Plan for Schedule-I species is INR 58

S. No	1	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				Schedule-I species in the Block. The plan was submitted to the Chief Wildlife Warden, Assam for approval	lakhs for the Block. The plan was submitted to the Chief Wildlife Warden, Assam for approval. Once the approval is obtained, necessary budget will be released from OIL.	lakhs
4.		As the EIA preparing agency does not have knowledge about local species of pythons, vulture etc. in the area.		Representative of EIA consultant ERM India Pvt Ltd. informed that information on vulture, python and other species is presented in the draft report and the data was collected from various reliable websites.	The data presented in EIA contains primary surveys as well as secondary information obtained through consultation with Forest	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				 ✓ Management plan for Bherjan-Borajan-Padumoni Wildlife Sanctuary ✓ Mazedul Islam and Prasanta Kumar Saikia. 2014. A study on the road-kill herpetofauna of Jeypore Reserve Forest, Assam NeBIO I An international journal of environment and biodiversity Vol. 5, No. 1. ✓ Soumyadeep Datta. 2014. Dihing Patkai Abhayaranya. Nature's Beckon. ✓ Anwaruddin Choudhury. 2009. The Hoolock Gibbon (Hoolock hoolock) in Tinsukia and Dibrugarh districts 	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				of Assam, India,	
				Asian Primates	
				Journal 1(2).	
				✓ Right of Passage	
				2017. Elephant	
				Corridors of India	
				[2nd Edition].	
				Menon, V, Tiwari,	
				S K, Ramkumar, K,	
				Kyarong, S,	
				Ganguly, U and	
				Sukumar, R (Eds.). Conservation	
				Reference Series	
				No. 3.WIldlife	
				Trust of India, New	
				Delhi.	
				✓ Saikia PK and Devi	
				OS. 2011. A	
				checklist of avian	
				fauna at Jeypore	
				Reserve Forest,	
				eastern Assam,	
				India with special	
				reference to	
				globally threatened	
				and endemic	
				species in the	
				Eastern Himalayan	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				biodiversity hotspot. J Threatened Taxa 3 (4): 1711-1718. ✓ Management Plan- Dehing Patkai Wildlife Sanctuary (2011-12-2015- 16)	
				Pythons were not recorded during primary survey in proximity to the proposed well site. However, their presence was reported by the local villagers. Information on python species in the area was obtained from Datta (2014) and also from Management Plan for Dehing Patkai Wildlife Sanctuary (currently Dehing Patkai National Park). White rumped vulture	
				was recorded during primary survey in proximity to the	

S. No	_	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
					proposed well site Information on the vulture species in the area obtained from study conducted by Saikia and Devi (2011) and also from Management Plan for Dehing Patkai Wildlife Sanctuary (currently Dehing Patkai National Park).	
5.		Also the data produced in the EIA report on the Black Panther and Leopard of this locality is based on very poor facts.		Representative of EIA consultant ERM India Pvt Ltd. informed that data on Leopard presented in the draft report was collected from various reliable websites and community consultation.	Common Leopard was not recorded during primary survey in proximity to the	
6.		He further mentioned about the oil spillage of B-2 rig of which the local people gave		OIL took immediate action to prevent the spillage and also	OIL always take preventive measures and follow best	Budget for oil spill management included in the
		a written complain to the		remedial measures to		drilling budget

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
		Installation Manager of Balimara QPS. But no measures were taken to prevent the oil spillage in nearby areas by M/S OIL. This news was even published in Newspaper and other News medias.		collect the spilled oil and disposed the same following the Hazardous and Other Waste (Management and Transboundary) Rules, 2016.	avoid/contain any spill of oil as per the Spill Management Plan presented below. Planning, Designing and Procurement As best practices to avoid/contain any spill, OIL would ensure: o All chemicals will be stored in designated area and to an extent possible all such areas would away from drainage channels; o The flooring of the area would be impervious (paved or HDPE lining) and bunding to be provide on all sides of the chemical storage areas; o The chemical storage area to be covered to ensure it has the minimum	
					runoff;	

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				-	 All transfers of 	
					chemicals to be	
					done with proper	
					care and under the	
					supervision of the	
					Store Supervisor;	
					Preventive and Mitigative Measures	
					o Once a spill incident	
					has occurred,	
					identify the	
					chemical involved	
					and check	
					hazardous property	
					of the chemical from	
					the Material Safety Datasheet (MSDS);	
					o Person wearing	
					required PPE will	
					apply necessary	
					absorbent like saw	
					dust for a liquid spill	
					to ensure that the	
					spill does not spread	
					over a wide area or	
					reach any surface	
					water body or	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				drainage channels; Thereafter, the substance will be properly collected and stored in a separate labelled container marked "hazardous waste – do not burn"; and dispose in accordance with Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.	
7.	He said that PCBA does not upload the final EIA report, only the draft EIA report is uploaded in the website.	-	Final report will be prepared incorporating the Public Hearing proceedings along with the action plan. Once the Final report is prepared it will be submitted to MoEF&CC and PCBA for uploading in their websites.	-	-

S. No	_	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
8.		He also said that better cooperation and commitment is needed to prevent pollution from M/S OIL.		OIL is following best practices and taking adequate steps to prevent pollution.	OIL will take measures as per the as mentioned below Air Quality Management Plan • Vehicles delivering raw materials like fine aggregates will be covered to prevent fugitive emissions. • Sprinkling of water on earthworks, material haulage and transportation routes on a regular basis during construction and decommissioning phase of the wells. • Flare stacks of adequate height would be provided. • DG set stacks would have adequate height, as per statutory requirements, to be able to adequately disperse exhaust gases • Periodic monitoring	Cost of air quality management plan, noise management plan, soil quality management plan, soil quality management plan, Municipal Solid Waste and Hazardous Waste Management have been presented as part of EMP

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
					of DG set stack emission will be carried out in accordance with the Environmental Monitoring Plan to assess compliance with CPCB DG set exhaust standards.	
					Noise Management Plan	
					• Selection and use of low noise generating equipment with in-built engineering controls viz. mufflers, silencers, etc.	
					• Appropriate PPEs (e.g. ear plugs) will be used for by workers while working near high noise generating equipment.	
					• All vehicles utilized in transportation of raw materials and personnel will have valid Pollution under Control Certificates	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				 (PUC). All high noise generating equipment will be identified and subjected to periodic preventive maintenance. No night time operation of vehicles 	
				and construction activities will be undertaken.Use of noise barriers	
				Soil Quality Management Plan • Drip trays to be used during vehicular/equipment maintenance and during re-fuelling operations.	
				 Spill kits will be made available at all fuel and lubricant storage areas. All spills/leaks contained, 	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				reported and cleaned up immediately.	
				• Dedicated paved storage area will be identified for the drilling chemicals, fuel, lubricants and oils within the drill sites.	
				• 1.5 mm HDPE lined pits will be considered for the disposal of unusable drilling mud cuttings.	
				Surface Water Quality Management Plan	
				• Levelling and grading operations will be undertaken with minimal disturbance to the existing site contours thereby maintaining the general slope and topographical profile of the site.	
				 Spill kits will be used to contain chemical spillages. During site preparation and 	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				construction, surface water run-off will be channelized through appropriately designed drainage system.	
				 Sediment filters and oil-water separators will be installed to intercept run-off and remove sediment before it enters water courses. 	
				 Domestic wastewater generated from drill sites will be treated through septic tank and soak pit system. 	
				 Process wastewater would be treated in Effluent Treatment Plant (ETP) at drill sites. 	
				Ground Water Quality Management Plan	
				 Water based mud would be used as a drilling fluid for the 	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				proposed project.	
				• Eco-friendly synthetic based mud if required for deeper sections, will be used after providing intimation to the Pollution Control Board;	
				The drill cutting along with spent mud will be stored in HDPE lined pit.	
				Waste Management Plan	
				• Use of low toxicity chemicals for the preparation of drilling fluid.	
				Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in	
				accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.	
				• The hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.	
				The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors.	
				 The sewage generated will be treated through septic tank and soak pit system. Used batteries will be recycled through the 	

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
				vendors supplying lead acid batteries as required under the Batteries (Management & Handling) Rules, 2001.	
				 The drill cuttings pit will be bunded and kept covered using tarpaulin sheets during monsoon. 	
				Wildlife Conservation Plan	
				 Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations; 	
				 Appropriate shading of lights to prevent scattering; 	
				 Strict no hunting policy to be implemented by contractors. 	
				Sedimentation tank	

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
					and oil-water separator will be installed at peripheral drains developed along the well pad sites to control any accidental discharge before it reaches any surface water body;	
					• Spill kits to be used for removal of any oil or chemical spillage on site;	
					Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody.	
					Contributing to Forest Departments habitat improvement program	
					 Capacity building of forest department staffs 	
					• Awareness Generation Meetings at villages	

S. No	_	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
					 Engaging a NGO for Identification of Hoolock Gibbon roosting sites. 	
9.	Indra Kumar Gupta (Local resident)	He said that in this public hearing, he takes the opportunity to express his grievances, like the dust pollution caused due to frequent vehicular movement in the area.		All the approach roads to the drilling locations and production Installations are made pucca roads to minimise dust generation. All roads are properly made before	As part of Air Quality Management Plan, the following mitigation measures will be undertaken by OIL: Dust suppression through water sprinkling in the internal unpaved roads Maintenance of paved internal road and transport route Ambient Air Quality Monitoring during different phases i.e., site development, drilling and decommissioning. Stack emission monitoring for DG sets used for drilling.	Cost of air quality management plan has been presented as part of EMP

S. No	Raised by Public	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	Tentative Budget (INR)
10.		He suggested that if fire brigade vehicles are used for sprinkling water in the roadways and steps like tree plantation will reduce pollution great extent.		OIL is taking adequate measures to prevent dust generation by regularly maintaining roads, water spraying etc., and plantation in the abandoned drill sites.	OIL shall deploy water tankers for dust suppression along the unpaved roads as part of Air Quality Management Plan.	Cost of water sprinkling has been presented as part of EMP
					OIL shall carry out plantation works in the abandoned well sites	Plantation at abandoned drill sites Rs. 2 lakh per site x 10 sites= Total Rs. 20 lakhs
11.		He hoped that, clarification from M/S OIL have been able to clarify the doubts of the public. He said these projects are of National importance and are profitable projects. Therefore, requested all to co-operate for successful completion of such project. He also said that, as the EIA (draft) has already been prepared, M/S OIL will follow the EIA and other guidelines in future. He observed that, the concerned are related to environment, therefore hoped M/S OIL in future will proceed with following all the environment related	-	OIL is committed to comply with all the environmental protection measures and safeguards stipulated by the MoEF&CC and PCBA from time to time.	Development of the local area will be done as per Corporate Environment Responsibility (CER) budget based on the PH action plan	 Mobile health services- Total 14 lakhs Drinking water facilities Rs. 0.2

S. No	Comments/Suggestion by Public	Response provided by REE, PCBA	Response /Commitment of OIL as Project Proponent	Action Items	II.	entative Budget INR)
	guidelines and in this regard					support for skill
	common people should also co-operate. He also assured					development
	that district administration is					among women
	always ready to help and do					Rs.1 lakh per
	the needful as when					training
	required. The hearing ended					program x 5
	with vote of thanks from the					training
	chair.					programs=
						Total Rs. 5 lakhs
						Industrial
					•	training for
						students Rs.
						0.5 lakh per
						student x 30
						selected
						students = Rs.
						15 lakhs
						Barricading the
						abandoned well
						sites Rs. 1 lakh
						per well x 20
						wells= Total Rs.
						20 lakhs
						Provision for
						street light at
						major traffic
						intersections
						Rs. 20 lakhs

Tinsukia District

S. No	Raised by Public	Comments/Suggestion by Public	Response /Commitment of OIL as Project Proponent	Action Items	Respon- sibility	Tentative Budget for CER (INR)
1.	Mr. Rajen Das, a resident of Balijan	Complained about the publicity of M/S OIL regarding this public hearing as he expected more people to gather in this hearing.		All the advertisements are published in Dainik Janmabhumi in Assamese and in Assam Tribune in English one month prior to the public hearing by PCBA.	-	-
2.		Expressed concern about the safety of the existing gas gathering centre in the Balijan.	OIL has conducted risk assessment study to take all the safety required. OIL also follows all the guidelines of PCBA and MoEF&CC.	OIL has dedicated team for management of pipeline operations. Regular patrols and inspections of pipelines conducted. Pressure testing and inspection of equipment and pipelines conducted regularly.	CGM- Safety& Environment	-
3.		Complained the land mining done by M/S OIL in forest areas for various purpose.	OIL also follows all the guidelines of PCBA and MoEF&CC.	-	-	-
4.		Hoped for the proper implementation of M/S OIL's CSR activities, like developmental works in Health Services and Schools of the local area.	Mr. Gaganath Cheti, an official of M/S OIL, said that M/S OIL is not only a co-operation / Ltd. but also a responsible PSU. OIL is	OIL is playing an important role in Assam economy. OIL is implementing CSR activities for socioeconomic development	GM-CSR	CSR budget will include 2% of profit Mobile health services= Total 14 lakhs

	Draigod M/S OIL for its convice	always ready for developments in areas where projects are laid. OIL is responsible for the cultural, economic and social development of the people. Certain CSR activities sanctioned M/s OIL does take some time but it finally takes place. He hoped for people's cooperation to point out certain specific areas where M/S OIL could contribute.	of the area. OIL will continue to invest on CSR activities. M/s OIL has developed a 2 years developmental plan for the area. The developmental plan will utilize the CSR fund for development of the area.		Infrastructure improvement work in 30 schools including improvement of latrines Rs. 1 lakh per school x 30 schools= Total Rs. 30 lakhs Plantation at nearby forest area Total Rs. 14 lakhs Repair of local roads=Rs. 50 lakhs Provision for Street light in the area Rs.70 lakhs Providing fund to locals villagers for construction of household latrines Rs. 0.1 lakh per unit X 350 units= Rs. 35 lakhs
5.	Praised M/S OIL for its service rendered to the country and the people and also hoped for its longevity.		-	-	-
6.	Asked M/S OIL to take adequate measures to balance the ecology and environment of the locality.		OIL is committed to preserve the natural resource and environment. OIL has dedicated team for	CGM-S&E	OIL will do plantation in the abandoned drill sites Refer SI. No. 4 of this

	management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary guidelines from PCBA and MoEF&CC. OIL will also implement conservation plan for protection of wildlife in the area. Wildlife Conservation Plan for	table
	Schedule I species will include • Provide portable noise barriers high noise generating areas and along the fence line adjoining sensitive locations;	
	 Appropriate shading of lights to prevent scattering; Strict no hunting policy to be implemented by contractors. Sedimentation tank and oil-water 	
	separator will be installed at peripheral drains	

	developed along the well pad sites to control any accidental discharge before it reaches any surface water body; • Spill kits to be used for removal of any oil or chemical spillage on site; • Oil booms, sorbents, dispersants will be kept on site to contain any oil spill to the nearest receiving waterbody. • Contributing to Forest Departments habitat improvement program • Capacity building of forest department staffs • Awareness Generation Meetings at villages • Engaging a NGO for Identification of Hoolock Gibbon roosting sites.
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				will also be undertaken at some producing wells		
7.	Mrs. Trisna Phukan Boiragi, President of Gaon panchayat, Balijan	Requested M/S OIL to contribute for Swachcha Bharat Abhiyan in this locality.	OIL will prepare an action plan and will try to implement as far as possible for development of societies. OIL will provide funds in the CER budget for Swachcha Bharat Abhiyan in the area.	OIL will provide funds for Swachcha Bharat Abhiyan in the area	GM-CSR	Infrastructure improvement work in 10 schools including improvement of latrines Rs. 1 lakh per school x 10 schools= Total Rs. 10 lakhs. (Refer SI no. 4 of this table) Providing fund to locals villagers for construction of household latrines Rs. 0.1 lakh per unit X 350 units= Rs. 35 lakhs (Refer SI no. 4 of this table)
8.		Asked for development in local area through CSR activities like roadways, school development and unskilled employment of the locals.	Refer SI. No. 4 of this table.	Refer SI. No. 4 of this table	Refer SI. No. 4 of this table	Refer SI. No. 4 of this table

9.	ADC, Tinsukia District	ADC told the public about the public hearing held in public/community hall, Baghjan TE, Baghjan on 12.03.2020, there were large public gathering. He expected the same even in today's hearing but is unhappy as only a few public gathering today. He informed that public hearing is necessary as per EIA Notification, 2006 for acquiring Environmental clearance from MoEF&CC. He stressed in his speech the degradation of Environment and Ecosystem in recent years. He wanted each citizen to be responsible to preserve and maintain tranquillity with nature.		OIL is committed to preserve the natural resource and environment. OIL has dedicated team for management environment. OIL has prepared a detailed EMP to protect the environment. OIL also follows all the necessary guidelines from PCBA and MoEF&CC. OIL will also implement conservation plan for protection of wildlife in the area. Greenbelt plantation will also be undertaken at some abandoned wells	CGM-S&E	OIL will do plantation in abandoned drill site - Refer SI. No. 4 of this table
10.		He urged Mrs. Trishna Phukan Boiragi, president Gaon Panchayat of Balijan to create awareness to plant trees and seeks any help necessary from M/S OIL.	OIL is always ready for developments in areas where projects are laid.	-	-	-
11.		He also requested Mrs. Trishna Phukar Boiragi also to create an awareness camp regarding Coronavirus. He urged M/S OIL Authorities to provide necessary help to such measures initiated	-	-	-	-

by public.		

Total plant area after expansion will be 969 Ha (existing plant area 63 Hectares and additional land required 896 Hectares for proposed capacity). Land for the drill sites will be procured prior to drilling. Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 35000 m². EMP Budget includes budget for Public Hearing Action Plan/CER Plan, Wildlife Conservation Plan, Greenbelt Budget and Budget for Environmental Conservation Measures. Budget for CER socioeconomic development is planned to be INR 1.15 crores for 2 years for Dibrugarh district, INR 2.13 crores for 2 years for Tinsukia district. Budget for Greenbelt Plan will be INR 3.5 lakhs. Budget for Wildlife Conservation Plan for Schedule-I species for 7 years will be INR 58 lakhs. Detail of cost breakup of implementation of Environmental Conservation measures for each well would be INR 10.18 lakhs and for each production installation for 1 year would be INR 6.66 lakhs. The estimated project cost is Rs 9734.60 Crores. Capital cost of EMP would be Rs. 2.45 Crores. Recurring cost for EMP would be approximately INR 0.4161 crores per annum (for 2 years) for CER and INR 4.4953 crores per annum (for 7 years) for Wildlife Conservation Plan, Greenbelt Plan and Environmental Control measures for drilling and production installation. Total Employment after expansion will be 180 persons as direct & indirect.

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

Ambient air quality monitoring was carried out at 8 locations during 05.10.2017 to 31.12.2017 and the baseline data indicates the ranges of

average concentrations as: PM_{10} (57.21-89.50 µg/m³), $PM_{2.5}$ (30.0-47.29 µg/m³), SO_2 (5.44-6.43 µg/m³) and NO_2 (17.4 – 20.93 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 11.73 µg/m³, 0.48 µg/m³, 0.06 µg/m³ and 0.08 µg/m³ with respect to NOx, SO_2 , PM_{10} and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Two weeks air monitoring conducted at the same 8 locations during February 2022 indicate average concentrations of PM_{10} : 57.96-90.25 µg/m³, $PM_{2.5}$:30.25-47.04 µg/m³, SO_2 :5.84-7.13 µg/m³ and NO_2 :17.63 – 20.98 µg/m³.

Total fresh water requirement after expansion will be 25 CMD for each well which will be met from groundwater. NOC has been obtained from CGWA vide letter no. CGWA/NOC/MIN/ORIG/2020/9251 dated 10.12.2020. Existing effluent generation is 21.8 CMD (8 CMD domestic wastewater and 13.8 CMD drilling and wash wastewater). Drilling and wash wastewater will be treated through effluent treatment plant. Domestic wastewater will be treated in septic tank and soak pits. The project will be based on Zero Liquid discharge system.

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

Details of Process emissions generation and its management:

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

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

 Drill cuttings and spent drilling mud will be disposed to HDPE lined pit within the drill site.

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

Production Installations:

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

Coordinates of Proposed wells and production installations

S. No.	Well No	Latitude	Longitude
1.	308	27° 25' 16.200" N	95° 14' 16.239" E
2.	309	27° 24' 10.414" N	95° 15' 14.698" E
3.	310	27° 22' 37.314" N	95° 18' 32.967" E
4.	314	27° 22' 21.243" N	95° 19' 48.572" E
5.	315	27° 23' 8.653" N	95° 17' 4.772" E
6.	316	27° 22' 59.404" N	95° 14' 30.012" E
7.	327	27° 22' 0.320" N	95° 28' 23.130" E
8.	332	27° 22' 14.779" N	95° 24' 9.013" E
9.	333	27° 21' 55.062" N	95° 20' 3.978" E
10.	334	27° 22' 31.480" N	95° 17' 7.290" E
11.	337	27° 23' 16.678" N	95° 17' 56.125" E
12.	340	27° 22' 2.965" N	95° 21' 13.045" E
13.	341	27° 21' 35.322" N	95° 20' 44.004" E
14.	356	27° 22' 2.318" N	95° 23' 17.135" E
15.	359	27° 22' 52.927" N	95° 21' 51.515" E
16.	360	27° 21' 19.637" N	95° 25' 34.399" E
17.	361	27° 21' 45.800" N	95° 23' 21.867" E
18.	362	27° 21' 37.051" N	95° 26' 33.834" E

S. No.	Well No	Latitude	Longitude
19.	365	27° 23' 29.743" N	95° 20' 43.573" E
20.	366	27° 21' 34.473" N	95° 22' 33.711" E
21.	367	27° 23' 17.369" N	95° 22' 38.454" E
22.	368	27° 22' 30.075" N	95° 22' 34.441" E
23.	369	27° 23' 9.393" N	95° 16' 33.424" E
24.	370	27° 22' 31.490" N	95° 20' 51.695" E
25.	373	27° 23' 8.664" N	95° 24' 3.759" E
26.	381	27° 23' 57.543" N	95° 17' 34.579" E
27.	399	27° 21' 7.657" N	95° 13' 57.155" E
28.	400	27° 21' 53.577" N	95° 14' 22.518" E
29.	DHC-H	27° 21' 20.751" N	95° 27' 24.581" E
30.	DHU	27° 20' 52.118" N	95° 27' 39.501" E
31.	HSA	27° 22' 31.893" N	95° 19' 5.648" E
32.	HSA	27° 22' 32.480" N	95° 19' 4.720" E
33.	HSY	27° 20' 26.345" N	95° 25' 57.849" E
34.	HSZ	27° 22' 30.160" N	95° 22' 37.051" E
35.	HTA	27° 21' 12.289" N	95° 22' 18.248" E
36.	HTB	27° 20' 31.758" N	95° 23' 41.380" E
37.	HTC	27° 20' 18.224" N	95° 24' 44.801" E
38.	HTD	27° 20' 26.620" N	95° 25' 20.010" E
39.	HUJ	27° 22' 1.245" N	95° 22' 25.798" E
40.	HUK	27° 20' 54.265" N	95° 22' 21.750" E
41.	HUL	27° 20' 26.421" N	95° 22' 44.910" E
42.	HUM	27° 22' 1.267" N	95° 22' 26.442" E
43.	HUN	27° 22' 5.619" N	95° 21' 36.694" E
44.	HWA	27° 21' 35.930" N	95° 13' 54.650" E
45.	HWY	27° 22' 53.707" N	95° 24' 30.972" E
46.	HXA	27° 21' 54.714" N	95° 26' 2.710" E
47.	HXF	27° 20' 30.730" N	95° 23' 42.250" E
48.	HXG	27° 20' 30.730" N	95° 23' 42.250" E
49.	HYA	27° 22' 6.078" N	95° 21' 36.471" E
50.	HYS	27° 20' 26.060" N	95° 25' 56.970" E
51.	HZD	27° 23′ 10.320″ N	95° 17' 45.840" E
52.	Loc-401	27° 22' 12.136" N	95° 24' 43.603" E
53.	Loc-501	27° 21' 4.090" N	95° 24' 1.586" E
54.	Loc-502	27° 20' 48.327" N	95° 24' 22.837" E
55.	Loc-507(D)	27° 21' 56.011" N	95° 28' 6.771" E
56.	Loc-B	27° 22' 51.065" N	95° 17' 51.064" E
57.	Loc-H	27° 22' 53.248" N	95° 18' 43.757" E
58.	Loc-I	27° 23' 4.768" N	95° 19' 6.017" E
59.	Loc-J	27° 22' 52.969" N	95° 16' 58.394" E
60.	Loc-K	27° 23' 11.121" N	95° 17' 24.635" E

S. No.	Well No	Latitude	Longitude
61.	Loc 101	27° 26' 14.521" N	95° 13' 43.295" E
62.	Loc 102	27° 24' 53.993" N	95° 14' 5.216" E
63.	NKM	27° 20' 35.660" N	95° 19' 16.100" E
64.	NKP	27° 20' 5.942" N	95° 16' 31.476" E
65.	NKQ	27° 21' 38.980" N	95° 18' 16.390" E
66.	NLA	27° 20' 20.590" N	95° 14' 37.860" E
67.	NLB	27° 20' 46.440" N	95° 14' 28.070" E
68.	NLC	27° 20' 20.980" N	95° 14' 36.910" E
69.	NLC-1	27° 20' 20.110" N	95° 14' 37.500" E
70.	NLD	27° 20' 56.110" N	95° 14' 33.450" E
71.	NLI	27° 20' 20.590" N	95° 14' 37.860" E
72.	NLN	27° 21' 39.253" N	95° 18' 16.703" E
73.	NLO	27° 21' 28.814" N	95° 19' 5.505" E
74.	Well-1	27° 23' 11.000" N	95° 17' 48.000" E
75.	Well-11	27° 23' 14.000" N	95° 19' 7.000" E
76.	Well-12	27° 23' 18.000" N	95° 23' 25.000" E
77.	Well-14	27° 20' 58.000" N	95° 22' 19.000" E
78.	Well-15	27° 21' 55.000" N	95° 24' 24.000" E
79.	Well-2	27° 22' 0.000" N	95° 15' 14.000" E
80.	Well-3	27° 21' 25.000" N	95° 14' 50.000" E
81.	Well-4	27° 22' 50.000" N	95° 14' 27.000" E
82.	301	27° 26' 56.820" N	95° 30' 21.790" E
83.	302	27° 25' 4.460" N	95° 28' 24.080" E
84.	303	27° 24' 6.846" N	95° 36' 2.953" E
85.	304	27° 23' 44.774" N	95° 28' 14.020" E
86.	305	27° 24' 52.554" N	95° 26' 25.619" E
87.	306	27° 26' 5.551" N	95° 20' 12.114" E
88.	307	27° 25' 16.396" N	95° 18' 58.474" E
89.	311	27° 23' 57.497" N	95° 23' 12.157" E
90.	312	27° 23' 47.736" N	95° 25' 36.117" E
91.	313	27° 24' 47.350" N	95° 23' 26.085" E
92.	317	27° 24' 9.690" N	95° 22' 46.950" E
93.	318	27° 24' 9.039" N	95° 19' 49.988" E
94.	319	27° 24' 57.584" N	95° 27' 39.775" E
95.	320	27° 24' 8.036" N	95° 36' 5.387" E
96.	321	27° 26' 52.980" N	95° 31' 50.420" E
97.	322	27° 26' 43.907" N	95° 30' 55.892" E
98.	323	27° 23' 43.690" N	95° 35' 45.360" E
99.	324	27° 22' 57.948" N	95° 25' 16.806" E
100.	325	27° 22' 30.541" N	95° 27' 37.344" E
101.	326	27° 23' 26.960" N	95° 27' 43.200" E
102.	328	27° 26' 48.360" N	95° 31' 49.670" E

S. No.	Well No	Latitude	Longitude
103.	329	27° 23' 0.755" N	95° 26' 21.270" E
104.	330	27° 24' 3.185" N	95° 26' 27.107" E
105.	331	27° 24' 25.240" N	95° 27' 38.100" E
106.	336	27° 23' 59.407" N	95° 18' 5.377" E
107.	338	27° 23' 17.993" N	95° 21' 31.112" E
108.	339	27° 23' 48.080" N	95° 21' 51.630" E
109.	342	27° 24' 24.482" N	95° 25' 41.306" E
110.	343	27° 23' 18.760" N	95° 27' 37.900" E
111.	344	27° 25' 5.778" N	95° 28' 48.969" E
112.	345	27° 25' 3.150" N	95° 28' 41.910" E
113.	346	27° 26' 56.620" N	95° 31' 53.130" E
114.	347	27° 24' 11.219" N	95° 36' 5.980" E
115.	348	27° 23' 45.670" N	95° 35' 48.940" E
116.	349	27° 23' 46.740" N	95° 35' 44.377" E
117.	350	27° 27' 38.378" N	95° 31' 44.401" E
118.	351	27° 28' 0.345" N	95° 32' 24.949" E
119.	352	27° 27' 38.509" N	95° 32' 50.248" E
120.	353	27° 27' 7.425" N	95° 32' 9.266" E
121.	354	27° 28' 11.520" N	95° 31' 31.342" E
122.	355	27° 27' 23.985" N	95° 30' 36.418" E
123.	357	27° 26' 53.150" N	95° 31' 35.620" E
124.	358	27° 23' 48.964" N	95° 23' 53.216" E
125.	363	27° 25' 35.140" N	95° 23' 37.240" E
126.	364	27° 24' 33.625" N	95° 22' 54.803" E
127.	371	27° 23' 45.146" N	95° 19' 41.254" E
128.	372	27° 20' 52.060" N	95° 28' 9.870" E
129.	374	27° 25' 21.152" N	95° 25' 17.905" E
130.	376	27° 23' 41.699" N	95° 26' 44.584" E
131.	377	27° 24' 26.024" N	95° 26' 41.797" E
132.	378	27° 25' 31.614" N	95° 24' 6.494" E
133.	379	27° 26' 38.952" N	95° 20' 40.702" E
134.	380	27° 25' 7.368" N	95° 19' 45.013" E
135.	382	27° 23' 34.778" N	95° 27' 30.884" E
136.	383	27° 25' 54.248" N	95° 27' 33.529" E
137.	384	27° 26' 53.423" N	95° 25' 54.267" E
138.	385	27° 27' 22.333" N	95° 25' 46.865" E
139.	386	27° 27' 34.963" N	95° 26' 42.854" E
140.	387	27° 27' 28.667" N	95° 27' 36.007" E
141.	388	27° 28' 2.805" N	95° 27' 26.918" E
142.	389	27° 28' 21.439" N	95° 26' 28.500" E
143.	390	27° 28' 27.712" N	95° 25' 36.307" E
144.	391	27° 27' 34.240" N	95° 24' 42.307" E

S. No.	Well No	Latitude	Longitude
145.	392	27° 27' 42.496" N	95° 23' 19.112" E
146.	393	27° 26' 56.642" N	95° 22' 6.052" E
147.	394	27° 26' 8.720" N	95° 20' 25.480" E
148.	395	27° 25' 33.986" N	95° 19' 52.059" E
149.	396	27° 26' 1.882" N	95° 18' 36.578" E
150.	397	27° 25' 38.237" N	95° 17' 31.380" E
151.	398	27° 25' 7.803" N	95° 15' 57.710" E
152.	CAC	27° 28' 50.587" N	95° 14' 55.985" E
153.	CK	27° 27' 26.717" N	95° 19' 3.000" E
154.	CL	27° 28' 3.983" N	95° 17' 38.346" E
155.	CM	27° 26' 28.331" N	95° 16' 15.981" E
156.	CZ	27° 26' 28.359" N	95° 16' 16.229" E
157.	DHF	27° 28' 48.266" N	95° 28' 52.002" E
158.	DHO	27° 27' 28.884" N	95° 32' 4.536" E
159.	DHV	27° 24' 32.578" N	95° 36' 23.869" E
160.	DHW	27° 24' 35.750" N	95° 36' 26.272" E
161.	HQN	27° 28' 21.993" N	95° 24' 35.234" E
162.	HQQ	27° 26' 10.665" N	95° 27' 53.040" E
163.	HRI	27° 27' 36.441" N	95° 24' 55.891" E
164.	HRO	27° 28' 52.460" N	95° 25' 56.930" E
165.	HRP	27° 28' 35.937" N	95° 26' 57.523" E
166.	HRS-H	27° 27' 42.950" N	95° 26' 28.630" E
167.	HRT	27° 26' 48.274" N	95° 24' 42.345" E
168.	HRV	27° 28' 52.250" N	95° 25' 55.960" E
169.	HRW	27° 28' 54.000" N	95° 26' 13.010" E
170.	HRY	27° 27' 9.700" N	95° 26' 53.000" E
171.	HRZ	27° 27' 1.026" N	95° 23' 46.718" E
172.	HSU	27° 24' 14.610" N	95° 27' 55.737" E
173.	HTF	27° 25' 27.462" N	95° 27' 18.068" E
174.	HTG	27° 25' 11.796" N	95° 26' 21.281" E
175.	НТО-Н	27° 27' 11.138" N	95° 26' 52.928" E
176.	HTP-H	27° 27' 10.650" N	95° 26' 52.990" E
177.	HTQ-H	27° 27' 42.850" N	95° 26' 27.900" E
178.	HTR-H	27° 27' 36.205" N	95° 24' 56.370" E
179.	HTS-H	27° 28' 44.193" N	95° 25' 18.891" E
180.	HTT-H	27° 27' 10.232" N	95° 26' 52.733" E
181.	HTU	27° 28' 44.681" N	95° 25' 18.839" E
182.	HTW	27° 27' 47.857" N	95° 26' 37.439" E
183.	HTZ-H	27° 28' 11.756" N	95° 26' 13.861" E
184.	HUA-H	27° 28' 11.709" N	95° 26' 12.811" E
185.	HUB-H	27° 28' 8.313" N	95° 26' 41.645" E
186.	HUE	27° 25' 38.961" N	95° 26' 41.151" E

S. No.	Well No	Latitude	Longitude
187.	HUF	27° 25' 39.870" N	95° 26' 43.042" E
188.	HUG	27° 25' 39.885" N	95° 26' 42.161" E
189.	HUH	27° 25' 40.552" N	95° 26' 43.020" E
190.	HUI	27° 28' 23.331" N	95° 24' 6.788" E
191.	HUO	27° 23' 56.569" N	95° 21' 9.001" E
192.	HUU	27° 27' 0.978" N	95° 23' 47.620" E
193.	HUW	27° 26' 22.688" N	95° 24' 19.123" E
194.	HUX	27° 26' 48.634" N	95° 24' 42.207" E
195.	HVA	27° 28' 20.165" N	95° 24' 35.270" E
196.	HVB	27° 28' 22.109" N	95° 24' 43.018" E
197.	HVC	27° 28' 45.038" N	95° 25' 18.822" E
198.	HVD-H	27° 26' 48.193" N	95° 24' 41.382" E
199.	HVE-H	27° 26' 48.249" N	95° 24' 41.933" E
200.	HVG-H	27° 27' 36.680" N	95° 24' 55.190" E
201.	HVH-H	27° 27' 40.952" N	95° 25' 27.919" E
202.	HVI	27° 28' 7.970" N	95° 23' 32.435" E
203.	HVJ	27° 25' 20.755" N	95° 20' 12.033" E
204.	HVK	27° 25' 31.677" N	95° 17' 27.309" E
205.	HVM	27° 26' 36.416" N	95° 27' 49.826" E
206.	HVN	27° 24' 48.767" N	95° 15' 49.612" E
207.	HVP	27° 27' 36.531" N	95° 24' 56.290" E
208.	HVQ	27° 27' 40.925" N	95° 25' 27.300" E
209.	HVR	27° 28' 22.155" N	95° 24' 42.240" E
210.	HWB	27° 23' 25.422" N	95° 24' 4.008" E
211.	HWC-H	27° 28' 20.651" N	95° 24' 35.331" E
212.	HWE-H	27° 25' 19.816" N	95° 16' 57.809" E
213.	HWN-H	27° 27' 48.393" N	95° 26' 36.840" E
214.	HWO-H	27° 26' 48.252" N	95° 24' 40.852" E
215.	HWO-H	27° 26' 48.570" N	95° 24' 41.370" E
216.	HWP-H	27° 27' 1.606" N	95° 23' 45.129" E
217.	HWR-H	27° 28' 23.600" N	95° 24' 6.408" E
218.	HWT-H	27° 27' 36.939" N	95° 24' 55.731" E
219.	HWV	27° 25' 20.204" N	95° 16' 57.905" E
220.	HWZ	27° 25' 42.123" N	95° 25' 16.808" E
221.	HXC	27° 21' 53.220" N	95° 28' 12.810" E
222.	HXD	27° 25' 21.170" N	95° 20' 12.450" E
223.	HXE	27° 24' 48.999" N	95° 15' 49.321" E
224.	HXH-H	27° 27' 1.352" N	95° 23' 46.671" E
225.	HXI-H	27° 28' 25.853" N	95° 27' 38.792" E
226.	HXO	27° 25' 54.699" N	95° 15' 30.524" E
227.	HXP	27° 26' 10.244" N	95° 27' 52.972" E
228.	HXT-H	27° 26' 22.682" N	95° 24' 19.123" E

S. No.	Well No	Latitude	Longitude
229.	HXU	27° 25' 39.758" N	95° 26' 42.753" E
230.	HXU	27° 25' 39.310" N	95° 26' 41.631" E
231.	HXV	27° 24' 49.616" N	95° 15' 49.349" E
232.	HXW	27° 26' 28.417" N	95° 16' 16.682" E
233.	HXX	27° 25' 21.441" N	95° 16' 57.781" E
234.	HXY	27° 25' 9.569" N	95° 18' 23.512" E
235.	HXZ	27° 25' 9.088" N	95° 18' 23.123" E
236.	HYB	27° 28' 8.080" N	95° 23' 30.680" E
237.	HYC	27° 28' 7.970" N	95° 23' 32.435" E
238.	HYD	27° 28' 7.880" N	95° 23' 33.650" E
239.	HYE	27° 28' 23.956" N	95° 24' 5.750" E
240.	HYF	27° 26' 36.343" N	95° 27' 50.301" E
241.	HYG	27° 28' 2.886" N	95° 27' 59.061" E
242.	HYI	27° 27' 35.671" N	95° 28' 53.551" E
243.	HYJ	27° 25' 12.412" N	95° 27' 55.429" E
244.	HYK	27° 26' 8.938" N	95° 27' 53.369" E
245.	HYL	27° 26' 28.755" N	95° 16' 15.859" E
246.	HYM	27° 23' 10.809" N	95° 27' 39.880" E
247.	HYN	27° 23' 36.007" N	95° 27' 47.721" E
248.	HYO	27° 22' 37.069" N	95° 28' 8.643" E
249.	HYP	27° 21' 53.220" N	95° 28' 12.810" E
250.	HYQ-H	27° 27' 42.851" N	95° 26' 26.502" E
251.	HYR	27° 22' 9.572" N	95° 26' 28.010" E
252.	HYT	27° 23' 39.530" N	95° 21' 13.849" E
253.	HYU	27° 23' 38.971" N	95° 21' 14.281" E
254.	HYV	27° 25' 58.343" N	95° 27' 42.612" E
255.	HYX	27° 26' 22.585" N	95° 24' 19.460" E
256.	HYY	27° 26' 48.410" N	95° 24' 42.260" E
257.	HYZ-H	27° 28' 23.331" N	95° 24' 6.788" E
258.	HZA-H	27° 26' 58.206" N	95° 24' 10.882" E
259.	HZB	27° 23' 53.625" N	95° 23' 52.298" E
260.	Loc-405	27° 25' 22.083" N	95° 19' 23.701" E
261.	Loc-407	27° 27' 28.293" N	95° 32' 22.754" E
262.	Loc-409	27° 27' 26.493" N	95° 16' 11.226" E
263.	Loc-410	27° 26' 7.234" N	95° 17' 10.389" E
264.	Loc-410A	27° 27' 22.471" N	95° 35' 59.587" E
265.	Loc-411	27° 24' 30.358" N	95° 36' 6.945" E
266.	Loc-413	27° 26' 10.103" N	95° 18' 22.710" E
267.	Loc-508	27° 25' 40.583" N	95° 28' 29.820" E
268.	Loc-509	27° 23' 29.100" N	95° 27' 52.420" E
269.	Loc-509 (D1)	27° 27' 13.083" N	95° 30' 11.231" E
270.	Loc-A	27° 25' 48.480" N	95° 28' 11.295" E

S. No.	Well No	Latitude	Longitude
271.	Loc-C	27° 25' 30.701" N	95° 28' 24.725" E
272.	Loc-D	27° 25' 30.701" N	95° 28' 24.725" E
273.	Loc-D10	27° 28' 39.856" N	95° 19' 6.024" E
274.	Loc-E	27° 28' 13.487" N	95° 14' 1.539" E
275.	Loc-F	27° 26' 25.400" N	95° 27' 46.388" E
276.	Loc-G	27° 26' 25.400" N	95° 27' 46.388" E
277.	Loc 103	27° 27' 11.028" N	95° 14' 31.109" E
278.	Loc 104	27° 27' 55.530" N	95° 15' 33.643" E
279.	Loc 105	27° 28' 14.094" N	95° 18' 32.884" E
280.	Loc 106	27° 27' 5.113" N	95° 18' 47.473" E
281.	Loc 107	27° 26' 24.996" N	95° 19' 2.896" E
282.	Loc 108	27° 25' 43.480" N	95° 19' 2.902" E
283.	Loc. 001	27° 26' 41.336" N	95° 17' 30.686" E
284.	THE	27° 23' 40.740" N	95° 21' 13.383" E
285.	Well-10	27° 24' 16.000" N	95° 20' 5.000" E
286.	Well-13	27° 24' 18.000" N	95° 23' 28.000" E
287.	Well-16	27° 23' 1.812" N	95° 27' 37.941" E
288.	Well-17	27° 24' 30.000" N	95° 25' 43.000" E
289.	Well-21	27° 24' 26.443" N	95° 36' 9.723" E
290.	Well-5	27° 25' 17.000" N	95° 15' 17.000" E
291.	Well-6	27° 26' 38.000" N	95° 18' 9.000" E
292.	Well-7	27° 24' 41.000" N	95° 18' 14.000" E
293.	Well-8	27° 24' 52.000" N	95° 19' 21.000" E
294.	Well-9	27° 25' 50.000" N	95° 18' 21.000" E
	Production Installation-1	27° 26' 27.950" N	95° 16' 12.500" E
	Production Installation-2	27° 24' 46.190" N	95° 15' 49.150" E

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Capital Cost in crores	Recurring Cost in Crores /Annum for Wildlife Conservation Plan, Greenbelt Plan andEnvironmental control measures for Well drilling and production installation (for 7 years)	
1.	Wildlife Conservation Plan	-	0.0829	-
2.	Greenbelt Plan	-	0.0050	-
3.	Environmental	-	4.2742	-

S. No.	Description	Capital Cost in crores	Recurring Cost in Crores /Annum for Wildlife Conservation Plan, Greenbelt Plan andEnvironmental control measures for Well drilling and production installation (for 7 years)	Crores
	control measures for Well drilling			
4.	Environmental control measures for production installation	-	0.1332	-
5.	CER Cost	2.45	-	0.4151
	Grant Total	2.45	4.4953	0.4161

Details of cost breakup of Environmental Control measures for drilling presented below:

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 294 wells
1	Air Quality Management Plan		
a.	Dust suppression through water sprinkling in the internal unpaved roads Cost of water sprinkling - One truck hiring charge (Rs. 1,00,000 per month X 9 months=Rs. 9,00,000); Diesel charge (50 km travel per day @ Rs. 45/km X 270 days = Rs.607500); Total cost for one year Rs.1507500 Total cost for 7 years= Rs. 10552500	0.36*	105.53
b.	Maintenance of paved internal road and transport route (budgetary provision is included in operational cost of drilling)	0	0
C.	Ambient Air Quality Monitoring -3 monitoring locations x 2 weeks per location x Once during site development, twice during drilling and once during decommissioning (@ Rs.7500 x 24 samples)	1.8	529.2
d.	Stack emission monitoring (@ Rs. 5000 per sample x 3 DG sets x twice during drilling)	0.3	88.2
2	Noise Management Plan		
a.	Ambient Noise Monitoring – 3 locations, once during site development, twice during drilling and once	0.3	88.2

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 294 wells
	during decommissioning (@Rs. 2500 X 12 samples)	-	
b.	Workplace noise monitoring -5 locations per well, twice during drilling (@Rs.2500 per location x 5 locations x 2 times)	0.25	73.5
C.	All DG sets would be provided with acoustic enclosures (All DG sets will be procured with in-built acoustic enclosures budget included in drilling budget)	0	0
3	Water Quality Management Plan		
a.	Construction and maintenance of double chambered sedimentation tank and oily-water separator ETP (Budget included in drilling budget)	0	0
b.	Surface Water Quality Monitoring (@ Rs. 8000 x 4 samples from natural drainages once during site construction, once during drilling, once after decommissioning)	0.96	282.24
C	Ground Water Quality Monitoring (@ Rs. 8000 x 3 sites, once during site construction, once during drilling, once after decommissioning)	0.72	211.68
d.	ETP Treated water quality (@ Rs. 8000 x 2 samples of ETP treated water per month for 4 months)	0.72	211.68
е	Sample from Oily water separator (@Rs. 5000 per sample X 1 sample after drilling)	0.05	14.7
4	Soil Quality Management Plan		
a.	Soil quality monitoring(@ Rs. 8000 x 2 samples x once before site preparation; once after decommissioning/restoration)	0.32	94.08
b.	Procurement of spill kits at drill sites (Rs 20,000 per kit X 3 spill kits per site)	0.6	176.4
5	Road Safety & Traffic Management		
a.	Signage in the transport route & its maintenance (@Rs. 100,000 + Rs. 10,000)	1.1	323.4
b.	Deployment of traffic personnel in sensitive area – 5 persons (@ Rs. 6000 per month x 6 months)	1.8	529.2
6	Surface Runoff & Soil Erosion Control		
a.	Two chamber sedimentation tank at each drill site (Budgetary provision is already included in the infrastructure development cost)	0	0
7	Municipal Solid Waste		
a.	Provision of two chambered covered collection bins at well site – 2 nos	0.2	58.8
b.	Transport arrangement of waste from well sites to	0.25	73.5

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 294 wells
	dumping area		
8	Hazardous waste management		
a.	Construction of dedicated hazardous storage area and record maintenance (construction included under project cost; only maintenance included in this budget)	0.1	29.4
b.	Drill Cutting, waste mud and wash water pits; HDPE lined (budgetary provision in operation cost of drilling)	0	0
C.	Analysis of drill cutting and waste drilling mud	0.3	88.2
	(Drill cutting @Rs. 5000 per sample x 1 sample per month x 3 months drilling time; Waste drilling mud @Rs. 5000 per sample x 1 sample		
	per month x 3 months drilling time)		
9	Surface and Ground Water Protection and		
	Management	0	0
a.	Surface runoff control measures for chemical storage area, fuel storage area (budgetary provision is already taken care in earlier section)	0	0
b.	Paved /impervious storage area for chemical storage area, fuel & lubricant storage area (Budgetary provision is already included in the infrastructure development cost)	0	0
C.	Domestic waste water treatment facility through septic tank & soak pits at the drill sites (budgetary provision in operation cost of drilling)	0	0
10	Occupational Health & Safety Management		
a.	Provision of appropriate PPE to all workers and its maintenance (budgetary provision is included in operational cost of drilling)	0	0
b.	Provision of drinking water, sanitation facility for all workers (budgetary provision is included in operational cost of drilling)	0	0
С	Provision First aid facility (budgetary provision is included in operational cost of drilling)	0	0
d	Provision of Ambulance facility OIL has its own ambulance facility)	0	0
е	Regular health checkup facility provided by OIL for workers)	0	0
f	Regular occupational health & safety training (@ 1 lakh per year for 7 years)	0.02*	7
g.	Safety related training for OIL drivers (@ 1 lakh per year for 7 years)	0.02*	7

SI. No.	Particulars of Work	Budget for 1 well (in lakh Rs.)	Cumulative Budget for 294 wells
	Total Cost of Implementation of EMP	10.18	2991.91

Note- Capital cost of environmental control measures are included within the budget for drilling

Details of cost breakup of Environmental Control measures for production installation presented below:

SI. No.	Particulars of Work	Budget (in lakh Rs.) per installation per year	Budget (in lakh Rs.) for 2 production installation for 7 years
1	Air Quality Management Plan		
a.	Dust suppression through water sprinkling in the internal unpaved roads (Budget at the drilling budget)	0	0
b.	Maintenance of paved internal road and transport route (budgetary provision is included in operational cost of production installations)	0	0
C.	Ambient Air Quality Monitoring -3 monitoring locations x twice per week x 2 weeks per location x 2 times per year (@ Rs.7500 x 24 samples)	1.8	25.2
d.	Stack emission monitoring (@ 5000 per sample x 2 GG sets x twice a year) @5000 X 4 samples	0.2	2.8
2	Noise Management Plan		
a.	Ambient Noise Monitoring – 3 locations, 2 times a year (@Rs. 2500 X 6 samples)	0.15	2.1
b.	Workplace noise monitoring -5 locations per facility, twice a year (@Rs.2500 per location x 5 locations x 2 times)	0.25	3.5
	All GG sets would be provided with acoustic enclosures (budget included in production budget)	0	0
3	Water Quality Management Plan		
a.	Surface Water Quality Monitoring (@ Rs. 8000 x 3 samples from natural drainages twice a year)	0.48	6.72
b.	Ground Water Quality Monitoring (@ Rs. 8000 x 3 samples from local villages twice a year)	0.48	6.72
C.	Treated water quality (@ Rs. 8000 x 2 samples	0.42	5.88

SI. No.	Particulars of Work	Budget (in lakh Rs.) per installation per year	Budget (in lakh Rs.) for 2 production installation for 7 years
	of ETP treated water; @ Rs. 5000 one sample		
	from oily water separator; twice a year)		
4	Soil Quality Management	0.40	6.70
a.	Soil Quality Monitoring (@Rs. 8000 x 3 samples x twice a year)	0.48	6.72
b.	Procurement of spill kits (@Rs. 20000 per kit x 3 spill kit per year)	0.6	8.4
6	Surface Runoff & Soil Erosion Control		
a.	Two chamber sedimentation tank at each facility (Budgetary provision is already included in the infrastructure development cost)	0	0
7	Municipal Solid Waste		0
a.	Provision of two chambered covered collection bins at each site – 2 nos.	0.2	2.8
b.	Transport arrangement of waste from production installation to dumping area	1	14
8	Hazardous waste management		
a.	Construction of dedicated hazardous storage area and record maintenance (construction included under project cost; only maintenance included in this budget)	0.1	1.4
9	Surface and Ground Water Protection and		
	Management		
a.	Surface runoff control measures for chemical storage area, fuel storage area (budgetary provision is already taken care in earlier section)	0	0
b.	Paved /impervious storage area for chemical storage area, fuel & lubricant storage area (Budgetary provision is already included in the infrastructure development cost)	0	0
C.	Domestic waste water treatment facility through septic tank & soak pits at the production sites (budgetary provision in operation cost of operations)	0	0
10	Occupational Health & Safety Management		
a.	Provision of appropriate PPE to all workers and its maintenance (budgetary provision is included in operational cost of operation)	0	0
b.	Provision of drinking water, sanitation facility for all workers (budgetary provision is included in	0	0
С	operational cost of operation) Provision First aid facility (budgetary provision is	0	0

SI. No.	Particulars of Work	Budget (in lakh Rs.) per installation per year	Budget (in lakh Rs.) for 2 production installation for 7 years
	included in operational cost of operation)		
d	Provision of Ambulance facility OIL has its own ambulance facility)	0	0
е	Regular health checkup facility provided by OIL for workers)	0	0
f	Regular occupational health & safety training (@ 1 lakhs per year for 7 years)	0.5*	7
	Total cost of implementation of EMP	6.66	93.24

Details of CER with proposed activities and budgetary allocation:

Dibrugarh District

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

Tinsukia District

S No.	Proposed Activity	Proposed Budget
1	Mobile health services	Total 14 lakhs
	Infrastructure improvement work in 30 schools including improvement of latrines	Rs. 1 lakh per school x 30 schools= Total Rs. 30 lakhs

6	Providing fund to locals villagers for construction of household latrines	Rs. 0.1 lakh per unit X 350 units = Rs. 35 lakhs
5	Provision for Street light in the area	Rs.70 lakhs
4	Repair of local roads	Rs. 50 lakhs
3	Plantation at nearby forest area	Total Rs. 14 lakhs

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

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

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

Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife as per the Ministry's OM dated 8th August, 2019 and 16th July, 2020. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken. PP shall also strictly follow the conditions mentioned in existing NBWL clearance.
- (iii). The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. Therecommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State ForestDepartment. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
- (iv). PP shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.

- (v). Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- (vi). As proposed, no pipelines or its part shall be laid and drilling of exploratory/production/development wells to be carried out in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (vii). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (viii). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.
- (ix). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (x). Approach road to drilling well shall be made pucca to minimize generation of suspended dust.
- (xi). 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.
- (xii). Total fresh water requirement shall be 25 KLPD which will be met from ground water. Extractionof ground water shall not be done without obtaining prior permission of CGWA/concerned authority.
- (xiii). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.

- (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 HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (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. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xvii). The project proponent shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (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.

- (xx). As per the action plan submitted by the project proponent all activities proposed in extended EMP (CER) for corpus of Rs. 3.28 crores shall completed within 2 years.
- (xxi). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xxii). Oil content in the drill cuttings shall be monitored, if oil-based mud is used then its report shall be sent to the Ministry's Regional Office/SPCB.
- (xxiii). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 03

Proposed Sugar Plant of 6500 TCD with 29.5 MW Co-Generation, 400 KLPD Cane Syrup/ Molasses and 100 KLPD Grain Based Distillery Plant located at village Mahalgoan, Tal. Vaijapur, Dist. Aurangabad, Maharashtra by M/s. Panchaganga Sugar & Power Pvt. Ltd.-Reconsideration of Environmental Clearance.

[IA/MH/IND2/424198/2023, IA-J-11011/533/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its meeting dated 17.04.2023, meeting ID IA/IND2/13482/17/04/2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S	ADS by MoEF&CC	Reply by PP
No.		

S	ADS by MoEF&CC	Reply by PP
No.		
1	Committee suggested to install air cooled condenser in the Sugar unit to reduce the fresh water requirement. Accordingly, water requirement for the sugar unit will reduce. PP has submitted that revised fresh water consumption for the sugar unit along with CPP without considering air cooled condenser in the sugar plant. From water balance of sugar unit, it appears that water is consumed as the make up water for cooling tower. From water balance of distillery unit, it appears that water is also consumed by the cooling tower, which indicates that PP has not considered installation of air cooled condenser and submitted revised water balance with taking account of the same.	reduced to 45 CMD from 218 CMD.after taking water conservation measures such as installation of air cooled condenser. Waste water generation from sugar unit (boiler
2	PP has submitted revised incremental GLC values due to increase in traffic from the proposed project. However, PP has not submitted the resultant incremental GLC values after superimposing the values from the point	i.e. stack and vehicular emissions. Accordindly, PP submitted the revised air quality modelling data after

S No.	ADS by MoEF&CC	Reply by PP	
	source emissions and vehicular emissions.	vehicular emissions. The revised results indicates that the maximum incremental GLCs after the proposed project would be 1.72 $\mu g/m^3$ and 1.12 $\mu g/m^3$, 3.0 $\mu g/m^3$ and 1.38 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_x .	
3	Committee suggested that PP shall develop at least 20 variety of species as a part of greenbelt. However, PP has submitted only 18 plant species.	PP submitted revised list of 20 variety of species to be developed as a part of green belt.	
4	Committee suggested toprovide control measures for fugitive emissions from the storage and transfer points of coal and bagasse. PP informed that fuel will be stored in covered shed but PP did not mention the transfer of fuel in closed conveyer from storage to boiler.		

S No.	ADS by MoEF&CC	Reply by PP
		regular water sprinkling shall be carried out on all the Kaccha road 5. Raw material/ fuel will be covered during transportation 6. Tree plantation will be carried out around plant area for minimizing environmental impacts of the proposed activities over a period of time. Total 8.1 Ha. land is dedicated for greenbelt development which is 33% of the total plot area.

EAC found the response to PP to additional details sought satisfactory.

The Project Proponent and the accredited Consultant M/s. MITCON Consultancy and Engineering Services Ltd. (NABET certificate no. NABET/EIA/2124/RA 0229_Rev 02 and validity 05.02.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the proposed integrated Sugar Plant of 6500 TCD with 29.5 MW Co-Generation, 400 KLPD Cane Syrup/Molasses and 100 KLPD Grain based Distillery Plant located at village Mahalgoan, Tal. Vaijapur, Dist. Aurangabad, Maharashtra by M/s. Panchaganga Sugar & Power Pvt. Ltd.

All products are listed at S.N.1(d) (> 25 MW biomass based thermal power plant), 5(g)(>100 KLPD molasses based distillery) and $5(j)(\geq 5000 \text{ TCD})$ of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

Sr. N	Unit	Product/By- product	Proposed	Total
Prod	ucts			

1	Distillery (Cane Sugar/Molasses based)	RS/ENA/AA/ Ethanol	400 KLPD	400 KLPD
2	Distillery (Grain based)	RS/ENA/AA/ Ethanol	100 KLPD	100 KLPD
3	Sugar manufacturing	Sugarcane crushing	6500 TCD	6500TCD
4	Bagasse based Cogeneration power plant	Power	29.5 MW	29.5 MW
5	Incineration boiler	Power	3.2 MW	3.2 MW
By-P	roducts			
1	CO ₂	Grain based distillery	454 TPD	454 TPD
2	DDGS	Grain based distillery	56 TPD	56 TPD

^{*}Note: Total production capacity of distillery shall not exceed 500 KLPD at any point of time.

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/533/2022-IA-II(I) dated 26.12.2022.. It was informed that there is no litigation is pending against the project.

Public Hearing for the proposed project had been conducted by the Maharashtra Pollution Control Board on 06.03.2023 at M/s. Panchaganga Sugar and Power Private Limited chaired by Dr. Anant Gavhane (Additional District Collector). The main issues raised during the public hearing and their action plan:

Sr. No	Name and address of the person along with suggestions, views, comments etc.,	Action plan	Budget Allocation and Timeline
1	 Shri MachindraPandurangShelke, at Mahalgaon, Tal. Vaijapur, Dist. Aurangabad Which type of Hazardous waste will be generated from proposed project? Also will there be any air pollution due to boiler of proposed project? 	• The hazardous waste generated from the proposed project will be disposed of scientifically: bagasse ash, CPU sludge, ETP sludge, yeast sludge, Press mud and STP sludge will be used as a manure, spent wash ash will be sold to brick	managemen t Capital cost: 50 lakhs Operation and Maintenance cost: 10 lakhs/A

		manufacturer, spent oil will be sent to authorized recycler and DDGS shall be sold to poultry/ cattle feed • Boilers of 160 TPH and 30 TPH will be installed with Electrostatic Precipitator ESP (with efficiency 99.9%) as an Air Pollution Control System which will trap major dust generated from boiler. Online Monitoring System will be installed to the boiler.	(Incineration Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Timeline:before commissioning of the plant
2	Shri. VishwasRaosahebNimbalk ar, SarpanchSirasgaon, Tal. Vaijapur Dist. Aurangabad • Is there any impact of wastewater generated from the proposed project on farm?	• Industry shall be installing a full-fledged effluent treatment plant with Zero Liquid Discharge as per the guidelines of MPCB and the treated water will be recycled 100% for cooling tower make up and on land for gardening. Hence no question arises on impact on farms located in the surrounding	Water Pollution (ETP, CPU, STP, Decanter and Dryer): Capital cost: 2080 Lakhs Operation and Maintenance cost: 21 Lakhs/A Timeline: before commissionin g of the plant
3	Shri Bharat Ashok Gundappa, Ghogargaon, Tal. Vaijapur Dist. Aurangabad • From Proposed Distillery Project is there any Sound Pollution problems? • And will the Proposed Project comply with the norms of Pollution Control Board?	 Industry informed that there will be no sound pollution problem from the proposed project. Yes, all the activities will be carried out in closed shed to control the noise pollution. All equipment's will be provided with noise control barricades. Green belt will be 	Noise Pollution: Capital cost: 100 Lakhs Operation and Maintenance cost: 10 Lakhs/A Green Belt: Capital cost: 81 Lakhs Page 141 of 292

		developed in and around the proposed project to control the noise. All the guidelines issued by MPCB/CPCB will be followed strictly.	Operation and Maintenance cost: 25 Lakhs/A Timeline: before commissionin g of the plant
4	Shri JanardhanPrabhakarChav an, SarpanchBhagur, Tal. Vaijapur, Dist. Aurangabad • Is there any impact of smoke on health due to the proposed boiler?	No, the industry will be installing boilers of 160 MT and 30 MT capacity with Electro Static Precipitator (ESP) (with efficiency 99.9%) as an Air Pollution Control System. Monitoring System will be installed to the boiler	Air Pollution (Incineration Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Timeline: before commissioning of the plant
5	Shri ShantaramGajananDushin g, Jategaon, Tal. Vaijapur Dist. Aurangabad. • How will you control the polluted water from proposed project?	 Effluent from sugar unit will be treated in 1000 CMD ETP. ETP Treated effluent from sugar will be reused in greenbelt development and cooling tower. Spent lees, blow down, Misc wastewater and condensate will be treated in distillery CPU of capacity 3000 CMD and treated water will be recycled in process. Domestic Sewage will be treated in 30 CMD STP. Raw spent wash will be concentrated in MEE to form conc. Spent wash 	Water Pollution (ETP, CPU, STP, Decanter and Dryer): Capital cost: 2080 Lakhs Operation and Maintenance cost: 21 Lakhs/A Timeline: before commissionin g of the plant

6	Shri. Sunil Borade R.R. Aba Foundation:- • Will you carry out the plantation in the premises of proposed project?	which will be used as a fuel in incineration boiler. Raw stillage will be treated trough Decanter followed by Multi effect evaporator (MEE) followed Dryer to produce DDGS. Yes, industry shall be developing a three tier green belt with 5 to 8 meter width along the project boundary.	Capital cost: 81 Lakhs Operation and Maintenance cost: 25 Lakhs/A Timeline: before
	Shri. DadasahebChandramanM	• Industry shall be requiring total	Capital cost:
7	 oin, SarpanchChorVaghalgaon, Tal. Vaijapur Dist. Aurangabad:- How much employment will be generated through this project? How many local people will get employment? How much electricity will be made available to our Village? Till date lots of tree plantation have been done but what about their long term survival? There is correction in village name i.e, Hanumantgaon instead of Hanumantpur and chorvaghalgaon instead of chorvahalegaon please correct. 	manpower of 150 (permanent 50 and temporary 100) during construction phase and 500 (permanent 100 and temporary 400) during the operation phase • At this stage it is impossible to inform the percentage of local manpower required as both skilled and unskilled manpower shall be required. However, preferences shall be given to the local candidates. • Industry generated shall be used for the project. Excess electricity will be given to the gridder and from	81 Lakhs Operation and Maintenance cost: 25 Lakhs/A Timeline: before commissionin g of the plant

	Also Sub Regional Officer said the District name as ChhatrapatiSambhajinag ar instead of Aurangabad.	where it will be further distributed as per the rule • An action plan will be prepared by the management for greenbelt development • The corrections in the village names have been done in the EIA report • Recently Government has changed the name of Aurangabad district as ChhatrapatiSambhajina gar. Over the time it will be incorporated in documents and other places.	
8	Shri Sunil Powar, Jategaon-Tembhi, Tal. Vaijapur Dist. Aurangabad:- • How will you disposal the Effluent and Ash generated from proposed project?	 Effluent from sugar unit will be treated in 1000 CMD ETP. ETP Treated effluent from sugar will be reused in greenbelt development and cooling tower. Spent lees, blow down, Misc wastewater and condensate will be treated in CPU of capacity 3000 CMD and treated water will be recycled in process. Domestic Sewage will be treated in 30 CMD STP. Raw spent wash will be concentrated in MEE to form conc. Spent wash which will be used as a fuel 	•

		in incineration boiler.	
		• Raw stillage will be	
		treated trough	
		Decanter followed by	
		Multi effect	
		evaporator (MEE)	
		followed Dryer to	
		produce DDGS.	
		Electrostatic	
		Precipitator shall be	
		provided as an air	
		pollution control	
		device to the boiler	
		with approximately	
		99.99 % efficiency to	
		capture maximum	
		boiler fly ash.	
		Spent wash ash will	
		be sent to given to	
		farmer as manure	
		Bagasse ash will be	
		used as a manure	
	Dr. Sanjay KishanNehe,	In order to control	Air Pollution
		the pollution industry	
			LINCIDERATIO
	Chendufal, Tal. Vaijapur,		_
	Dist. Aurangabad :-	shall be installing	n Boiler,
	Dist. Aurangabad :- • From Sugar Cane	shall be installing Electro static	n Boiler, ESP, OCEMS,
	Dist. Aurangabad :-From Sugar Cane Chimney, boiler ash will	shall be installing Electro static precipitator (ESP) to	n Boiler, ESP, OCEMS, ID fan and
	Dist. Aurangabad :-From Sugar Cane Chimney, boiler ash will be spread in and around	shall be installing Electro static	n Boiler, ESP, OCEMS, ID fan and auxiliaries):
	 Prom Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, 	shall be installing Electro static precipitator (ESP) to the boilers.	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost:
	 Prom Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs
	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and
	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not hazardous. Also to	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution (ETP, CPU,
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not hazardous. Also to control particulate	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution (ETP, CPU, STP, Decanter
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not hazardous. Also to control particulate emissions we are going to installed most	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution (ETP, CPU, STP, Decanter
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not hazardous. Also to control particulate emissions we are going to installed most	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution (ETP, CPU, STP, Decanter and Dryer): Capital cost:
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not hazardous. Also to control particulate emissions we are going to installed most advance versions of	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution (ETP, CPU, STP, Decanter and Dryer): Capital cost: 2080 Lakhs
9	 From Sugar Cane Chimney, boiler ash will be spread in and around the area of 2 to 3 km, What is the impact of that on human health and what precautionary measure will be taken on 	shall be installing Electro static precipitator (ESP) to the boilers. Health impact due to particulate matter may cause various types of impacts. However, it will not be hazardous as fuel use in boiler will be Bagasse and spent wash, which are not hazardous. Also to control particulate emissions we are going to installed most advance versions of pollution control	n Boiler, ESP, OCEMS, ID fan and auxiliaries): Capital cost: 4190 Lakhs Operation and Maintenance cost: 57.5 Lakhs/A Water Pollution (ETP, CPU, STP, Decanter and Dryer): Capital cost: 2080 Lakhs Operation and

	Shri ShivajiBhanudasGayke,	due to discharge of water, industry shall be installing a CPU of 3000 CMD, ETP of 1000 CMD and STP of 10 CMD for treating the generated waste water. Treated water is recycled/reused in process and CT. Raw spent wash will be concentrated in MEE to form conc. Spent wash which will be used as a fuel in incineration boiler. Raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. • It is not possible for us to inform a specific timeline at	Pollution
10	Mahalgaon, Tal. Vaijapur, Dist. Aurangabad:- • When will be industry in operation? • What are the impact of polluted water generated from proposed project?	specific timeline at this time. There shall be no impacts of polluted water on proposed project as generated wastewater shall be treated and recycled and reused in cooling tower and process Industry shall install ETP of 1000 CMD, CPU of 3000 CMD and STP of 300 CMD for generated	(ETP, CPU, STP, Decanter and Dryer): Capital cost: 2080 Lakhs Operation and Maintenance cost: 21 Lakhs/A Timeline: before commissionin g of the plant
11	Shri. D.K. More, Bhagur, Tal. Vaijapur Dist. Aurangabad:- • Industry generally use chemicals. My question is that what is the impact of these chemical on underground land? And	 Proper provision shall be made for storage of the chemicals within the premises. Storage tank shall be provided at a designated location. Due care will be 	Page 146 of 292

	about what distance?	taken to avoid the leakage of chemicals on the land.	
12	Shri. BabasahebKadubaPatil, Chendufal, Tal. Vaijapur Dist. Aurangabad:- • For establishment of the proposed project chairman of the industry Shri. ShindeSaheb and local MLA shri. Ramesh BornareSaheb have taken lots of efforts and my request to both of them to organize a farmers melava in the industry.	Project proponent replied with thanks	Green Belt: Capital cost: 81 Lakhs Operation and Maintenance cost: 25 Lakhs/A Timeline: before commissionin g of the plant
13	Shri. DilipKhedkar, Regional Officer, MPCB and Member of Public Hearing, Aurangabad: • My first question is that project consultant has given answers to the public question but it is not clear whether management of the proposed project agrees to his answers? So it should be clear from management side. • Then Shri. DilipKhedkar asked project proponent to rectify the green belt development area as per TOR and do necessary corrections at the time of submission. • Shri. Khedkar further asked that what are the precautions taken by the project proponent at the time of construction. Such as toilet facility for labor, dust particle emission,	agreed with all the answers and all the mentioned things shall be done. Industry shall be providing a three tier green belt with 5 to 8 meter width along the project boundary. The rectified green belt is enclosed in the EIA report Project consultant replied upon that they will do the necessary correction before submission. Mobile toilets, modular STP, regular Water Sprinkling to control dust emission, concrete roads shall be provided at the time of construction.	water and waste water: Capital Cost: 10 Lakhs Operation and Maintenance: 3 Lakh/ A During site preparation: Capital Cost: 2 Lakhs Operation and Maintenance: 1 Lakh/ A Operation phase Water Pollution (ETP, CPU, STP, Decanter

- vehicle movement on kaccha road, etc.
- Shri. Khedkar suggested to provide the standby arrangements to Effluent treatment plant and Air Pollution Control System in case of failure of equipment's.
- He further asked to give the information about the system to recycle the treated water.
- 3000 CMD and ETP of 1000 CMD with two stage RO shall be installed for the proposed project.
- In case of emergency breakdown, the plant will shut down immediately.
 Additional spent wash storage lagoon with 5-day storage capacity shall be installed
- The treated water shall be recycled and reused in process and cooling tower

Capital Cost: 10 Lakhs Operation and Maintenance: 3 Lakh/ A Timeline: 2023-2025. **Green Belt:** Capital cost: 81 Lakhs Operation and Maintenance 25 cost: Lakhs/A Timeline: before commissionin g of the plant

Total land area required is 24.39 hectares. Greenbelt will be developed on total area of 8.1 hectares i.e., 33% of total project area. The estimated project cost is Rs. 578.99 Crores. Capital cost of EMP would be Rs. 78.66 Crores and recurring cost for EMP would be Rs. 2.14Crores per annum. Industry proposes to allocate Rs. 7.51Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 700 (150-200 during Construction and 400-500 during operation phase) persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. There is no reserve forest/ protected area within 10km radius of the project site. NO eco sensitive Zone is present in the 10 km radius of the study area. NBWL application is not applicable. River Shivna is at a distance of 9.29 km. One Nandur- Mathmeshwar canal is at a distance of 3.74 km towards W direction.

Ambient air quality monitoring was carried out at 11 locations during March 2022 to May 2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (41.60 to 70.50 $\mu g/m^3$), $PM_{2.5}$ (16.64 to 28.9 $\mu g/m^3$), SO_2 (5.90 to 16.30 $\mu g/m^3$) and NOx (10.11 to 20.30 $\mu g/m^3$) in the core zone. AAQ modelling study for point source emissions indicates that the

maximum incremental GLCs after the proposed project would be 0.139 $\mu g/m^3$ and 0.105 $\mu g/m^3$, 3.0 $\mu g/m^3$ and 1.91 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_x in the core zone. The revised results indicates that the maximum incremental GLCs after the proposed project would be 1.72 $\mu g/m^3$ and 1.12 $\mu g/m^3$, 3.0 $\mu g/m^3$ and 1.38 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement for the integrated project will be 1155 KLPD which will be sourced from Ground water. Application has been submitted to CGWA 21-4/9936/MH/IND/2023 dated 08.04.2023. Effluent of 910 CMD Sugar-cogeneration will be treated trough effluent treatment plant of capacity 1000 CMD. Treated water of sugar ETP will be used in the process application of distillery unit. Effluent of 2974 CMD from Molasses-grain based distillery quantity will be treated through Condensate Polishing Unit of 3000 CMD. Raw spent wash will be concentrated in MEE to form conc. Spent wash which will be used as a fuel in incineration boiler. Raw stillage will be treated through Decanter followed by Multi effect evaporator (MEE) followed Dryer to produce DDGS. STP of capacity 30 CMD 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 11.87MW (9.87 MW Sugar and 2 MW Distillery (Molasses & Grain)) and will be met from proposed 29.5 MW and 3.2 MW TG cogeneration power plant. Bagasse fired 160 TPH Sugar Boiler and Spent wash and bagasse fired 30 TPH distillery boiler will be installed. APCE Electrostatic Precipitator with75m high stack (Sugar Boiler) and 60 m high stack (Distillery boiler) will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³ for the proposed boiler. 1250kVA* 2 DG set will be used as standby during power failure and stack height (12 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Process emission will be in the form of CO₂. It will be generated from Fermentation unit. This will be scrubbed and bottled to be sold.
- The whole process will be carried out in closed condition so as to avoid any chances of VOC emissions.

• PM, SO₂andNOxemission from utility operation 160 TPH and 30 TPH boiler with Electrostatic precipitator, sulphur reducing measures and 75 m and 60 m stack height resp. as APC measures.

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

- Bagasse ash of 27.72 TPD will be used as a manure
- DDGS of 56 TPD will be sold to poultry/ cattle feed
- ETP sludge of 18.2 TPD will be used as a manure
- CPU sludge of 17.2 TPD will be used as a manure
- Yeast sludge of 129.9 TPD will be used as a manure
- Press mud of 260 TPD will be used as a manure
- STP sludge of 2.81 TPD will be used as a manure
- Spent oil of 0.008 TPD will be sent to authorized recycler

Total land of 24.39 Hectares is under possession of the company and tentative land use conversion has been completed vide approval No. RPAUR/LT/2023/APL/00042 dated 13.02.2023. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

S. No	Construction phase (with Break-up)	Capital Cost	O & M
		(Amount	in lakhs)
1.	Environmental monitoring		3
2.	During site preparation	2	1
3.	Noise and solid waste management	2	1.5
4.	Water and waste water	10	3
5.	Occupational health	4	1
6.	Greenbelt development	7	5
	Total (A)	25	14.5
Sr.	Operation Phase (with Break-up)	Capital Cost	O & M
No		(Amount	in lakhs)

1	Air pollution		
а	Incineration Boiler	3000	40
b	ESP	1000	15
С	Online Continuous Emission Monitoring System (OCEMS)	40	2.5
d	ID fan and other auxiliaries	150	
2	Water pollution		
а	ETP	550	5
b	СРИ	600	5
С	STP	80	1
d	Decanter	150	5
е	Dryer	1000	5
			21
3	Noise pollution	100	10
4	Environmental Monitoring (Air, water, waste water, Soil, Solid waste, Noise)	40	15
5	Occupation health	200	30
6	Green belt	81	25
7	Solid waste	50	10
8	Rain water harvesting	50	10
9	CER Cost	750	0
	Total (B)	7841	199.5
	Total A+B	7866	214

Details of CER with proposed activities and budgetary allocation:

#	CER Activity	Location	Details	Quant ities	Total Amount in Rs.
		Mahalgaon		15	8,00,000
	Duovidio	Tembhi		15	8,00,000
	Providin	Sirasgaon	Providing Solar street lamps nearby	15	8,00,000
1	g Solar street	Kate Pimpalgaon		15	8,00,000
	lamps	Bhagur		15	8,00,000
	nearby	Chorwaghalgaon		15	8,00,000
	пеагру			90	48,00,000
		Z. P. Primary	Water filters 2000 L		
2	Providin	school, Agar	each filtered water tank	2	1,00,000
	g Water	saigaon	at at each place		

	filters/	Z.P School,			
	filtered	Chinchadgaon		2	1,00,000
	water in	Z. P. P School,		2	1 00 000
	nearby	Kanak Sagaj		2	1,00,000
	schools	Z. P. Elementary			
		School,		2	1,00,000
		Katepimpalgaon			
		Z. P. Primary		2	1,00,000
		School, Satana S.N.M.			
		Vidhyalaya -			
		Middle school,		2	1,00,000
		Virgaon			
		Veer Ashok Patil			
		English School,		2	1,00,000
		Virgaon			
		Z. P. P. School,		2	1,00,000
		Sirasgaon			
		Z. P. P. School, Nadi		2	1,00,000
		MadhyamikVidyali	•		
		ya High School,		2	1,00,000
		Kautgaon		_	1,00,000
		Z. P. P. School,		2	1 00 000
		Mali Ghogargaon		2	1,00,000
		Z. P. P. School,			
		RanjangaonNarha		2	1,00,000
		ri			
		APGE English		2	1 00 000
		Medium School, Mahalgaon		2	1,00,000
		New High School,			
		Mahalgaon		2	1,00,000
		Z. P. P. School,		<u> </u>	1 00 000
		AkoliVadgaon		2	1,00,000
				30	15,00,000
	.	CHATURTHI			20.00.000
	Providin	HOSPITAL,		1	30,00,000
	g Ambulan	Mahalgaon Dr Thaware	Providing Ambulance/		
	ce/	Hospital,	equipments to the	1	30,00,000
3	equipme	Mahalgaon	nearby Gov Hospitals	1	30,00,000
	nts to	Government	1130.27 207 1100p10015		
	the	Hospital, Kate		1	30,00,000
	nearby	Pimpalgaon			- •
	Gov			Ω	90,00,000
	Hospitals	Now High Cabasi	Dunyiding garagettans in		
4		New High School,	Providing computers in	10	14,00,000

	Providin	Mahalgaon	nearby school/		
	g compute rs in	MadhyamikVidyali ya High School, Kautgaon	colleges, necessary furniture, projectors, Air conditioners for	10	14,00,000
	nearby school/ colleges, necessar	S.N.M. Vidhyalaya - Middle school, Virgaon	computer lab, science lab equipment	10	14,00,000
	y furniture ,	Veer Ashok Patil English School, Virgaon		10	14,00,000
	projector s, Air condition	APGE English Medium School, Mahalgaon		10	14,00,000
	ers for compute r lab, science lab equipme nt	Z. P. Elementary School, Katepimpalgaon		50	70,00,000
		Mahalgaon	Development of closed drainage at 5 locations (~1000m length), road development near School grampanchayat (~3 km), wherever required during execution	5	25,00,000
5	Infrastru cture develop ment in the area,	Tembhi	Development of closed drainage at 5 locations (~1000m length), road development near School grampanchayat (~3 km), wherever required during execution	5	25,00,000
	Roads, gutters etc.	Sirasgaon	Development of closed drainage at 4 locations (~2 000m length), road development near School grampanchayat (~2 km), wherever required during execution	4	25,00,000
		Kate Pimpalgaon	Development of closed drainage at 5 locations (~1000m length), road development around 2	5	20,00,000

			i
	km wherever required during execution		
Bhagur	Development of closed drainage at 4 locations (~1000m length), road development near School grampanchayat (~2 km), wherever required during execution	4	25,00,000
Chorwaghalgaon	Development of closed drainage at 4 locations (~1000m length), road development near School grampanchayat (~2.5 km), wherever required during execution	3	25,00,000
Hanumantgaon	Development of closed drainage at 4 locations (~1000m length), road development near School grampanchayat (~2 km), wherever required during execution	4	30,00,000
Kautgaon	Development of closed drainage at 3 locations (~1000m length), road development near School grampanchayat (~1.5 km), wherever required during execution	3	30,00,000
Jategaon	Development of closed drainage at 5 locations (~1000m length), road development near School grampanchayat (~2 km), wherever required during execution	5	30,00,000
Ghogargaon	Development of closed drainage at 5 locations (~1000m length), road development near School grampanchayat (~2 km), wherever required during	5	30,00,000 Page 154 of 29

			execution		
		Varkhed	Development of closed drainage at 5 locations (~1000m length), road development near School grampanchayat (~2 km), wherever required during execution	5	30,00,000
				48	2,95,00,000
6	Provision of Rain water Harvesti ng system or water shed manage ment program	Mahalgaon Tembhi Sirasgaon Kate Pimpalgaon Bhagur Chorwaghalgaon Hanumantgaon Kautgaon Jategaon Ghogargaon Varkhed Agar saigaon Jambargaon Barathwadi Virgaon	Provision of roof top Rain water Harvesting system for school (1 school), grampanchyat (1 office) etc.Water shed management - Cement nall bunds at 2 locations in the village,Water conservation through loose bolder structure/Gully Plug/ at 5 locations, Construction of Rainwater harvesting tanks/ farm pond at 3 locations	total 12 activiti es in each village	12,00,000 12,00,000 12,00,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000 12,50,000
7	Training program me to nearby villages/ farmers	Mahalgaon Tembhi Sirasgaon Kate Pimpalgaon Bhagur Chorwaghalgaon Hanumantgaon Kautgaon Jategaon Ghogargaon Varkhed Agar saigaon Jambargaon Barathwadi Virgaon	Training programme to nearby villages/ farmers, Organic farming, crop rotation, selection of crop and crop management, Good Agricultural Practices and methods for crop irrigation, Pests, Disease And Biological pest control, development in harvesting technologies		1,86,00,000 2,00,000
8	Tree plantatio n	Along the road Vaijapur- Gangapur road	3500 Native tree species & Locations with help of Social forestry and local planning authority	1	17,00,000

	16	47,00,000
TOTAL AMOUN T Rs.		7,51,00,000

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

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iii). 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 before commissioning of the plant.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from ground water for the integrated sugar project. State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (v). Total Fresh water requirement shall not exceed 1155 m³/daywhich will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (vi). The spent wash form molasses based distillery shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Spent Wash/stillage from grain based distillery shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three stage RO. No wastewater or treated water from integrated unit of sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall install air cooled condensor in sugar unit to reduce fresh water requirement.
- (vii). Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.
- (viii). APCE ESP (5 field) with 75m high stack shall be installed with Bagasse fired 160 TPH (Sugar Boiler) and APCE ESP (5 field) with 60 m high stack with Spent wash and bagasse fired 30 TPH(Distillery boiler) for controlling particulate matter emissions within the statutory limit of 50 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
 - (ix). Boiler (Bagasse) ash of 27.72 TPD will be used as manure. PP shall use Biomass / bagasse as fuel for the proposed boiler. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

- (x). CO_2 (454 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be collected in bottling plant.
- (xi). PP shall allocate at least Rs. 2.0 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xii). PP shall conduct performance audit of Pollution Control Systems/ Devices annually.
- (xiii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiv). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xvi). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvii). The green belt of at least 5-10 m width shall be developed in nearly 8.1 hectares 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 plant Saplings 4-6 feet high of at least 20 variety of species as part of greenbelt development. 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.

- (xviii). PP proposed to allocate Rs. 7.51 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
 - (xix). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 3.65 Ha. of land i.e. 15% of total project area shall be allotted solely for parking purposes with facilities like rest rooms etc.
 - (xx). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
 - (xxi). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xxii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.
- (xxiii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the sixmonthly compliance report being submitted to concerned authority.

Agenda No. 04

Establishment of 105 KLPD Grain based distillery along with 3 MW Electricity Generation at: Gat No. 346, 350/1, At/Post: Vathar (Kiroli), Tal.: Koregaon, Dist.: Satara, Maharashtra State by Rahimatpur Vibhag Shetkari Producer Company Ltd. (RVSPCL) - Consideration of Environmental Clearance.

[IA/MH/IND2/425987/2023, IA-J-11011/169/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/SA 0177 and validity 10.10.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for Environmental Clearance to the project for Establishment of 105 KLPD Grain based distillery along with 3 MW Electricity Generation at: Gat No. 346, 350/1, At/Post: Vathar (Kiroli), Tal.: Koregaon, Dist.: Satara, Maharashtra State by Rahimatpur Vibhag Shetkari Producer Company Ltd. (RVSPCL).

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

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by- product	Production capacity
1	Distillery	Ethanol	105 KLPD
2	Cogeneration Power Plant	Power	3 MW
3	DWGS dryer	DDGS	88 TPD
4	Fermentation unit	Carbon di-oxide	79 TPD

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

Total land area required is 6.16 hectares. Greenbelt will be developed in total area of 2.03 hectares i.e., 33% of total project area. The estimated project cost is Rs. 120 Crores. Capital cost of EMP would be Rs. 20.85 Crores and recurring cost for EMP would be Rs. 2.40 Crores per annum. Industry proposes to allocate Rs. 2.25 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 90 persons as direct & indirect.

There is no presence of National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserved Forest is at 2 Km; North-East from project site. PP has submitted a copy of letter dated 14.03.2023 confirming that nearest reserve forest is located at a distance of 2.48 km from the proposed site. Water bodies: Krishna River is at a distance of 4.5 Km from site flows in West direction of project site. Further, a minor canal is passing through one part of the project site. In this regard, PP has submitted a NOC dated 17.03.2023 from Irrigation department stating that if PP has to make the area non agricultutal and setup ethanol plant, the irrigation restoration cost area shall be paid according to govt circular dated 21.02.2004 along with other condtions.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.061 $\mu g/m^3$, 0.015 $\mu g/m^3$, 2.91 $\mu g/m^3$ and 1.45 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 299 m³ /day which will be met from Krishna River. Application has been submitted to Krishna irrigation Department, Satara. Effluent (Condensate/spent lees/blowdown etc.) of 670 m³ /day quantity will be treated through Condensate Polishing Unit of capacity 1100 m³ /day. Raw stillage (540 T/D: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3 MW and will be met from proposed 3 MW electricity generation plant. 30 TPH Bagasse / Coal fired boiler will be installed. APCE ESP with 70 m stack height shall be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (5 m) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management:

- APCE ESP with a 70 meters high stackshall be installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (79 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be collected in bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (88 TPD) will be sold as cattle feed.
- Boiler ash (18 TPD) will be used for brick manufacturing.
- CPU sludge (0.6 TPD) and STP Sludge (0.003 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 105 KLPD will be used for manufacturing fuel ethanol only.

Total land of 6.16 Hectares is under possession of the company and land use conversion application has been submitted to Tehsil Office, Koregaon, Satara vide letter dated 31.01.2023.EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

No.	Description	Cost Component (Rs. Lakhs)		
NO.	Description	Capital	Annual O & M	
1	Air Pollution : APC Equipment's [ESP for boiler – 1 Nos. (Stack height 70 M), OCMS, CO ₂ bottling Plant, Ash Collection system	Rs.595.0	Rs.70.0	
2	Water Pollution: Installation of CPU, STP, MEE, OCMS and Dryer for Grain	Rs.1200.0	Rs.120.0	
3	Noise Pollution Control: PPE (Ear plugs, Ear Muff, Insulations, Barriers)	Rs.50.0	Rs.10.0	
4	Occupational Health & Safety: Annual Health checkup, Occupational health center	Rs.100.0	Rs.10.0	
5	Environmental Monitoring: Solid waste disposal (storage and disposal), Ash & CPU, Yeast Sludge	Rs.60.0	Rs.10.0	
6	Green Belt Augmentation & Rain Water Harvesting Plan (5,100 nos of trees under greenbelt and Tank for rain water harvesting)	Rs.80.0	Rs.20.0	
	Total; (17% of Capital Investment of Rs. 120 Cr.)	2085.0	240.0	

Details of CER with proposed activities and budgetary allocation:

No	CER ActivityDetails	Amount
1	Non-Conventional Energy Promotions (5 Villages: Vathar (Kiroli), Surali, Takale, Borgaon, Rahimatpur): Provision of Solar Street Lights with Gadget – 1 MS Pole, 18-20 W LED Lamp, Battery, Solar Panel, Wiring etc. 5 Villages X 40 Nos./Village = 200 Solar Street Lights X Rs.30,000/- per No. = Rs.60 Lakhs	Rs. 60 Lakhs
2	Solar Photovoltaic System (10 Villages:Pimpari, Dhamner, Takale, Vathar (Kiroli), Rahimatpur, Borgaon, Surali, Landewadi, Pawarwadi & Nhavi Bk.) - 260 KW @ Rs. 0.5 Lakh per KW at Grampanchayat / ZP School Building. 260 KW X Rs.50,000/- = Rs. 130 Lakh	Rs. 130 Lakhs
3	Drinking Water Supply Infrastructure (5 Villages:Pimpari, Dhamner, Takale, Vathar (Kiroli), Rahimatpur)- Safe Drinking Water Units with Filtration, RO Module & Storage Tank (2 Unit/ Village @ 500 Lit/Hr) - 10 Units X Rs. 3 Lakhs = Rs. 30 Lakhs	Rs. 30 Lakhs
4	Afforestation in Nhavi Bk Village: 1000 Trees X Rs.500/No. = Rs. 5 Lakhs	Rs. 5 Lakhs
	(1.9% of Capital Investment 120 Cr.) Total Amount	Rs. 225 Lakhs

During deliberations, EAC discussed following issues:

- As suggested by EAC, PP committed that the Ethanol storage onsite will be reduced from 7 days to 6 days
- PP informed that as per the CPCB guidelines (1998); the stack height for a Boiler of 30 TPH was found to be 51 m. However, the industrial location being at 2 Km from one reserved forest (in North-East), the stack height has been further increased up to 70 M from the viewpoint of better plume dispersion. The wind velocity during the monitoring period was 0 14 Km/Hr along with a maximum.mixingheight of 730 M as the Based on the meteorological data, stack details, emission rates, and topography of the industrial location and using AERMOD Software Version 11.2, 2022, the predicted incrementalincrease for PM₁₀, PM_{2.5}, SO₂& NOx was 0.061, 0.015, 2.91, & 1.45 respectively at a distance of 8.67 8.77 km in the downwind direction which was East with predominant wind direction being from West.

• PP has left certain portion of land where canal is passing. In that land, PP committed that no construction shall be carried out and that entire land shall be developed as part of green belt.

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 105 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from River Krishna(surface 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 shall obtain such permission. No ground water shall be used for the plant operations.
- (v). PP shall adhere to all condtions stipulated in NOC dated 17.03.2023 issued by Irrigation department. As proposed, PP shall keep certain portion of land as no construction area where canal is passing. In that

- land, PP committed that no construction shall be carried out and that entire land shall be developed as part of green belt.
- (vi). Total Fresh water requirement shall not exceed 299 m³/daywhich will be met from Krishna River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (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) followed by RO. STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (viii). APCE ESP (5 field) with 70 meters high stackshall be installed with the Bagasse/ Coal (with 15% coal usage as auxiliary fuel) fired 30 TPH boiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³. SO₂ and NOx emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
 - (ix). Boiler ash (18 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use Bagasse /Coal (for startup only) as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
 - (x). CO_2 (79 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be collected in bottling plant.

- (xi). PP shall allocate at least Rs. 1.0 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi). The green belt of at least 10 m width shall be developed in nearly 2.03 hectares 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 plant Saplings 4-6 feet high of atleast 20 variety of species as part of greenbelt development. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant. No cutting of existing

trees is permitted.

- (xvii). PP proposed to allocate Rs. 2.25 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 1.16Ha i.e 15% of the total project area shall be allotted solely for parking purposes with facilities like rest rooms etc. Entry and Exit of the vehicles transporting material to and from the plant shall be through slip road only to avoid traffic congestion on the main road.
 - (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 sixmonthly compliance report being submitted to concerned authority.

Agenda No. 05

Proposed expansion of Distillery project (Ethanol) from 45 KLPD to 150 KLPD by using raw material as Syrup/ B-Heavy Molasses / C-Molasses at Amdapur, Post: Shingnapur, Tal: & Dist: Parbhani, Maharashtra by M/s. Shree Laxmi Narshinha Sugars LLP (SLNSLLP) - Consideration of Environmental Clearance.

[IA/MH/IND2/424839/2023, IA-J-11011/252/2020-IA II (I)]

The Project Proponent and the accredited Consultant M/s. Technogreen Environmental Solutions (NABET certificate no. NABET/EIA/2124/IA0081 and validity 05th July 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the Proposed Expansion of Distillery project (Ethanol) from 45 KLPD to 150 KLPD by using raw material as Syrup/ B-Heavy Molasses / C-Molasses at Amdapur, Post: Shingnapur, Tal: & Dist: Parbhani by M/s. Shree Laxmi Narshinha Sugars LLP (SLNSLLP).

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

The details of products and capacity as under:

Sr. No.	Name of unit	Name of the product / by- product	Existing Productio n capacity	Additional production capacity	Total productio n capacity
	Distillery				
	Products	ENA	45 KLPD		45 KLPD or
1		Ethanol	45 KLPD	105 KLPD	150 KLPD
	By products	Biogas	15000 CMD	-	15000 CMD
		CO2	40 TPD	85TPD	125 TPD
2	Co-gen power plant for distillery/ sugar mill	Electricity	20.5 MW	-	20.5 MW
3	Sugar Mill	Sugar	2500 TCD	-	2500 TCD

Note: Capacity of disitillery shall not exceed 150 KLPD at any point of time.

Ministry has issued Environment Clearance (EC) for 45 KLPD Molasses/ Sugarcane Juice Based Distillery and 20.5 MW Co-generation Power project videF.No. J-11011/252/2020-IA-II (I) on dated 24th November 2020. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File no- EC-1683/RON/2022-NGP/10302 dated 12th September, 2022. Action Taken Report has been submitted to IRO, MOEFCC, Nagpur dated 16th September, 2022 for partial compliances. The committee deliberated on action plan/ action taken related to two partial compliances related green belt and installation of CO2 plant. EAC found the action plan submitted satisfactory.

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

Total plant area after expansion will be 36.92 Ha which is under possession of the company and converted to industrial use. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 9.8 Hectares i.e., 26.5 % of the total plant area has already been developed as greenbelt & plantation and

the same will be maintained and remaining 3.12 ha area green belt development is in progress. The estimated project cost is Rs.69.39 Crores. Capital cost of EMP would be Rs. 20.85 Crores and recurring cost for EMP would be Rs. 0.93 Crores per annum. Industry proposes to allocate Rs 0.70 Cr towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 80 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. present within 10km distance. No Reserve forests/protected forests present within 10km distance. Water bodies Canal is at a distance of 0.53 km in SE direction. River Godavari is at a distance of 13 km. in S Direction and River Purna is at a distance of 17.5km in NE direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.79 $\mu g/m^3$, 1.23 $\mu g/m^3$, 4.60 $\mu g/m^3$ and 1.59 $\mu g/m^3$ with respect to PM₁₀, PM2.5 SO2 & NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total freshwater requirement after expansion will be 1166 m³/day (for Sugar & cogeneration 205 and for distillery 921 m³/day & Domestic 40 M3/day) which will be met from Own Rain water Harvesting Pond of total capacity 180000 Cum. Existing effluent generation is 170 m3/day from sugar mill, is treated in Sugar ETP having capacity 400 m3/day. Effluent generation 346 m3/day from 45 KLPD distillery using C- Molasses which is treated in Condensing Polishing Unit (400 CMD Capacity). Proposed effluent generation will be 817 M3/day and 648 M3/day from distillery using C Molasses and Bheavy molasses as raw Material respectively which will be treated through upgraded Condensing Polishing Unit (900 CMD capacity)

Existing 45 KLPD distillery: In molasses-based operation, spent wash generated from the analyzer column during distillation is treated through bio methanation followed concentrated in Multi Effect Evaporator and concentrated spent wash is treated through bio-composting and bio-compost will be sold to farmers in packed form.

Expansion 105 KLPD distillery: In molasses-based operation, spent wash generated from the analyzer column during distillation will be concentrated

in Multi Effect Evaporator and concentrated spent wash will be converted into powder form by spray dryer (ATFD) technology.

The plant will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 7.8 MW which will be sourced from existing 20.5 MW co-generation power plant. Existing co-gen plant has three no. of bagasse fired boilers of capacity 32TPH X 2 Nos. each and 55 TPH x 1 No. APCE as Wet Scrubber with a stack of height of 45 m and 65 meter are already installed with the existing 32TPH X 2 Nos. each and 55 TPH x 1 No boilers for controlling the particulate emissions within the statutory limit of 150 mg/Nm3. Industry has existing 500 KVA DG set which is used as standby during power failure and stack height (11 m) is provided as per CPCB norms.

Details of Process emissions generation and its management:

- APCE as Wet Scrubber with a stack height of 45 m is installed to the existing two boilers of capacity 32 TPH each for controlling the particulate emissions within the statutory limit of 150 mg/Nm3.
- APCE as Wet Scrubber with a stack of height of 65 m is installed to the 55 TPH boiler to control the particulate emissions within the statutory limit of 150 mg/Nm3.
- Online Continuous Emission Monitoring System is in place and data is transmitted to CPCB/SPCB servers. Same practices will be followed after expansion also.
- CO₂ (158TPD) generated during the fermentation process will be bottled in CO₂ bottling plant and sold to beverage industries.

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

- Concentrated spent wash (108 m3/day) from existing 45 KLPD is being converted to bio-compost and used as manure.
- Concentrated spent wash (252 m3/day based on C- Molasses, 190 m3/day B- heavy molasses & 40 m3/day based on Syrup) generated from expansion of distillery by 105 KLPD will be forwarded to spray

dryer to form spent wash powder. It will be used as fertilizers.

- Total Boiler ash (10 TPD) after expansion of distillery will be given to brick manufacturing/ cement manufacturing industries.
- CPU sludge (2.2 TPD) will be used as manure.
- Yeast Sludge (14 TPD) and 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 45 KLPD to 150 KLPD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

S r.		Specif Budget in (Rs lakh)			Time line for	Responsib
N O	Attribute	Meas ure	Capit al	Recurri ng	1/5 Implem ent	ility
1.	AirEmissioncontrol	CO ₂ Pla nt	700	10.0	Install before operatio n (12 Month) Shall be complete d during construct ion phase	Managing Director, Distillery Manager and Environme nt Officer
2.	Water & Wastewater	MEE	480	20.00	Install	Managing
	management	CPU	120	25.0	before	Director,
		Dryer	600	20.0	operation (12) Month) Shall be completed during construction phase	Distillery Manager and Environme nt Officer
3.	SolidWasteManagement		10.0	5.0	Install before operatio n (12 Month)	Distillery Manager and Environme nt Officer
4.	GreenBeltDevelopment		75.00	2.0	-	Industry
5.	Environment Monitoring (stack, Ambient Air, Water and Soilan		-	5.0	-	Industry/ NABL or

S r. N o	Attribute	Specif ic Meas ure		t in (Rs kh) Recurri ng	Time line for 1/5 Implem ent	Responsib ility
	dNoise)and meteorology					MOEF lab
6.	RainWaterHarvesting		30.0	2.0	Install before operatio n shall be complete d during construct ion phase	Industry
7.	Occupational Health&Safety		50.00	2.0	•	Industry
8.	OnlineMonitoringSystem		10.0	2.0	Install before operatio n	Industry
	Total		2085. 00	93.00		

Details of CER with proposed activities and budgetary allocation:

Sr. No.	CER activity	Total (Rs. Lacs)
	Drinking water facility to ZP	15.00
1	schools in ithalapur Deshmukh,	
_	Tadpangari, Amdapur, Taroda,	
	Lohgaon, Singnapur villages	
	Infrastructure to ZP schools of	35.00
2	Amdapur, Taroda, Lohgaon,	
	Singnapur villages	
	Solar street lamp in Amdapur,	20.00
3	Taroda, Lohgaon, Singnapur	
	villaegs	
	Total	Rs. 70.00 Lakhs

During deliberations, EAC discussed following issues:

- As suggested by EAC, PP committed that existing biocomposting practised shall be abandoned within 2 years of issuance of EC.
- As suggested by EAC, PP committed that existing wet scrubber shall be replaced by ESP.

- PP informed that Industry will develop green belt on 13.81 ha land (37.40 % of total land) of which Industry has already developed green belt on 9.8 ha area with 18830 number of plants. Out of total number, industry planted 500 Nos of *Cocos nucifera*& 300 Nos of *Polyalthia longifolia*. As suggested EAC, PP committed that they will plant additional 800 Number of endemic plants and will develop green belt with total 35630 Number of plants. (Existing: 18830 Plant and additional 16800 plants).
- It was alo noted that a canal is flowing at distance of 0.53 km in SE direction. Therefore, the committee suggested PP to obtain NOC from irrigation department. However, PP has not submitted the copy of NOC from the irrigation department for the canal. The Committee suggested that PP shall submit NOC from irrigation Department for the canal.

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

Agenda No. 06

Establishment of distillery plant of capacity - 150 KLD (Grain based) along with Co-Gen Power of 4.0 MW located at Khasra No. - 349, 348, 358, 356, 365, 368, 370, 375, 375, 374, 386. 381, 382, 378, 394, 297, 303, 307, 311, 312, 373, 371, 319, 323, 322, 318, 314, 313, village: Kukuwal, Tehsil: Nurpur Bedi, District: Ropar, State: Punjab by M/s. Agrimax Distillery Limited- Consideration of Environmental Clearance.

[IA/PB/IND2/424077/2023, IA-J-11011/152/2023-IA-II(I)]

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 environmental clearance to the project for 150 KLPD Grain based Ethanol Plant & 4.0 MW Co-generation power plant (fuel to be used: Biomass & Paddy Straw) located at Khasra No. - 349, 348, 358, 356, 365, 368, 370,

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375, 375, 374, 386. 381, 382, 378, 394, 297, 303, 307, 311, 312, 373, 371, 319, 323, 322, 318, 314, 313, village: Kukuwal, Tehsil: Nurpur Bedi, District: Ropar, State: Punjab by M/s. Agrimax Distillery Limited.

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product / by- product	Production capacity
1	Distillery (Grain- Broken	Ethanol	150 KLPD
	Rice, Jwar, Sorghum,		
	Bajra, Maize, etc.)		
2	Co-generation power	Power	4.0 MW
	plant		
3	DWGS dryer	DDGS	88 TPD
4	Fermentation unit	Carbon di-oxide	108 TPD

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

Total land area required is 11.39 hectares. Greenbelt will be developed in total area of 3.76 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 212.44 Crores. Capital cost of EMP would be Rs. 32.15 Crores and recurring cost for EMP would be Rs. 2.80 Crores per annum. Industry proposes to allocate Rs. 3.18 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 125 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. No Reserve Forest within 10 km radius. Water bodies: Soan River is at a distance of 4.33 Km in North East direction.

AAQ modelling study for point source emissions indicates that the maximum incrementalGLCs after the proposed project would be 0.98 $\mu g/m^3$, 0.65 $\mu g/m^3$, 0.89 $\mu g/m^3$ and 0.65 $\mu g/m^3$ with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 600 KLD, which will be met from Ground Water. NOC has been obtained by Punjab Water Regulation and development Authority (PWRDA) vide letter no. PWRDA/01/2022/L3/303, dated 19.01.2022 and validity 3 Years. Effluent (Condensate/spent lees/blowdown etc.) of 662 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1000 KLD. Raw stillage (960 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS.STP of capacity 20 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 2.85 MW and will be met from proposed 4.0 MW cogenerationpower plant/state grid. 32 TPH Rice Husk / Biomass fired boiler will be installed. APCE ESP (Electrostatic Precipitator) with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 1 No of 1000 kVA DG set will be used as standby during power failure and stack height (6.3 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 55 meters will be installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.

• CO₂ (108 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (88 TPD) will be sold as cattle feed / fish feed /prawn feed.
- Boiler ash (16 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil: 1 KL per annum will be sold to authorized recyclers.
- CPU sludge 1.2 TPD will be used as manure.

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

Total land of 11.39 Hectares is under possession of the company and as per order of Government of Punjab vide letter no: PS/PSHUD206 dated 12.11.2021, "with a view to facilitate setting up of industry in the state of Punjab, there shall be no requirement for CLU for setting up standalone industries". EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

Sr. No	Particulars	Capital Cost	Recurring Cost / annum
1	Air Pollution Control Equipment (APC) in the form of ESP and Stack, Online monitoring equipment.	200	20
2	Water Pollution Control	650	80
3	Noise Pollution Control	50	5
4	Environmental Monitoring and Management	6	5
5	Occupational Health	50	10

6	Greenbelt / Plantation	67	10
7	MEE, Decanter, mixer & dryer	2167	145
8	Others	25	5
	Total	3215 Lakh	280 Lakh

Details of CER with proposed activities and budgetary allocation:

SI. No.	Proposed activity	Proposed Budget Time line: Before commissioning of the plant
1	Training & Skill Development of local	
	youths in Kukowal, Kalwal Khas, Nalhoti etc	15
2	Repair of School Buildings in village	110
	Kalwal Khas, Nalhoti etc	
3	Solar light distribution in village Kalwal	100
	Khas, Nalhoti etc	100
4	Plantation in nearby villages like Kalwal	93
	Khas, Nalhoti etc	93
	Grand Total	318

During deliberations, EAC discussed following issues:

- The committee suggested that no existing tree in the proposed site shall be cut.
- The committee suggested that PP shall develop at least 20 variety of species as a part of greenbelt. Accordingly, PP has submitted 25 species list that shall be planted as part of green belt.
- PP informed that 10 m width green belt will be provided all around the project boundary.
- PP informed that coal will not be used.
- Capacity of Ethanol storage shall not exceed 7 days.
- PP shall allocate Rs. 50 Lakhs as capital cost of OHS.
- Additional green belt of 15 m width shall be provided towards Kukuwal village.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in Page 181 of 292

writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from 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 shall obtain such permission.
- (v). Total Fresh water requirement shall not exceed 600 m³/daywhich will be met from Ground Water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent Wash/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) followed by Ultra filtration and RO. STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

- (vii). APCE ESP (5 field)with 55 meters high stackshall be installed with the Rice Husk/Biomass fired 32 TPH boiler for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (16 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure. PP shall use Rice Husk/Biomass as fuel for the proposed boiler. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
 - (ix). CO₂ (108 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.
 - (x). PP shall allocate at least Rs. 0.5 Crore for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
 - (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 10 m width shall be developed in nearly 3.76hectares 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. Additional green belt of 15 m width shall be provided towards kukuwal village.
- (xvi). PP proposed to allocate Rs. 3.18 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

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

Agenda No. 07

Proposed Capacity 200 KLPD New Distillery along with Expansion of Sugar from 3500 TCD to 10000 TCD & Cogeneration from 20 MW to 50 MW, at survey no. 407, Devinagar Tanda, Taluka- Sonpeth, and

Dist. Parbhani -Maharashtra by M/s. Twentyone Sugars Ltd (Unit II)- Consideration of Environmental Clearance.

[IA/MH/IND2/425070/2023, IA-J11011/472/2022-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. Sd engineering services pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0166 and validity Aug. 12 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for Proposed Capacity 200 KLPD New Distillery along with Expansion of Sugar from 3500 TCD to 10000 TCD & Cogeneration from 20 MW to 50 MW located at survey no. 407, Devinagar Tanda, Taluka- Sonpeth, and Dist. Parbhani –Maharashtra by M/s. Twentyone Sugars Ltd (Unit II).

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

The details of products and capacity as under:

Sr.	Industrial Unit	Product / By-Product	Quant	ity (Capad	city)
No	industrial Offic	Product / By-Product	Existing	Proposed	Total
1	Sugar Unit	Tons Sugarcane Crushing per day (TCD)	3500	6500	10000
а	Product	Sugar (MT/M)	12075	22425	34500
		Molasses (MT/M)	4200	7800	12000
b		Syrup (MT/M)	0	48750	48750
D	By - Product	Press Mud (MT/M)	4480	8320	12800
	,	Bagasse (MT/M)	32600	60540	93140
2	Cogeneration Unit	Electricity (MW)	20	30	50
3	Distillery Unit	RS/ Ethanol (KLPD)	0	200	200

Ministry has issued Environmental Clearance to the existing capacity of integrated Sugar Unit (3500 TCD), Distillery Molasses based Ethanol (30 Page 187 of 292

KLPD) and Co-generation Power Point (20 MW) vide File No. J-11011/630/2009-IA II (I) dated 5th Oct., 2010. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEF&CC, Nagpur vide File no- EC-1653/RON/2022-NGP/10035 dated 15th July, 2022. Action Taken Report has been submitted to IRO, MOEFCC dated 15th March 2023. EAC found the information satisfactory.

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/472/2022-IA-II (I); dated 22 Nov, 2022. It was informed that there is no litigation is pending against the project.

Public Hearing for the proposed project had been conducted by the Maharashtra Pollution Control Board on 15th Feb, 2023 at project site chaired by Additional District Magistrate, Parbhani, District-Parbhani and Regional officer, MPCB. The main issues raised during the public hearing and their action plan:

Issue in brief	Action plan in brief	Budget allocated and timeline
If the factory capacity is increased due to expansion what will be your strategy for sugarcane development?	Nurseries development by factoryDistribution of sugarcane seedingFarmer's guidance program with field visitsGuidance for income growth of sugarcaneArranged the expert guidance for farmer	Rs. 7 Lakhs fund for the same will be spend from CER activity and same will be done during 1 st season of sugar expansion.
What measures can factory take to revive the diminishing interest in book reading among the people?	Positive response and supportPresentation has given information about the CER fundsVarious social schemes like educational facilities, library, and playgroundVillages will be implementation	About Rs. 10.9 Lakhs CER fund will be spend within 1 year for various social schemes.

	through CSR in consultation.	
The increases in sugarcane crushing capacity up to 10000 TCD will definitely in the area. But what is the strategy of the project proponent to improve the quality of education in the factory area?	support -A grand education complex -Scheme for the workers and employees of the factory	provide computers and other educational facilities to school in the surrounding area under CER activity the

Total plant area after expansion will be 440000 sqm. 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 150996.76 sqm. i.e. 33% of the total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 437 Cr. Capital cost of EMP would be Rs. 40 Cr. and recurring cost for EMP would be Rs. 600 lakhs per annum. Industry proposes to allocate Rs. 4.5 Cr. towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 330 persons as direct & indirect.

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

Ambient air quality monitoring was carried out at 9 locations during March 2022 to May 2022 and the baseline data indicates the ranges of concentrations as: PM10 ($36.00\text{-}55.50\mu\text{g/m3}$), PM2.5 ($13.98\text{-}25.32\mu\text{g/m3}$), SO2 ($4.23\text{-}16.50\mu\text{g/m3}$) and NO2 ($9.52\text{-}23.90\mu\text{g/m3}$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $1.42\mu\text{g/m3}$, $0.36\mu\text{g/m3}$, $2.44\mu\text{g/m3}$ and $2.64\mu\text{g/m3}$ with respect to PM10, PM2.5, SO2

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

Total fresh water requirement after expansion will be 795 CMD which will be met from Godavari river/khadaka barrage. Existing Effluent generation is 327 CMD which is treated through ETP of 400 CMD capacity. Proposed effluent generation will be 389 CMD which will be treated through upgraded ETP of capacity 800 CMD (Existing ETP will be upgraded by 400 CMD). Domestic waste water will be treated in STPbased on MBBR. For Distillery, the effluent from distillery will be treated through CPU, MEE & Incineration Boiler. The plant will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of distillery/ sugar mill after expansion will be 7 MW which will be sourced from 50 MW co-generation power plant. Existing unit has 110 TPH Bagasse's fired boiler (will be upgraded to 120 TPH by modified to 10 TPH) and Proposed New 110 TPH Bagasse fired boiler will be installed. APCE ESP with a stack of height of 74 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. APCE ESP with a stack of height of 74 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. For Distillery unit, 50 TPH incineration boiler will be install with 70 m Stack height. Industry has 1010 KVA*2 DG set which will be used as standby during power failure and stack height (6 m) is be provided as per CPCB norms.

Details of Process emissions generation and its management:

 75 T/Day of CO2 will be emitted from fermentation section of Distillery. The same shall be bottled and sold to open market.

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

A. Hazardous Waste

- Spent oil (350 Kg/M) will be used as lubricant oil for bullock carts.
- Empty Barrels/ Containers (50 Nos/M) will be disposed by

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sold to authorized recyclers.

B. Non-hazardous Waste

- Boiler ash generation will be about (153.33 MT/Day) & will be sent to brick manufacturer.
- ETP and CPU Sludge (150 MT/A) will be disposed by sold as manure.
- Other solid waste like Paper waste (40 Kg/M), Plastic Waste (35 Kg/M) will be disposed by sold to scrap vendors.

Capital cost and recurring cost of EMP are given below:

Sr. No.	Description	Capital Cost (Rs. in Lakh)	Recurring Cost (Rs. in Lakh)
1	Air Pollution Control	1200	180
2	Water Pollution Control	1500	225
3	Solid waste management	50	7.5
4	Environment monitoring and Management	300	45
5	Rain water Harvesting	200	30
6	Occupational Health	400	60
7	Green Belt	350	52.5
	Total	4000	600

Details of CER with proposed activities and budgetary allocation:

Sr.No CERActivity Yes		Year(Bud	ear(BudgetaryProvisioninLakh)		
511110	•	1st	2nd	3rd	Total
	A.Improver	nentinSoci	alInfrastru	cture	
	Computer Distribution				
4	in	2.5	5	7.5	15
1	Nearby ZP School				
2	GIM Installation	22	20	15	57
	Sanitizer Distribution				
	(PPEs) Shree	5	7.5	10	22.5
_	Madhvashram Vidya	5	/.5	10	22.5
3	Mandir Khadka Camp.				
	B. Infrastructure & Development in Villages				
	Construction/	71	60	9F 6	216 6
1	Repairing/Maintenance	/ 1	60	85.6	216.6

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	<u> </u>				
	of				
	Road & Canal Repairing				
2	Blood Donation Camp	1	2	10	13
	Donation for Khelo				
3	India	4.5	40	10	54.5
	Campaign	1.9	10	10	3 1.3
	Contribution to				
	Women				
4	Bachat Gat with rural	15	20	12	47
	area				
	C. Fund Reserved for	or Public H	earing Com	nmitment	
1	Nurseries	2.5	3	2	7.5
	development	2.5	5		7.5
2	Educational	3.6	3.6	3.6	10.9
	Facilities	5.0	5.0	5.0	10.9
	Computers and				
3	other educational	2	2.5	1.5	6
	facilities				
		129.1	163.7	157.2	
	Total Budgetary allocated for next Three years 450				

During deliberations, EAC desired the following information:

- PP shall submit closure report from IRO on the non/partial compliances observed.
- Action plan for replacement of wet scrubber by ESP.
- Action with budgetary allocation shall be submitted representations raised in Public Hearing along with written representation received if any.
- Revised water balance shall be submitted after proposing air cooled condensors.
- Month wise action plan for development of green belt along with plant species and budget allocated.
- PP informed that 100 TPH shall be upgrated to 120 TPH boiler. Therefore, committee suggested to submit commitment for upgradation of ESP also to meet the particulate matter emission norms of 50 mg/Nm³.
- Sludge drying belts shall be replaced by Filter press.
- PP shall submit revised activities proposed in CER increased the budget to Rs. 5.00 Crores.

- Activities proposed in CER and Public Hearing commitments shall be completed before commissioning of the plant.
- Risk assessment for Ethanol, pipeline etc shall be submitted.
- Committment for installation of inhouse brick making plant from fly ash.
- PP shall provide traffic management plan and impact of the vehicular emissions on the ambient air quality.
- PP shall provide clarification for high values of BOD and COD observed in Ground water samples.

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

Agenda No. 08

Proposed 200 KLPD grain-based Ethanol plant (Biofuel production) and power cogeneration of 5 MW at Village Balluana, Tehsil and District Bathinda, Punjab by M/s WEWIN Biofuels - Consideration of Environmental Clearance.

[IA/PB/IND2/426537/2023, IA-J-11011/389/2022-IA-II(I)]

It has been informed to EAC by PP vide mail dated 01.05.2023 that due to unavoidable circumstances they will not be able to attend EAC meeting.

Accordingly, the proposal was deferred. Proposal will be considered as and when PP will submit request on PARIVESH portal.

Agenda No. 09

Proposed 1 x 100 KLPD Grain based Ethanol Plant with 3.0 MW Captive power plant at Survey No: 21/P, 22/P, 41/P, 42/P, 39/P Metpalle Village, Kagaznagar Mandal, Kumuram Bheem Asifabad District, Telangana by M/s. Aithanoli Cibus Products Private Limited - Consideration of Environmental Clearance.

[IA/TG/IND2/280862/2022, IA-J-11011/237/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 06-06-2023), made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed Grain based Ethanol plant, of production capacity of 1×100 KLPD under EBP programme under B2 category of grain-based Ethanol and 1×3.0 MW of Co-generation power plant, to be installed at Survey No: 21/P, 22/P, 41/P, 42/P, 39/P Metpalle Village, Kagaznagar Mandal, Kumuram Bheem Asifabad District, Telangana by M/s. Aithanoli Cibus Products Private Limited.

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

The details of products and capacity as under:

S. NO.	NAME OF UNIT	NAME OF THE PRODUCT	PRODUCTION CAPACITY	
1	Distillery plant	Ethanol	100 KLPD	
2	Power plant (Co- generation)	Electricity	3.0 MW	
	BY-PRODUCTS			
1	Distillery plant	DDGS	80 TPD	
2	Distillery plant	CO ₂ recovery	76 TPD	

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

Total land required is 8.2 Ha. (20.28 acres). Greenbelt will be developed in total area of 3.20 Ha. (7.93 acres) i.e 39% of total project area. The estimated project cost is Rs. 190.50 crores. Capital cost of EMP would be Rs. 21.8 crores and recurring cost of EMP would be Rs. 4.48 Crores per annum. Industry proposes to allocate Rs. 2.00 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 60 persons.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Elephant reserves, etc. within 10 Km radius. Movement of tiger observed within 10 Km. radius. Accordingly, conservation plan has been prepared and subsequently Principle Chief Conservator of Forests (PCCF), Govt. of Telangana has approved the Conservation Plan with a budget of Rs. 216.92 lakhs towards conservation of wildlife.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.1~\mu g/m^3$, $0.1~\mu g/m^3$, $3.6~\mu g/m^3$, and $0.6~\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_X . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 400 KLD which will be met from Surface water (Wankidi vagu) application has been submitted to State Ground Water Board for drawl of ground water vide letter dated 04-06-2022. Effluent (Condensate/spent lees/blow down etc.) of 829 m³/day quantity will be treated through Condensate Polishing Unit of capacity 900 KLPD. Raw stillage (600 KLPD quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 3.0 MW and will be met from the proposed 1 x 3.0 MW cogeneration power plant. 1 x 30 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator (5-field) with a stack height of 48 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm 3 for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets

Details of Process emissions generation and its management:

- APCE ESP (5-field) with a stack height of 48 meters will be provided to boiler for effective dispersion of sulphur dioxide emission into the atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (76 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (80 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (55.2 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.9 TPD) and STP Sludge (0.4 Kg/day) will be used as manure.

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

Total land of 8.2 Ha. (20.28 acres) is under possession of the company and land use conversion has been completed vide letter no. 2200499159 dated 19-05-2022 issued by Revenue Department, Government of Telangana. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

S.NO ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
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1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	4.2	0.6
2.	Ash handling & management	0.9	0.3
3.	Effluent Treatment Plant	12.0	3.0
4.	Fire fighting	1.8	0.3
5.	online monitoring equipment (CEMS & OEMS)	1.0	0.02
6.	Greenbelt development	0.4	0.2
7.	Occupational Health & Safety	1.5	0.06
	TOTAL	21.8	4.48

Details of CER with proposed activities and budgetary allocation:

S.NO.	Proposed Activity	Proposed Budget (RS. In Crores)
1	Community & Infrastructure Development Such as Road strengthening of village roads in Metpalle village, Tattigudem village, Marrigudem village & Kanargaon village	0.30
2	for Health & Hygiene of the community (Portable Water plants, construction toilets in Metpalle village, Tattigudem village, Marrigudem village & Kanargaon village)	0.40
3	Skill Development A Community Centre will be established in Metpalle village which will consist of the following: i) Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready. ii) Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii) Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	1.00

4	for Education & Sports	
	(Construction of class rooms in schools, providing	
	computers in class rooms, development of library	
	facility in Metpalle village, Tattigudem village,	0.30
	Marrigudem village & Kanargaon village)	0.30
	Total	2.00

During deliberations, EAC discussed following issues:

- PP shall only use surface water (Wankidi vagu) for construction and operations of distillery. PP shall not extract ground for construction/opertaions of the plant.
- PP committed that that minimum of 30 m wide greenbelt will be developed on the North side of the Project site and 20 m wide on the East side of the Project site.
- PP informed that 7930 no.s of indigenous plant species shall be planted as a part of Greenbelt development.
- Capacity of ethanol storage tanks shall not exceed 7 days.

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

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

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from Surface water (Wankidi vagu) 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 shall obtain such permission. No ground water shall be used for the plant operations.
- (v). Total Fresh water requirement shall not exceed 400m³/daywhich will be met from surface water (Wankidi vagu). No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). APCE ESP (5 field) with48 meters high stackshall be installed with the Biomass/Coal (with 15% coal usage as auxiliary fuel) fired30 TPH boiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³. SO₂ and NOx emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

- (viii). Boiler ash (55.2 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers. PP shall use Biomass/Coal (for startup only) as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
 - (ix). CO₂ generated (76 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.
 - (x). PP shall allocate at least Rs. 1.5 Crore for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
 - (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 10 m width shall be developed in nearly 3.20 Page 201 of 292

Ha. i.e 39% 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 plant saplings 4-6 feet high of atleast 20 variety of species as part of greenbelt development. 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. PP shall develop 30 m wide greenbelt on the North side and 20 m wide on the East side of the Project site. Additional 9.0m wide Green belt shall be developed along the canal as per the conditions stipulated in the NOC of irrigation department.

- (xvi). PP proposed to allocate Rs. 2.00 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xviii). PP shall maintain the village road connecting plant to the main road/highway.
 - (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 sixmonthly compliance report being submitted to concerned authority.

04thMay, 2023 (Thursday)

Agenda No. 01

Proposed 1 x 150 KLPD Grain based Ethanol Plant with 1 x 5.0 MW Cogeneration power plantat Survey No.s: 228 & 723 Mallavalli Village, Bapulapadu Mandal, Krishna District, Andhra Pradesh by M/s. Nithin Sai Constructions Private Limited - Consideration of Environmental Clearance.

[IA/AP/IND2/423563/2023, IA-J-11011/141/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid up to 06-06-2023) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed Grain based Ethanol plant, of production capacity of 1 x 150 KLPD under EBP programme under B2 category of grain-based Fuel Ethanol and 1 x 5.0 MW of captive power plant, to be installed at Survey No: 228 & 723 Mallavalli Village, Bapulapadu Mandal, Krishna District, Andhra Pradesh by M/s. Nithin Sai Constructions Private Limited.

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

The details of products and capacity as under:

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

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

Total land required is 8.24 Ha. (20.38 acres). Greenbelt will be developed in total area of 3.08 Ha. (7.62 acres) i.e 37.37% of total project area. The estimated project cost is Rs. 184.95 Crores. Capital cost of EMP would be Rs. 23.9 crores and recurring cost of EMP would be Rs. 5.0 Crores per annum.

Industry proposes to allocate Rs. 3.0 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 100 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Reserve Katrenpadu RF is located at a distance of 9 Km. Polavaram Right Canal is located at a distance of 3.1 kms. Eluru canal is at a distance of 8.1 km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.68 $\mu g/m^3$, 0.68 $\mu g/m^3$, 2.28 $\mu g/m^3$, and 2.28 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_X . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 600 KLD which will be met from Surface water. Application has been submitted to Superintendent Engineer Irrigation Department, Govt. of Andhra Pradesh for drawing water from Polavaram Right canal vide letter dated 09-12-2022. (Condensate/spent lees/blow down etc.) of 1244 KLPD quantity will be treated through Condensate Polishing Unit of capacity 1250 KLPD. Raw stillage (900 KLPD quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 10 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 4.0 MW and will be met from the proposed 1 x 4.0 MW co-generation power plant. 1 x 40 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator (5-field) with a stack height of 52 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm 3 for the proposed boiler. 2 x 1000 KVA DG sets will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

 APCE ESP (5-field) with a stack height of 52 meters will be provided to boiler for effective dispersion of sulphur dioxide emission into the Page 205 of 292

- atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (114 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (120 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (73.6 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.25 TPD) and STP Sludge (0.8 Kg/day) will be used as manure.

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

Total land of 8.24 Ha. (20.38 acres) is taken on lease and land use conversion application has been submitted Revenue Department, Andhra Pradesh dated 15-09-2022 & 03-04-2023. EAC found the information satisfactory.

<u>Capital cost and recurring cost of EMP are given below:</u>

S.NO	ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	4.5	0.8
2.	Ash handling & management	1.0	0.3

3.	Effluent Treatment Plant	13.0	3.0
4.	Fire fighting	2.0	0.3
5.	online monitoring equipment (CEMS & OEMS)	1.0	0.3
6.	Greenbelt development	0.4	0.2
7.	Occupational Health & Safety	2.0	0.1
	TOTAL		5.0

During deliberations, EAC discussed following issues:

Committee noted that main proposal submitted establishment of 150 KLPD grain based ethanol plant alongwith 5 MW cogeneration Power Plant. Further, PP vide EDS reply dated 19.04.2023 clarified that they will go for 4 MW cogeneration Power Plant instead of 5 MW. However, during presentation, the Consultant informed that they will now go for 5 MW Cogeneration Power Plant only and they will use 85% biomass & 15 % coal on annual basis as fuels in boiler pertaining to power plant. The Committee suggested that as per EIA Notification, 2006 as amended from time to time, 15 % coal can be used as auxiliary fuel in the biomass based boiler. The Committee was unhappy with response of the environmental consultant namely Pioneer Enviro Laboratories and Consultants Private Limited w.r.t information furnished on the parivesh portal. Accordingly, the Committee recommended that Ministry should issue warning letter to the Environmental Consultant for uploading wrong information w.r.t. capacity of cogeneration power plant on the parivesh portal and tried to mislead the Committee about usage of 15% coal on annual basis instead of use of coal as an auxiliary fuel.

- PP informed that Shri S S V Prasad, Village Revenue Officer, Mallavali, Revenue Department, Government of Andhra Pradesh vide leter no. Nil dated 4.05.2023 has issued NOC for establishment of the ethanol plant. Revenue Officer confirmed that width of the approach road to the sy. No 228 and 723 is 10 m.
- PP has submitted revised the fund earmarked for CER, which is as given below:

DETAILED ACTIVITY WISE EXPENDITURE TO BE INCURRED IN A SPAN OF 1 YEAR

S.NO.	MAJOR ACTIVITY HEADS	TOTAL EXPENDITURE (Rs. In Crores)
1.	Laying of approach road from the main road to the proposed project site consisting of length 1000 m and width of 10 m.	1.0
2.	Health & Hygiene of the community (Potable Water plants (8 nos.), construction toilets (12 nos.) in Mallavalli village, Remalle village, Mirzapuram village &Singanagudem village)	0.50
3.	Skill Development A Community Centre will be established in Mallavalli village which will consist of the following: i)Vocational Training Institute with latest tools, machinery &softwares etc. for making them Industry ready. ii)Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii)Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	1.20
4.	Education & Sports (Construction of class rooms in schools, providing computers in class rooms, development of library facility in Mallavalli village, Remalle village, Mirzapuram village &Singanagudem village)	0.30
	Total	3.00

- PP informed that a pucca approach road (Panchayat road) of 10 m width and 1000 m length will be constructed The road will be maintained by the company only.
- PP informed that they will plant 7630 nos. of indigenous species as greenbelt within the premises.
- PP informed that 15% of the total power requirement will be met through Solar energy
- PP confirmed that ethanol storage will be restricted to 7 days storage. and 2 nos of ethanol storage tanks each of 525 KL capacity shall be provided.
- PP confirmedto provide Filter press instead of sludge drying beds in the

ETP proposed.

- PP confirmed that there will be not be any bulk storage of chlorine and chlorine tonner (1 no.) will be stored in secured place duly complying with all precautions.
- PP confirmed that Rain water harvesting will be for 60 days.
- PP confirmed that EHS will report to the Managing Director directly.
- PP confirmed that Fly ash brick manufacturing plant will be established within the plant premises for effective ash management.

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from Surface Water. 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 obtain such permission. No ground water shall be used for the plant operations.

- (v). Total Fresh water requirement shall not exceed600 m³/daywhich will be met from Polavaram Right canal. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent Wash/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., shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). APCE ESP (5 field) with 52 meters high stack shall be installed with the Biomass/Coal (with 15% coal usage as auxiliary fuel) fired 40 TPH boiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³. SO₂ and NOx emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (73.6 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure. PP shall use Biomass/Coal (for startup only) as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
 - (ix). CO₂ generated (114 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

- (x). PP shall allocate at least Rs. 1.5 Crore for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 3.08 hectares i.e., 37.37 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery before 31st December 2024. 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 plant saplings 4-6 feet high of atleast 20 variety of species as part of greenbelt development. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

Greenbelt development shall be completed before commissioning of the plant.

- (xvi). PP proposed to allocate Rs. 3.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
 - (xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
 - (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.

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

Agenda No. 02

Proposed 60.0 KLPD Grain based Distillery to produce Ethanol for EBP Programme and 1.8 MW Co-generation power plant at Survey No. 267, 271, 272, 273 & 342 of Village Govada, Tehsil Chodavaram, District Anakapalli, State Andhra Pradesh by M/s. The Chodavaram Co-Operative Sugars Limited (Distillery Division)- Consideration of Environmental Clearance.

[IA/AP/IND2/421646/2023, IA-J-11011/105/2023-IA-II(I)]

The Project Proponent and the accredited Consultant SV Enviro Labs & Consultants (NABET certificate no. NABET/EIA/2124/RA 0240 and validity 24.10.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for establishment of 60.0 KLPD Grain based Distillery to produce Ethanol for EBP Programme and 1.8 MW Co-generation power plant at Survey No. 267, 271, 272, 273 & 342 of Village Govada, Tehsil Chodavaram, District Anakapalli, State Andhra Pradesh by M/s. The Chodavaram Co-Operative Sugars Limited (Distillery Division).

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

THE CHODAVARAM CO-OPERATIVE SUGARS LIMITED is an existing sugar plant established in the year 1962 under Co-operative society at Govada Village, Chodavaram mandal, Anakapalli District in an area of 43.11 Acres. The plant having Crushing Capacity of 4000 TCD, 400 TPD Sugar and power generation of 14 MW. Initially sugar plant established with crushing capacity of 1000 TCD, has been in expanded in stages to 4000 TCD (as per EIA notification do not require EC) and the industry is operating with valid CFO vide order no. APPCB/VSP/59/CFO/HO/1962 Dated: 16.12.2022 valid up to 31.12.2024. The proposed 60.0 KLPD distillery will be established adjacent to the existing sugar unit of TCCSL with Grain as raw material.

The details of products and capacity as under:

S. No.	Name of the unit	Name of the product/ by-product	Production Capacity
1.	Distillery (Grain as Raw material)	Ethanol	60.0 KLPD
2.	Co-generation power plant	Power	1.8 MW
3.	DWGS Drier	DDGS	31.0 TPD
4.	Fermentation Unit	Carbon di-oxide	47.0 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project. the industry is operating with valid CFO vide order no. APPCB/VSP/59/CFO/HO/1962 Dated: 16.12.2022 valid up to 31.12.2024.

Total land area required is 2.23 hectares. Greenbelt will be developed in total area of 0.76 hectares i.e., 34.0% of total project area. The estimated project cost is Rs. 80.0 Crores. Capital cost of EMP would be Rs. 11.88 Crores and recurring cost for EMP would be Rs. 1.23 Crores per annum. Industry proposes to allocate Rs. 80.0 Lakhs towards Extended EMP (CER activities). Total Employment will be 150 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Potukonda RF at 4.85 km due SE and Nallakonda RF at 4.00 km due NE are

located at a distance of 10 km. Water bodies such as Sarada River is at a distance of 51.70 meters due West direction for which HFL & RL of the river and project site were certified vide Lr. No. 305 M/DB/AEE 4/ File No. E/9E/Vol.60 Dated: 19.04.2023 by the Executive Engineer Water Resources Department, Visakhapatnam Division, Andhra Pradesh. Water resources Department informed that HFL of the Sarda River is 96.7 m. RL of proposed project site is 97.5 m.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 80.62 $\mu g/m^3$, 18.37 $\mu g/m^3$, 17.46 $\mu g/m^3$ with respect to PM10, SO₂ and NO_x (Base line Concentrations for PM – 79.40 $\mu g/m^3$, SO₂ – 16.65 $\mu g/m^3$ & NO_x – 15.25 $\mu g/m^3$ were taken from the secondary sources). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement will be 1058 m³/day (Fresh Water – 235 m³/day & Recycled Water – 823 m³/day) which will be met from Ground Water through Bore Wells. NOC issues for abstraction of 500 KLD of water from the office of Ground Water & Water Audit department Vijayawada vide Lr. No. 1257/Hg-II/2023, Dated: 09.03.2023. Effluent (MEE condensate/Spent lees/Cooling tower blow downs/Boiler blow downs/ Domestic) of 325 m³/day will be treated through Condensate Polishing Unit of capacity 350 m³/day. Spent Wash of 328 m³/day from distillation will be sent to decanter followed by MEE & dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement during the operation phase will be 1.8 MW and will be met from cogeneration power plant (Captive Source). During the construction phase the power will be met through Andhra Pradesh State Power Distribution Corporation Limited (APSPDCL) for the same necessary permissions will be obtained. A 18.0 TPH (Rice Husk/Coal) fired boiler will be installed with Electro Static Precipitator as APCE with a stack height of 40 m for controlling the particulate emissions within the statutory limit of 30 mg/Nm 3 for the proposed boiler. A 1 x 500 KVA DG set will be used as standby during power failure with stack height (7 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE Electro Static Precipitator with a stack height of 40 meters is installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (47.0 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant

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

- DDGS (Distilled Dried Grains Stillage) (31.0 TPD) will be sold as cattle feed/ fish feed /Prawn feed.
- Fly ash (12.0 TPD) will be supplied to brick manufacturers.
- Used oil (0.3 Kilolitres per annum) will be sold to authorized recyclers. The CPU rejects will be returned back to MEE for further treatment.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 60 KLPD will be used for manufacturing fuel ethanol only.

Total land of 2.23 Hectares is under possession of M/s. The Chodavaram Cooperative Sugars Limited. EAC found the information satisfactory.

<u>Capital cost and recurring cost of EMP are given below:</u>

S. No.	Description	Capital Cost in Lakhs	Recurring Cost in Lakhs/Annum
1.	Air Pollution		
	Pollution Control Equipment for 18 TPH Boiler (ESP & Stack height – 40 meters)	170	10.0
	Dust Suppression		2.0
	OCEMS	10.0	3.0
2.	Water Pollution		
	RWH water harvesting pond along	10.0	2.0

	with collection pits		
	CPU, MEE & RO	900.0	80.0
3.	Noise Pollution		
	PPE (Ear Plugs, Ear muffs, Insulations, Barriers)	30.0	3.0
4.	DWGS Handling, DDGS Drying, Handling, Storage, weighing bagging etc,	40.0	5.0
5.	Environmental Monitoring & Manageme	ent	
	Ambient Air, Stack, Noise, Soil, Water & Waste Water etc,		8.0
6.	Landscaping/Green Belt Development		
	Plantation	8.0	2.0
7.	Occupational Health & Safety		
	Annual health Check-up, OHC, Fire Fighting	20.0	8.0
	Total	1188.0	123.0

<u>Details of extended EMP (CER) with proposed activities and budgetary allocation:</u>

S. No.	S. No. Activity	
1.	Upgradation of drinking water facilities by installation of water purifiers in Amberupuram Village	15.0
2.	Plantation on the Village roads	15.0
3.	Provision of fund for upgradation to digital classrooms in ZP School at Govada Village	10.0
4.	Solar street lighting system along the roads of Amberupuram village	15.0
5.	To support the public health centers with Infrastructural facilities	15.0
6.	6. Skill Development centers for youth Organizing training programs for youth/residents	
	Total	80.0

During deliberations, EAC discussed following issues:

 As per OM dated 8.06.2022, Self-certified Compliance Report for the latest CTO shall be sufficient if the project proponent applies for expansion within a period of one year from the grant/renewal of CTO. If such application is submitted beyond the period of one year from the grant/renewal of CTO, CCR shall be required for the latest CTO. Accordingly, PP informed that they have valid CTO dated 16.12.2022, which is valid till 2024. However, PP has not submitted self certified compliance report of latest CTO dated 16.12.2022. The Comittee suggested that the Unit shall submit self certified compliance report of the existing CTO dated 16.12.2022.

- The Committee suggested that PP shall recycled/reused treated effluent of sugar unit for the proposed distillery and reduce the fresh water requirement of proposed distillery unit. Accordingly, it was sugested that PP shall revise the water balance of distillery unit for sugar cane crushing period and off season. PP has submitted revised water balance, which indicates that during sugar crushing period, fresh water reuirment for proposed distillery will be 10KLD and during off season, fresh water reuirment for proposed distillery will be 235 KLD.
- PP committed that they will establish in-house brick manufacturing unit.
- CPU sludge fromthw proposed project will be mixed with press mud and suppkied to can growers for their land to use as fertilizers.
- PP informed that due to the proposed project a total of 18 existing tree will be cleared from the proposed project site. EAC asked the PP to review the layout, so that cutting of trees is not imperative.
- PP informed that 15 % of power requirement will be generated from soalr power.
- The PP to revise EMP coast and CER budget. Accordingly, PP has increased the EMP cost from Rs. 1188 Crore to Rs. 1203 Crore. Budget of CER has been increased from Rs. 80 Crore to Rs. 100 Crore.
- PP informed that 3 nos. @ 65 KL equal to 195 KL will be installed, which is less than 7 days storage capacity.

The Comittee suggested that the Unit shall submit self certified compliance report of the existing CTO dated 16.12.2022 as per Ministry's OM 8.06.2022 for further consideration.

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

Agenda No. 03

Proposed 250 KLPD Grain based distillery along with Rice husk/biomass briquette based 6.5 MW Cogeneration Power Plant at Vill. Bachupaal Thurkapally, and Suraram, in Tehsil Ramannapet of Yadadri Bhuvanagiri District in Telangana State by M/s. Ethoforge Pvt.Limited- Consideration of Environmental Clearance.

[IA/TG/IND2/426385/2023, IA-J-11011/182/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Paramarsh ServicingEnvironment and Development, Lucknow, (NABET Certificate No. NABET/EIA/2124/RA0224 and validity 01st May.'2024) made a detailed presentation on the salient features ofthe project and informed that the proposal is for environmental clearance to the project250 KLPD Grain Based Ethanol Plant and 6.5 MW Cogeneration Power Plant (Fuel to beuse Rice Husk / Biomass Briquette and coal upto 15% will be used as auxiliary fuel) located near Vill. Bachupaal Thurkapally, and Suraram, in Tehsil Ramannapet of YadadriBhuvanagiri District in Telangana State by M/s. Ethoforge Pvt. Limited.

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

The details of products and capacity as under:

S. No.	Name of the unit	Name of product/by-product	the	Production Capacity
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1.	Distillery (Broken Rice / Maize raw material)	Ethanol	250 KLPD
2.	Co-generation power plant	Power	6.5 MW
3.	DDGS Drier	DDGS	200 TPD
4.	Fermentation Unit	Carbon di-oxide	190 TPD

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

Total land area required is 8.7156 Hectares. Greenbelt will be developed in total area of 2.88 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 200 Crores. Capital cost of EMP would be Rs. 18 Crores and recurring cost for EMP would be Rs. 6.6 Crores per annum. Industry proposes to allocate Rs. 3.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 70 persons as direct &indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. There are no Reserve forests/protected forests within 10 km. radius. Water bodies: River Musi is at a distance of 0.85 km in NE direction. Irrigation & CAD Deptt, Govt of Telengana vide letter no EE (I) TNCG/NOC/8 dated 8.04.2023 has mentioned that proposed site is not located within flood plain.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.1 μ g/m³, 0.7 μ g/m³, 0.5 μ g/m³ and 1.0 μ g/m³with respect to PM₁₀, PM_{2.5}, SO₂ and NO_X. The resultant concentrations are within theNational Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1020 m³/day which will be met from proposed Borewells within premises and River Musi. Application has been submitted to Ground Water Deptt. Govt of Telangana vide Letter No. EPL/23/GWD/WA Dt: 12.04.2023 & Irrigation and CAD Deptt., Govt. of Telangana vide Letter Dt: 17.04.2023. Effluent(Condensate/spent m³/day etc.) 779 lees/blowdown of quantity will be treated throughCondensate Polishing Unit/Effluent Treatment Plant of capacity 1200 m³/day. Raw stillage(1980 KLPD:quantity of raw spent wash from distillation) will be sent to decanter followedby MEE and dryer to produce Page 221 of 292

DDGS. STP of capacity 25 KLPD will be installed to treatsewage generated from factory premises. The plant will be based on Zero Liquiddischarge system and no effluent/treated water will be discharged outside factorypremises.

Power requirement will be 6.25 MW and will be met from proposed 6.5 MW cogeneration power plant. 60 TPH Rice husk/briquette fired boiler (Coal upto 15% will be used as auxiliary fuel) will be installed. APCE ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for theproposed boiler. 2 Nos. 1000 kVA and 1 No. 500 kVA DG set will be used as standbyduring power failure and stack height (3.5 m. above roof of the building) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP with a stack height of 60 meters will be installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (190 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (200 TPD) will be sold as cattle feed / fishfeed / prawn feed.
- Boiler ash (85 TPD) will be supplied to fly ash brick manufacturers.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.1 TPD) and STP Sludge (0.025 TPD) will be used as manure.

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

Total land of 8.7156 Hectares is under possession of the company and land

use conversion for use of land for industrial purposes has been done by Office of Revenue Divisional Officer, Bhongir Division, Yadadri Bhuvanagiri District, Telangana dated 19.11.2018. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

Particulars Amount in INF Lakhs		
One Time Installation Cost		
1. Air Pollution Control System	250.0	
2. MEE, CPU & DWGS Dryer System	390.0	
3. Installation of Tertiary Water Treatment Plant	50.0	
4. Solid waste such as Garbage, process and ETP storage and odor management system	35.0	
5. Green Belt Development	40.0	
6. Installation of Fire Safety System	75.0	
7. Installation of Solar Power System	70.0	
8. Rain Water Harvesting System	40.0	
Total	950.0	
Recurring Cost / Annum		
1. Environmental Monitoring	25.0	
2. Maintenance Cost of Air Pollution Control System	90.0	
3. Maintenance of MEE, CPU & DWGS Dryer System	95.0	
4. Greenbelt maintenance	22.0	
5. Maintenance of ETP / STP / Water Treatment Plant	18.0	
Total	250.0	
Grand Total	1200.00	

Details of CER with proposed activities and budgetary allocation:

		Period with Budget allocation		
CER Activities	Upto	Upto		
	Dec.	Dec.	Total	
	2024	2025		

TOTAL CER AMOUNT (1.05% of Total Project Cost)	167.5	132.5	300
Tree Plantation within 10 Km. Radius in consultation with DFO	10	15	25
Development of Rain Water Collection Pond in 2 nos. villages within 10 Km. radius	10	15	25
Skill development for 100 nos. local youths (as per employability potential) from villages within 10 km. radius. Training Charges Rs. 7500/= plus Rs. 2500/= stipend per month for 3 months. (Rs. 15000 / youth)	7.5	7.5	15
Support to Govt. Heath Care agencies for improvement and upgradation of existing health infrastructure	35	45	80
Financial assistance & Support to agriculture deptt. for implementation of PM Kusum Yojana for Harvesting of Solar Power and Installation of standalone solar powered agricultural pumps.	30	35	65

During deliberations, EAC discussed following issues:

- It was noted that PP intends to meet the water requirement from two sources i.e. ground water and surface water. Further, the Committee suggested that PP shall not draw water from two sources. Accordingly, PP confirmed that water will be sourced water i.e. River Musi.
- PP reduced the fresh water requirement from 1020 m³/day to 995 m³/day.
- PP has revised the cost earmarked for EMP from 9.50 Crore to 18 Crore. Revised capital cost and recurring cost is as given below:

Capital cost and recurring cost of EMP are given below:

Particulars	Amount in INR, Lakhs
One Time Installation Cost	
1. Air Pollution Control System	650.0
2. MEE, CPU & DWGS Dryer System	550.0
3. Installation of Tertiary Water Treatment Plant	110.0
4. Solid waste such as Garbage, process and ETP storage and odor management system	75.0

5. Green Belt Development	85.0
6. Occupational safety and Health	30
7. Installation of Fire Safety System	150.0
8. Installation of Solar Power System	100.0
9. Rain Water Harvesting System	50.0
Total	1800.0
Recurring Cost / Annum	
1. Environmental Monitoring	25.0
2. Maintenance Cost of Air Pollution Control System	200.0
3. Maintenance of MEE, CPU & DWGS Dryer System	175.0
4. Anual greenbelt development	50
5. Greenbelt maintenance	40.0
6. Maintenance of ETP / STP / Water Treatment Plant	35.0
7. Occupational safety and Health	20
8. Installation of Fire Safety System	40
9. Installation of Solar Power System	50
10. Rain Water Harvesting System	25
Total	660.0

Details of CER with proposed activities and budgetary allocation:

	Period with Budget allocation		
CER Activities	Upto Dec. 2024	Upto Dec. 2025	Total
Financial assistance & Support to agriculture deptt. for implementation of PM Kusum Yojana for Harvesting of Solar Power and Installation of standalone solar powered agricultural pumps.	40	30	70
Support to Govt. Heath Care agencies for improvement and upgradation of existing health infrastructure	65	45	110
Installation of solar panels and solar lighting system in 5 villages within 10 kn radius	20	10	30

TOTAL CER AMOUNT (1.05% of Total Project Cost)	167.5	132.5	300
Tree Plantation within 10 Km. Radius in consultation with DFO	10	15	25
Development of Rain Water Collection Pond in 5 nos. villages within 10 Km. radius	25	25	50
Skill development for 100 nos. local youths (as per employability potential) from villages within 10 km. radius. Training Charges Rs. 7500/= plus Rs. 2500/= stipend per month for 3 months. (Rs. 15000 / youth)	7.5	7.5	15

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from surface water from Musi river 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 shall obtain such permission.

- (v). Total Fresh water requirement shall not exceed 985 m³/daywhich will be met from River Musi. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). APCE ESP (5 field) with 60 meters high stackshall be installed with the Rice husk/briquette/coal(with 15% coal usage as auxiliary fuel) fired60 TPH boiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (85 TPD) from proposed boiler will be supplied to brick manufacturers in covered vehicles. PP shall use Rice husk/briquette/coal fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

- (ix). CO₂ (190 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.
- (x). PP shall allocate at least Rs. 0.3 Crore for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 2.88 hectares i.e., 33 %of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Thick green belt shall be developed around the parking area. 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 plant saplings 4-6 feet high of atleast 20 variety of species as part of

greenbelt development. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

- (xvi). PP proposed to allocate Rs. 3.00 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
 - (xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
 - (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring

functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

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

Agenda No. 04

Greenfield Project of Grain Based Distillery Plant of 200 KLD (100 KLD in Phase-1 + 100 KLD in Phase-2) along with 6 MW Cogeneration Project (3 MW in Phase-1 + 3 MW in Phase-2)" located at Village- Jajarakal, D. Hirehal Mandal, Dist. Anantapur, Andhra Pradesh by M/s. Eco Steels India Ltd.- Consideration of Environmental Clearance.

[IA/AP/IND2/418209/2023, IA-J-11011/187/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd (NABET certificate no. NABET/EIA/2124/RA0213 and valid till 15.02.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance of "Greenfield Project of Grain Based Distillery Plant of 200 KLD (along with 6 MW Cogeneration Project" located at Village- Jajarakal, D. Hirehal Mandal, Dist. Anantapur, Andhra Pradesh by M/s. Eco Steels India Ltd.

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

The details of products and capacity as under:

S. No.	Name of Unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	200 KLD
2	Co-generation power plant	Power	6 MW
3	DWGS dryer	DDGS	80 TPD
4	Fermentation unit	Carbon di-oxide	120 TPD

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

Total land area required is 9.04 hectares. Greenbelt will be developed in total area of 2.98 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 152.11Crores. Capital cost of EMP would be INR Rs. 24.0 Crores and recurring cost for EMP would be INR Rs. 6.0 Crores per annum. Industry proposes to allocate Rs. 2.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 70 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Wildlife Corridors etc. within 10 km distance. Hirehalu Reserve Forest is at 3.3 km towards West, Krishnarajapur RF is at 4.5 km towards West, NCHERI RF is at 5 km towards NEE, Metriki RF is at 6.5 km towards WNW, Micheri RF is at 7.5 km towards NNE, Bellary RF is at 9.7 km towards North. Two Seasonal drains are passing at a distance of 0.6 km and 0.28 km towards SE & North direction respectively from project site, Gangammana Vanka is at 5.7 km towards South; Tungabhadra Canal is at 9 km towards ESE; Gunderi Halla is at 9.5 km towards South. Flood NOC vide letter File/2R-1/DB-JTO-1/No:- 118 M dated 27.03.2023 has been obtained for the total land i.e. 102.2 acres which is under the possession of the project proponent.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.04 $\mu g/m^3$, 0.03 $\mu g/m^3$, 0.44 $\mu g/m^3$ and 1.78 $\mu g/m^3$ with respect to PM₁₀, PM_{2.5},

 SO_2 , NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 800 m³/day which will be met from ground water. Out of 800 KLD, approval has already been obtained for 687 KLD from Andhra Pradesh Ground Water Authority vide letter no. 3027/Hg-II/2022 dated 02.08.2022 (for 389 KLD) and further vide letter no. 3027/Hg-II/2022 dated. 23.09.2022 (for 298 KLD). Thus, approval for total 687 KLD is available. For the balance 113 KLD, the Company has executed MOU/agreement with Large Water tanker suppliers in the nearby region namely M/s Jai Hanuman Associates (for 60 KLD) & M/s Sripatmal Bachhawat (for 60 KLD). Effluent (Condensate/spent lees/blowdown etc.) of 782 m³/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 940 KLPD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 10 KLD will be installed to treat sewage generated from factory premises. The plant will be discharged outside factory premises.

Power requirement will be 3.5 MW and will be sourced from proposed 6 MW co- generation power plant, the rest will be supplied to state grid. 60 TPH using rice husk with 15% coal as auxillary fuel fired boiler will be installed. ESP with stack height of 45 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm 3 for the proposed boiler. 2 x 500 kVA DG sets will be used as standby during power failure and stack height (10m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 30 meters will be installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (120 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (80 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (99 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 2.2 Cr. bricks per annum.
- Used oil (3.0 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (18.67 TPA) and STP Sludge (0.48 TPA) will be used as manure.

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

Total land is 9.04 ha and 100% land is under possession of the company. The permission for change in land-use has been obtained from The Revenue Divisional Officer, Dharmavaram vide letter no. R/Dis.1693/08(I) dated 20/08/2008. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

S. No	Particulars	Capital Cost (In Cr.)	Annual Recurring (In Cr.)
1.	Air pollution control system ESP on boiler, Stack, Industrial vacuum cleaner, road	6.50	1.62
2.	AAQMS (Ambient air quality management system) and CEMS (Continuous emission	0.50	0.20
3.	Scrubbing system, compressing system, liquefying system and storage for CO ₂	4.50	1.15
4.	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system, Construction of Garland drains, Water Reservoir and Web Camera for ZLD	4.75	1.20
5.	Condensate Polishing unit for water treatment and recycle, STP	3.35	0.85
6.	Rainwater harvesting systems	0.55	0.15

7.	Occupational Health Management	0.45	0.12
8.	Noise Reduction Systems	0.65	0.16
9.	Green Belt Development	0.75	0.18
10.	Environment monitoring		0.25
11.	Environment management cell	0.45	0.12
12.	CER	1.55	
	Total	24.0	6.0

Details of CER with proposed activities and budgetary allocation:

S. No.	Description	Budget (INR Cr.)
1.	Upgradation of medical facility in nearby hospital such as Donating medical equipment like Beds, Stretcher, Portable Oxygen Cylinder, Oxygen Concentrator, Air Purifier, AC, in nearby hospitals of Jajarakal, Kanakuppe, Tamenahalli, Pulakurthi	0.40
2.	Development of smart class, distribution of benches, Fans, drinking water facility, Upgradation of sanitary facility (One for male and one for female), Distribution of IT gadgets (students of class 12), Printers, Computers, smart class, free tuitions in schools present in nearby villages – Jajarakal, Kanakuppe, Tamenahalli, Pulakurthi	0.30
3.	Development of Village roads - Jajrakallu Road, Park and Drainage System. Providing training in ITI for generating skilled employment to students Up-gradation of drinking water facility by installation of water purifier in nearby villages- Jajarakal, Kanakuppe, Tamenahalli, Pulakurthi	0.80
4.	Installation of RWH Pits and provision of solar units and lights (30 nos.) in villages – Jajarakal, Kanakuppe, Tamenahalli, Pulakurthi	0.30
5.	Awareness Programmess for farmers for increasing soil productivity and water	0.20

conservation.	
Total	2.0

During deliberations, EAC discussed following issues:

- PP informed that they have acquired 102 acre of land in the study area. Out of which, proposed plant will be installed in 22.3 acres (9.04 ha) of land. PP informed that Drain /stream is not passing through the 9.04 hec of land of the project site. Details of land selected forethanol project are as follows:
 - 1. Sy. no. 97 (1.51 acres),
 - 2. Sy. no. 98 (11.68 acres),
 - 3. Sy. no. 106A (0.40 acres),
 - 4. Sy. no. 106B (12.36 acres).

PP informed that total area of above survey nos. is 25.95 acres. They have left some part of land falling within Sy No-106B to maintain mandatory buffer zone as per NOC. Hence total revised project area is 22 acres which is free from both streams (approx. 0.06 km & 0.28 km resp). The project area is shown below in figure 3 & stream details are given below:-

- a) A Seasonal stream is 0.06 km away from the Project site towards SE having elevation of 523 m amsl.
- b) Another Seasonal stream is 0.28 km away from the Project site towards North having elevation of 521 m amsl. While the Project site's elevation is 526 m amsl.
- PP informed that NOC for streams has been issued by water resource Department, Government of AP with certain conditions. The Committee suggested that PP shall abide by the terms and conditions stipulated in the NOC letter.
- The Committee suggested that PP shall install 200 KLPD distillery in single phase only. Accordingly, PP has submitted an affidavit stating that the installation of 200 KLD Ethanol plant along with 6 MW

cogeneration power plant with one boiler of 60 TPH will be carried out in single phase.

- PP confirmed that the Co-generation power plant will be Biomass based with 15% Coal as auxiliary fuel.
- PP confirmed that 15% of power requirement will be met through solar energy.
- PP confirmed that they will install five field Electrostatic Precipitator (5 fields) with the boiler stack to control the particulate and gaseous emissions.
- PP confirmed that they will construct Garland drain all along the project boundary.
- PP has submitted revised AAQ modiling data. Revised AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.04 μ g/m³, 0.03 μ g/m³, 2.73 μ g/m³, 0.44 μ g/m³ and 1.78 μ g/m³ with respect to PM₁₀, PM_{2.5}, SO₂, NO₂ and CO.
- P confirmed that a greenbelt of 2.98 ha (33.0 %) will be developed in the plant premises. 10m-20m wide, three- tier greenbelt will be developed around the plant premises. PP shall plant 7,500 no. of trees. PP shall develop greenbelt with at least 20 variety of species.
- PP has increased the stack height from 30m to 45 m for proposed 60 TPH boiler.
- PP has revised the CER budget from Rs. 1.35 Crore to 2.0 Crore.

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

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

any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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

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

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

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

- (ii). As committed, PP shall install 200 KLD Ethanol plant along with 6 MW cogeneration power plant with one boiler of 60 TPH in single phase.
- (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). 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.
- (v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from 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 shall obtain such permission.
- (vi). Total Fresh water requirement shall not exceed 800 m³/daywhich will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vii). Spent Wash/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). ESP (5 field) with 45 meters high stackshall be installed with the (Rice husk with 15% coal usage as auxiliary fuel) fired 60 TPH boiler for

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

- (ix). Boiler ash (99 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
- (x). CO_2 (120 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.
- (xi). PP shall allocate at least Rs. 0.45 Crore for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xv). The company shall undertake waste minimization measures as below(a) Metering and control of quantities of active ingredients to minimize waste;(b) Reuse of by-products from the process as raw materials or

as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- (xvi). The green belt of at least 10-20 m width shall be developed in nearly 2.98 hectares i.e., 33 %of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Thick green belt shall be developed around the parking area. 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 plant Saplings 4-6 feet high of atleast 20 variety of species as part of greenbelt development. 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. 50 m thick greenbelt shall be develed towards stream side.
- (xvii). PP proposed to allocate Rs. 2.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
 - (xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control

System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

- (xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.
- (xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the sixmonthly compliance report being submitted to concerned authority.

Agenda No. 05

Expansion of Sugarcane Crushing Unit from 4500 TCD to 12000 TCD, Co-generation Unit from 14 MW to 39.60 MW and Establishment of 180 KLD Multi feed (Grain/ Cane Juice/ BH-Molasses & C-Molasses) based Distillery Unit at Sy. No. 98/1, 98/2, 100/3, 100/4, 101/1B, 101/2, 101/1A, 101/3A, 101/3B, 102/3F, 102/3E, 102/3D, 102/3K, 102/3B, 102/3A, 103/15, 103/14, 103/13, 103/12, 103/11, 103/10, 103/9, 103/8, 103/7, 103/6, 103/5, 103/4, 103/3, 103/2, 103/1, 104/2, 104/3, 104/4A, 104/4B, 104/1B, 104/1A, 105/1A, 105/1B, 106/1A, 106/1B, 106/1K, 107/3, 107/4, 107/5, 107/6, 107/7, 107/8, 107/9, 107/10, 108/3, 108/2, 183/1, 184/1, 184/2, 185/1 of Alagawadi Village, Raibag Taluk, Belagavi District, Karnataka Stateby M/s. Alagawadi Bireshwar Sugars Private Limited -

Consideration of Environmental Clearance.

[IA/KA/IND2/427023/2023,IA-J-11011/57/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its meeting (IDMeeting ID: IA/IND2/13463/16/03/2023) held during 16.03.2023 wherein EAC returned the proposal for re-submission. Information desired by the EAC and responses submitted by the project proponent is as under:

S. No.	Observations of EAC	Reply of PP
1	The committee noted that a representation has been received against the proposal vide letter dated 01.03.2023 through email as well as speed post sent by Shri. Anirudha R J Nayak, Advocate. He has also circulated the representation to all the EAC members. The committee asked the PP to furnish point wise reply to all the issues/concerns raised in the representation.	The Point wise compliance to the Advocate representation is uploaded in Parivesh portal and also given below.
2	While discussing the Public Hearing issues it was noted that several court cases are pending against the project. However, PP has mentioned that no Court case is pending against the project on the Parivesh portal. The committee suggested to issue a warning letter to environmental consultant M/s. Environmental Health & Safety Consultants Pvt. Ltd for not placing the facts. Further, the committee asked PP to submit detailed status of court cases pending against the project.	As per the advice of our legal team, it was mentioned in the TOR compliance that, there is no litigation or notice under the section 5 of Environment (Protection) Act 1986 or relevant sections of Air and Water Acts. The cases referred during public hearing/representation are partition suit's filed between the family members related to Land matter and M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. is one of the party in the litigation filed. These cases are filed after Submission of Draft EIA and Public Hearing Notification. Hence, the same were not mentioned in the

S. No.	Observations of EAC	Reply of PP
		TOR compliance. M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. Alagawadi and M/s Environmental Health and Safety Consultants Pvt Ltd, Bangalore had no intention to hide the Cases and the same was explained during the EAC meeting held on 16.03.2023. Status of Court cases are uploaded in Parivesh portao and also updated in TOR compliance of Revised EIA Report.
3	PP shall prepare a detailed point wise action plan along with budget and timelines to address all the issues raised in Public Hearing. PP shall also come out with	The detailed Point wise compliance and action plan along with budget and timelines addressing all the EPH issues is given in Chapter – 7 of Revised EIA Report. The allegations made by Mr. Anirudh
	the common issues raised in PH and representation received from Shri. Anirudha R J Nayak, Advocate.	Naik are false, frivolous and vexatious. However, the common issues were also presented in Tabular form in Chapter – 7, Page No. 237 & 245.
4	The committee noted that existing 4500 TCD sugar unit is still in construction stage. Therefore, PP shall revise EIA report by considering impact due to 12000 TCD (instead of 4500 to 12000 TCD) sugar unit and 39.60 MW (instead of 14 to 39.6 MW) & provide EMP accordingly.	, ,
5	Proposed sugar, cogen power plant and distillery shall be based on ZLD concept. Accordingly, EIA/EMP report should be modified.	The effluent generated from the Proposed Sugar and Co-generation shall be treated in ETP of 1250 KLD and CPU of 3000 KLD capacity. The treated water from ETP will be used for Green belt development and treated condensate from CPU will be

S. No.	Observations of EAC	Reply of PP
		reused in the process. The effluent generated from the Distillery will be treated in CPU of 1600 KLD and the treated condensate will be reused in the process. Spent wash will be concentrated in MEE and dried using Spray Drier to remove moisture content. Further, the dried Potash powder will be packed and sold as Potash derived from Molasses. Thus, the Distillery will be achieving ZLD.
6	PP shall carry out HAZOP study as well as risk assessment study	The risk assessment study carried out for the project is shown in Pg. No. 249 to 278 of Revised Final EIA report. The study covers the quantitative risk analysis by using the software ALOHA (Areal Locations of Hazardous Atmosphere: Version 5.4.7) to determine the consequence analysis for the various likely failure scenarios (spillages and vapour cloud). The HAZOP study is also carried out for the steam boiler proposed in the project to generate steam to use in turbines for steam generation. The major risk identified is explosion, Hence the HAZOP study is carried out for this operation using the nodes flow of water and pressure (Pg. No. 264 - 266). The recommendation /mitigation measures for safe operation of the boiler is shown in Pg. No. 265 of the final EIA report."

Compliance to the observations of Advocate letter dated 01.03.2023

SI. No.	Observation of Advocate		Compliance			
1	That the public hearing conducted	The	allegation	made	by	Mr.

SI.	Observation of Advocate	Compliance		
No.		•		
	on 2.11.2022 was not completed in accordance with notification issued by your department dated	Anirudh Naik is false and baseless.		
	14.09.2006 wherein it is clearly mentioned that the public hearing proceedings ought to be completed on the same date and the signatures of all present obtained. That where any act is to be done in a particular manner it has to be done in that manner or not at all is settled law to cite precedents. That in the said public proceedings the statement of a deceased person has also been stated to be recorded. That all these violations do not warrant sanction of EC to the project proponent.	Environmental Public Hearing has been conducted as per the procedure prescribed under EIA Notification, 2006 and its amendments. Accordingly, the Deputy Commissioner, Belagavi has issued proceedings of public hearing. The people those who have spoken during the public hearing has been recorded by the KSPCB and sent to MOEFCC in the form of Proceedings duly signed by DC, Belagavi. Allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely		
	It is to state that after the above referred complaints the farmers have instituted an original suit at the Court of Senior Civil Judge, Raibag in Nos. O.S. No.105, 108, 100, 110, 111, and others of	denied by us. The allegation made by Mr. Anirudh Naik is baseless. The status of Original suits and Miscellaneous applications along with Writ Petition are enclosed		
2	109, 110, 111 and others of 2022. Additionally miscellaneous appeal no.5164-5169/2022 before the VII Additional District & Sessions Judge at Chikkodi, Belgavi and writ petition no.100249/2023 (GM-RES) disputing the ownership of the land which was procured through undue influence, coercion and committing fraud on other legal owners of the property on which the project is desired to be setup. The writ petition also challenges the issuance of the IEM to the project proponent on the ground that they have squatted on the property from 2006 without	separately. The Civil suit for partition bearing OS No. 105, 106, 108, 109, 110 and 111 are filed between 17.09.2022 to 21.09.2022 on the Land of Extent 34 Acres 01 Gunta which is in possession of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. These Suit for Partition are between their family members and they made M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., as party in that. These suits for partition are filed by the children of erstwhile property owners		

SI. No.	Observation of Advocate	Compliance
140.	taking any steps and therefore they are not serious of completing or setting up a sugar factory. The case is likely to be listed in the second week of March 2022 and decision of the High Court, appellate court and original court is pending. In the light of pendency of the above litigations before various forums it is requested that the environmental clearance sought by the project proponent may kindly be withheld	who had sold the property to M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., in the year 2006-07 after receiving full consideration. Sale deeds of the same are uploaded in Parivesh portal. Project layout map showing total of 189 Acres 05 Gunta along with OS land of 34 Acres 1 Guntas is hatched in red colour is also uploaded in Parivesh portal.
	and if granted be withdrawn.	The Suit of Partitions are filed exactly after Submission of Draft EIA to KSPCB on 08.08.2022 to administrative authorities and after a gap of 16 years after sale of lands. This clearly shows intentional and instigated by vested interests.
		The Honorable Principal Senior Civil Judge Raibag by its order dated 30.09.2022 was pleased to reject the interim applications (Original suits) seeking for grant of temporary injection (TI) by imposing cost of Rs. 5000 /- for each. The copies of the order rejecting the claim of the applicant are uploaded in Parivesh portal.
		Even the Appellate court, VII Additional District and Session Judge, Chikkodi, also dismissed Miscellaneous Application No. 5164-5169/2022 by imposing cost of Rs. 1000/- each. The copies of the order rejecting the claim of the applicant are

SI. No.	Observation of Advocate	Compliance
1101		uploaded in Parivesh portal.
		It is brought to your notice that, the very same farmers by suppressing the abovementioned orders and pending proceeding have filed Writ Petition No. 100249 / 2023 before High Court of Karnataka and the same is pending, it is needless to mention that there are no any adverse orders passed against M/s. Alagawadi Bireshwar Sugars Pvt. Ltd in any Court of Law. The Status of Case is attached separately.
		Further, it is to be submitted that, the industry has Total of 189 Acres 05 Gunta. Of which, the allegation was made on 34 Acres 01 Gunta only. Even then the industry has sufficient land to implement the project.
		Hence, the Allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.
3	Further, I state that in terms of the NA order of the DC dated 23.07.2012 at point no.1 it is singularly and specifically stipulated as a condition precedent that the "purpose for which the land is converted it shall be used only after obtaining necessary clearances from competent authority/Development Board/CMC/Pollution Control	It is absolutely false to content that, the permission from Gram Panchayath is not sought. We bring to your kind notice that, Gram Panchayath permission for Construction was obtained on 08.06.2021 and the Copy of the same is uploaded in Parivesh portal.
	Board/Gram panchayat". That there was no permission sought from the Gram Panchayat is a fact	Consent to Establishment had obtained from Karnataka State Pollution control board vide No. Page 248 of 292

SI. No.	Observation of Advocate	Compliance
	on record in the light of the letter submitted by the Gram Panchayat to the DC on the date of the public hearing on 2.11.2022 and it is also a fact that no permission was sought from the Gram Panchayat prior to commencement of any works at the site. That despite not obtaining any permission the works have been allowed to proceed at break neck peed in the past couple of months.	CTE – 326909, dtd. 21.09.2021 for the capacity of 4500 TCD Sugar Unit and 14 MW Co-Gen Unit. Copy of the same is uploaded in Parivesh portal. M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., have obtained necessary permission for Construction and the allegation made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.
4	That at point no.10 of the DC's aforestated order it is singularly mentioned that KJP shall be done within 120 days of issue of the order. The order is dated 23.07.2012 and 120 days therefrom ends on 24.11.2012. There is no KJP obtained within the stipulated time, despite which works have been permitted to commence and a public hearing was attempted to be held for expansion when the factory for which purported permission was obtained was never in existence. That the land has been blocked by the project proponent from 2006.	The allegation made by Mr. Anirudh Naik on KJP is false and baseless. As per the orders of Deputy Commissioner, Belagavi 26.04.2022, it is clearly states that, the condition No. 11 of Land Conversion order are only for administrative purpose to speed up the project activities. Further, it is also clarified that, the Land conversion orders issued earlier are permanent till further orders. Copy of the DC order is enclosed as Annexure-9. Hence, there is no prescribed time limit to obtain KJP (Kam Jasti Patra) within 120 days. However, M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., had applied for KJP and Panchayath Development Officer, Alagawadi Gram Panchayath had forwarded the proposal to Country and Town Planning Department Nippani on 18.04.2023

SI. No.	Observation of Advocate	Compliance
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.
5	That at point no.11 of the DC's aforestated order it is singularly mentioned that land shall be used for industrial purpose within 2 years i.e. within 23.07.2014, which has been flagrantly not done and commencement of the works only happened in October 2022. That the order is dated 23.07.2012 and two years therefrom ends on 23.07.2014. The land was never used for industrial purpose within stipulated time and there were other violations (pointed out in this letter infra), despite which works have been permitted to commence and a public hearing was attempted to be held for expansion when the factory for which purported permission (4500 TCD) was obtained was never in existence. That in terms of the DC's order the order is deemed to have been cancelled if land was not used for industrial purpose within 2 years.	The allegation made by Mr. Anirudh Naik is false and baseless. The Land has been already converted to Non-Agriculture tenure under section U/s 95 of Karnataka Land Reforms Act. As per the orders of Deputy Commissioner, Belagavi 26.04.2022, it is clearly states that, the condition No. 11 of Land Conversion order are only for administrative purpose to speed up the project activities. Further, it is also clarified that, the Land conversion orders issued earlier are permanent till further orders. Copy of the DC order uploaded in Parivesh portal. Hence, we bring to your kind notice that, M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., has not violated any of the rules and to substantiate the above, we are enclosing the copy of the order which is in Kannada language and translated to English uploaded in Parivesh
	That the land has been blocked by the project proponent from 2006 and there have been stark dereliction of duties of several authorities, departments and officials all of whom have to be	M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., Alagawadi (A company by shares and incorporated under the companies Act, 1956) having Certificate of

SI. No.	Observation of Advocate	Compliance
1101	brought to the book and some accountability for such glaring violations of law.	Incorporation No. U15421KA2006PTCO39146 Dt. 27th April 2006.
		Later on in the year 2015, Ownership of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. Alagawadi was transferred to M/s. Indian Cane Power Limited, having its registered office at "Indian Cane Power Limited", #627, Sri Kalleshwara Rice Mills compound, Anekonda, Davangere Tq and Dist. Karnataka State. – 577002. The details of transfer of shares/owners is uploaded in Parivesh portal.
		The New Management having vast experience of Sugar plant had propose to set up a Sugar and Co-Gen Complex with Distillery unit in the near future. Due to repeated drought in the command area during the period 2016-19 and followed by Covid-19 crisis, the progress of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., got effected severely.
		Soon after, COVID-19 Crisis, M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., had obtained permission to set up the Sugar Plant with capacity of 4500 TCD and 14.4 MW Co-Gen Unit at Alagawadi Village, Raibag Taluk, Belagavi Dist., in Karnataka by the Govt. of Karnataka vide its order No. CI-313 SPI2008 dtd. 19.12.2008 read with order No. CI 192 SPI 2021 Dtd.

SI. No.	Observation of Advocate	Compliance
		14.06.2021. Further, GO no. CI 192 SPI 2021 Bangalore Dt: 23.03.2023 was also issued.
		M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., had obtained Consent to Establishment vide No. CTE – 326909, dtd. 21.09.2021 from Karnataka State Pollution Control Board to set up Sugar Plant of capacity 4500 TCD and Co-Gen unit of capacity 14.4 MW and construction work of the same is under progress and expected to commission the same on October 2023.
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.
	That there was no existing sugar factory of 4500 TCD and the same was not established as per requisite permissions and	The allegation made by Mr. Anirudh Naik is false and baseless.
	requisite permissions and conditions to such permissions were violated flagrantly as stated above.	M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., had obtained permission to set up the Sugar Plant with capacity of 4500 TCD
6	That despite no factory being in existence the authorities and the project proponent by clear intent to commit fraud on the public exchequer and their monies has attempted expansion to 12000TCD in which act many Government department and government employees have been involved.	and 14.4 MW Co-Gen Unit at Alagawadi Village, Raibag Taluk, Belagavi Dist., in Karnataka by the Govt. of Karnataka vide its order No. CI-313 SPI2008 dtd. 19.12.2008 read with order No. CI 192 SPI 2021 Dtd. 14.06.2021. Further, GO no. CI 192 SPI 2021 Bangalore Dt: 23.03.2023 was also issued.
		M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., had obtained Consent Page 252 of 292

SI. No.	Observation of Advocate	Compliance			
1401	to Establishment vide No. C7 326909, dtd. 21.09.2021f Karnataka State Pollution Cor Board to set up Sugar Plan capacity 4500 TCD and Co- unit of capacity 14.4 MW construction work of the same is ur progress.				
		The Construction activities for 4500 TCD is under progress, by looking at the availability of Sugar Cane and management of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., has applied for expansion from 4500 TCD to 12000 TCD.			
		As per the EIA Notification, 2006 and its amendments, provision has been made to expand project activities and based on which, application for TOR approval has been submitted to MOEFCC on 18.02.2022 and subsequently on 20.07.2022 considering the overall capacity of the project.			
		M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., has not violated any of the rules including EIA Notification, 2006 and its amendments.			
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.			
7	That the land of 60 acres bearing survey nos 103, 104, 106 & 107 on which the proposed factory is	The allegation made by Mr. Anirudh Naik is false and baseless. Page 253 of 292			

SI. No.

Observation of Advocate

to be setup did not belong to the project proponent and that the same was transferred by fraud, coercion etc. That the EIA report does not bring to the fore the court cases the existing on project. That lands have been obtained by not paying monies to farmers was also clearly stated on 2.11.2022 by the farmers That their land was transferred without their knowledge is also a fact brought on record. That farmers were not allowed to access their lands is also a fact brought on record. That despite such illegalities committed the project proponent with the connivance of several government departments and officials has attempted to establish а plant whose permissions were deemed to have been cancelled in 2014 itself. That none of these illegalities seem to have been an impediment for departments government and officials to permit the project proponent to initiate of commencement works long after the deemed cancellation of legal permissions.

Compliance

The Advocate is providing the erroneous figures on extent of land. The industry has Total of 189 Acres 05 Gunta. Of which, the allegation was made on 34 Acres 01 Gunta and the industry has sufficient land to implement the project. The advocate is posing 60 acres instead of 34 Acres 01 Gunta. Map showing the same is already Annexed to this letter.

The Advocate has accessed the Draft EIA Report wherein at the time of submission of Draft EIA Report to KSPCB, there was no case pending against the project.

The Land details mentioned in the Draft EIA / Final EIA are purchased by M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., from original owner's legally in the year 2006-07 after paying full consideration and the same was converted in to non-Agriculture. The lands surveyed, are demarcated and fenced by the date industry from the purchase of land. Sale deed was already annexed to this letter and land conversion orders is uploaded in Parivesh portal.

As the property is in the name of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., the question of allowing farmers inside the premises does not arise.

SI. No.	Observation of Advocate	Compliance
		M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., has not violated any of the rules including EIA Notification, 2006 and its amendments.
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us. The allegation made by Mr. Anirudh Naik is false and baseless.
8	That the TOR to the EIA on the KSPCB's website states in Annexure III point no 12 that there were no litigations pending against the project which was a blatant lie in the light of the objections filed by farmers on 25.10.2022. A copy of which was handed over to the DC on 2.11.2022.	The Draft EIA Report has been submitted to KSPCB on 08.08.2022 and the litigations were filed on 25.10.2022 which is after the submission of the Draft EIA Report to KSPCB. Hence, the same may not be depicted in Draft EIA Report. Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The
	That the construction in progress was of a capacity 12000 TCD and that 4500 TCD related	same completely denied by us. The allegation made by Mr. Anirudh Naik is false and baseless.
9	machineries was never procured. That the details of machineries to the EIA report on the website of KSPCB are a testament to this fact.	M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. has taken up this project in phased manner, i.e 4500 TCD in 1st Phase and expansion of the same to 12000 TCD in 2nd Phase. Accordingly, M/s. Alalgawadi Bireshwar Sugars Pvt. Ltd., had obtained CFE from KSPCB.
		M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. had made provision in Page 255 of 292

SI. No.	Observation of Advocate	Compliance			
		the plant layout to accommodate the future expansion and the same will be taken up after obtaining necessary permission for expansion of capacity.			
		The details of machineries mentioned in EIA report for the expanded capacity only. It is not necessary to have separate 4500 TCD plant and a new plant for expanded capacity.			
	It is a standard praction increase the capacity of the by addition of machine equipment's to the capacity. M/s. Alagawadi Bireshwar Sept. Ltd., has not violated the rules including Notification, 2006 and amendments.				
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.			
	That there was no water permission obtained and the commencement of the works being illegal as per above	The allegation made by Mr. Anirudh Naik is false and baseless.			
10	submissions also did not have any water before commencement.	M/s. Alagawadi Bireshwar Sugars Pvt. Ltd had obtained approval for Water requirement of 4000 KLD from Krishna River in State Level Single Window Clearance Committee of Department of Commerce and Indstires, Govt. of Karnataka Order no. CI 192 SPI 202, Dtd. 14.06.2021.			

SI. No.	Observation of Advocate	Compliance
		M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. had applied to Water Resource Department, Govt. of Karnataka for permission to draw 4000 KLD water from River Krishna River. The Chief Engineer, Water Resource Department, Govt. of Karnataka vide letter Dt: 19/01/2023 recommended for water permission and forwarded the proposal to the Secretary, Water Resource Department, Govt. of Karnataka to issue of Government Order. The Status of Water permission letters are uploaded in Parivesh portal.
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.
	That no prior approval of KSPCB for expansion was obtained, which is again an imperative for works to commence as per the	The allegation made by Mr. Anirudh Naik is false and baseless.
11	CFE vide CTE-326909 dated 21.09.2021.	The Advocate himself is stating that, no approval was obtained from KSPCB and also providing the Reference of CTE obtained from KSPCB.
		Hence, the allegations made by Mr. Anirudh Naik are false, frivolous and vexatious. The same completely denied by us.

The Project Proponent and the accredited Consultant M/s. Environmental Health & Safety Consultants Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/RA 0241 and validity: 22.08.2024) made a detailed presentation on the salient features

oftheprojectandinformedthattheproposalisforenvironmentalclearance totheproject "Expansion of Sugarcane Crushing Unit from 4500 TCD to 12000 TCD, Co-generation Unit from 14 MW to 39.60 MW and Establishment of 180 KLD Multi feed (Grain/ Cane Juice/ BH-Molasses & C-Molasses) based Distillery Unit" locatedatAlagawadi Village, Raibag Taluk, Belagavi District, Karnataka State byM/s. Alagawadi Bireshwar Sugars Private Limited.

All Molasses based distillery projects are listed at S.N.5(g) & Sugar Industries listed under 5 (j) & Thermal listed under 1(d) of Schedule of Environment Impact Assessment (EIA)Notification under category 'A' and are appraised at Central Level by Expert AppraisalCommittee (EAC). The proposed expansion project is an integrated Distillery, Sugar and Thermal industry hence the proposal is appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

S. N o	Unit Product/b ExistingQuantit y ProposedQuantit y		TotalQuantit y		
	A. Pro	oducts			
1	TPD	Sugar	495	825	1320
2	MW	Power	14	25.6	39.60
3	KLD	Ethanol	-	180	180
4	KII)	Rectified Spirit (RS)	-	189	189
5	KLD	ENA	-	180	180
E	3.By-	oroducts			
1	TPD	Bagasse	1292	2152	3444
2	TPD	CO ₂ (Bottling Plant)	-	141	141
3	TPD	Potash powder	-	117	117
4	TPD	Dried Distillers Grains Soluble (DDGS)	-	92	92

Existing sugar and cogeneration unit has obtained Consent to Establishment (CTE) industry from Karnataka State Pollution Control Board (KSPCB) vide letter No.CTE-326909 on 21.09.2021 and based on which construction work is under progress & its validity upto 05.05.2026. Self-certified CTE compliance submitted to Ministry. EAC found the information satisfactory.

Standard Terms of Reference have been obtained vide F.No. IA-J-11011/57/2022-IA-II (I) dated: 23/02/2022& again Fresh TOR obtained for reduction of total area and Addition of Sy. Nos. videF.No. IA-J-11011/57/2022-IA-II (I) dated: 30/07/2022.

Status of Litigation Pending Against the Project.

- 06 Nos. of Suit for Partition was filed by local farmers between 17.09.2022 to 21.09.2022 on the Land of Extent 34 Acres 01 Gunta which is in possession of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. These Suits for Partition are between the family and they made M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., as party in that.
- The Suit of Partitions are filed exactly after Submission of Draft EIA to KSPCB and administrative authorities and after a gap of 16 years after sale of lands. The Suit for partition bearing Case No. OS 105/2022, 106/2022, 108/2022, 109/2022, 110/2022 and 111/2022, the applications IA No 1 to 3 filed by the Plaintiff's under order 39 rule 1 & 2 R/W 151/CPC are dismissed by I/c Senior Civil Judge & JMFC, Raibag with cost of Rs. 5000/-.
- The interim ex-party TI orders granted against defendants are hereby vacated on 30.09.2022. The M.A Case No. M.A/5167/2022, M.A/5168/2022, M.A/5169/2022, M.A/5164/2022, M.A/5166/2022 and M.A/5165/2022, The appeal preferred by the appellant U/o .XLIII rule 1(r) R/w Sec. 103 of the Code of Civil Procedure stands DISMISSED with cost Rs. 1000/-.
- The very same farmers by suppressing the above-mentioned orders and pending proceeding have filed Writ Petition No. 100249 / 2023 before High Court of Karnataka and the same is pending, it is needless to mention that there are no any adverse orders passed against M/s. Alagawadi Bireshwar Sugars Pvt. Ltd in any Court of Law.

Public Hearing for the proposed project had been conducted by the Karnataka State Pollution Control Boardon 02.11.2022 at Project site premises of M/s. Alagawadi Bireshwar Sugars Pvt. Ltd., Alagawadi Village, Raibag Taluk, Belagavi District, Karnataka State chaired by Sri. Nitish Patil, IAS, Deputy Commissioner, District Magistrate, Belagavi, Karnataka. The main issues raised during the public hearing and their action plan:

Issueinbrief	Actionplaninbrief	Budget allocated And timeline
due to establishment of industry with respect to Land	M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. purchased lands from original owner legally and converted into Non-Agriculture. The lands are surveyed, demarcated and fenced by the industry from the date of purchase of land.	
establishment of industry	Nos) with efficiency of 99.8% will be provided to Boilers (80	Fund allocated for installation of ESP as a part of EMP : 200 Lakhs
establishment of industry	The plant is achieving ZLD & there is no discharge of water on ground or outside of the project.	implantation of STP,
Employment to local	The industry agreed to provide employment to local people.	
disposal	Solid waste will be handled scientifically as per KSPCB norms and there is no disposal of any type of waste outside the industry.	Fund allocated to Solid waste management : 10
	provided for noise generating	Fund allocated to Noise attenuation : 20 Lakhs

Issueinbrief	Actionplaninbrief	Budget allocated And timeline
	green belt will be developed al	Fund allocated to
	along the periphery of the	Green belt
	industry.	development :
		63.50 Lakhs

Total plant area after expansion will be 76.53 Ha (existing sugar and cogeneration plant area is 35.58 Hectares and additional land required 40.95 Hectares for proposed distillery unit) whichisin the name of the company and converted to industrial use. Out of the total plant area 25.26 Hectaresi.e. 33% of the total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated project cost isRs. 651.58 Crores. Capital cost of EMP would be Rs. 13.70 Crores and recurring cost for EMP would be Rs.0.97 Crores per annum. Industry proposes to allocate Rs.6.51 Crores towards extended EMP (Corporate Environment Responsibility).Total Employment after expansion will be 425 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km distance. Shahu Park Reserve Forest located at a distance of 8.6 Km in Southwest direction. There are no Schedule – I species found in the study area and hence no Conservation plan applicable. Water bodies: Ghataprabha left bank canal is at a distance of 1.20 Km in East direction and Harugeri Lake is at a distance of 5 Km towards East direction. River Krishna flowing is at a distance of 12.80 Km from project site.

Ambient air quality monitoring was carried out at 9 locations during March 2022 to May 2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (54.83 to 63.50 $\mu g/m^3$), $PM_{2.5}$ (21.04 to 27.33 $\mu g/m^3$), SO_2 (5.83 to 7.33 $\mu g/m^3$) and NO_2 (17.10 $\mu g/m^3$ to 21.59 $\mu g/m^3$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.69 $\mu g/m^3$, 1.37 $\mu g/m^3$ and 1.94 $\mu g/m^3$ with respect to PM_{10} , SO_2 and NO_X . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement which will be 2330 CMD which will be met

from Krishna River. Application has been submitted to Krishna Bhagya Jala Nigam Ltd, Water Resource Department, Govt. of Karnataka on 10.03.2021 and on 19.01.2023, the Chief Engineer, Water Resource Development Organization, Govt. of Karnataka vide letter 19.01.2023 recommended for water permission and forwarded the proposal to the Secretary, Water Resource Department for according the water permission. Proposed effluent generation from sugar unit Sugar unit will be 1150 KLD & domestic sewage (100 KLD) will be treated in common ETP of capacity 1250 KLD & the treated the water (1125 KLD) will be used for greenbelt development. Excess condensate from Sugar unit will be treated in CPU of capacity 3000 KLD and the same will be recycled for cooling tower make up and for process. Spent wash generated from Distillery Unit will be pass through Bio-methanation Plant and concentrated in MEE and dried using spray drier to derive potash powder which will be packed and sold as manure. Process condensate, Spent lees, Cooling Tower and Boiler blow down will be treated in CPU of capacity 1600 KLD and the same will be recycled for cooling tower make up and for process. Domestic sewage from Guest house will be treated in scientifically designed STP of capacity 10 KLD with SBR technology. The plant will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of sugar & cogeneration unit after expansion will be 16 MW & for proposed distillery unit is 3.5 MW whichwill be sourced from proposed 39.60 MW co-generation power plant. 1 x 80 TPH bagasse fired boiler and 1 x 135 TPH bagasse fired boilers will be installed. APCE 2 No of Electrostatic Precipitator with a stack of height of 85 m and 90 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm 3 for the boiler. Industry has 1 x 1500 KVA DG set which will be used as stand by during power failure and stack height 10 m will be provided as per CPCB norms to the proposed DG sets.

DetailsofProcessemissionsgenerationanditsmanagement:

The air pollution sources from the proposed expansion project are operation of Boiler (80 TPH & 135 TPH), Operation of DG set (1500 KVA), operation of co-gen plant (Turbine), Vehicular movement for loading and unloading of Raw material, finished products, handling of bagasse & coal

in the industry, Fugitive emission from fly ash storage area, manufacturing process and other industrial activities, etc.

Mitigation Measures

- Bagasse storage area will be covered with sheets.
- All internal roads will be asphalted.
- Periodic water sprinkling will be carried out to supress the Dust.
- Green belt development will be undertaken all along with Periphery of the industry.
- Electro Static Precipitator (2 Nos) with efficiency of 99.8% will be provided to Boilers (80 TPH & 135 TPH) to mitigate Particulate matter and connected to stack height of 85 m & 90 m.
- Acoustic enclosures will be provided to existing 1500 KVA DG set with a stack height of 10 m ARL and will be used only during power failure. Regular stack monitoring will be carried out to ensure that the emissions are well within the norms.
- The CO₂ released in the fermentation process (141 TPD) of ethanol manufacturing contains maximum impurities as compared to other sources. These impurities include Sulphur, Various Hydrocarbons including aromatic hydrocarbons. By installing CO₂ recovery plant is capable to reduce these impurities spillage to air.

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

SI. No.	Waste	Qty.	Method of collection	Mode of Disposal	
A. S	olid Waste				
Yeast sludge from 1 fermenter & digester		5.40 TPD	Mechanical conveyor	Used as manure.	
2	Sludge from CPU	0.150 TPD	Filter Press		
	Fly Ash	28.5 TPD	Mechanical		
3	Bottom Ash	12.5 TPD	conveyor into common silo for further disposal	Sold to brick manufacturers	
4	Bagasse	3444 TPD	Mechanical conveyor	Used as boiler feed.	
5	Press mud	480 TPD	Mechanical conveyor	Used as manure	
6	ETP Sludge	112 Kg/day	Mechanical conveyor	Used as manure	
7	DDGS	144 TPD	Stored in	Will be sold as	

SI. No.	Waste	Qty.	Method of collection	Mode of Disposal
			common silo	cattle feed/fish feed.
8	Domestic solid waste	60 Kg/day	Segregated into organic & inorganic solid wastes and stored in bins	Raibag Municipal Authority.
B. H	azardous Waste G	eneration De	tails	
1	Used oil from DG sets	0.500 KI/A	Stored at an identified place with proper sign board, Stored in leak proof sealed barrels	Used as lubricants for Conveyor chains and sprockets within the industry to avoid use of fresh oil.
2	Oil Soaked Cotton waste	100 Kg/A	Storage Yard	Used for light up/ start-up of Boiler
3	Empty Barrels /Containers	30-50 no's	Storage Yard	Disposed to authorized recyclers.
C. P	lastic waste			,
1	Plastic waste	0.02 TPA	Collected and stored in separate bins	Handed over to KSPCB approved recyclers
D. E	- Waste			
2	Electronic Waste	0.01 TPA	Collected and stored in designated place	Handed over to E- Processors
E. Bi	io-medical waste			
3	Biomedical waste	0.017 TPA	Collected in separate bins	Handed over to CBMWTF
F. Ba	atteries Waste			
4	Batteries	0.017 TPA	Collected and stored in designated place	Handed over to Battery waste recyclers

Capital and recurring cost of EMP are given below:

SI. No.	Particulars	Capital Cost in Crores	Recu rring cost in Cror es/ Annu m
1	Air Pollution Mitigation during Construction Phase, Installation of APC Equipment such as ESP, purchasing of Vacuum machine	2.00	0.10
2	Installation of mobile STP & sanitation facilities to labours during construction phase	0.25	-
3	Drinking water facilities to labours during construction phase	0.05	-
4	Erection of tall barricades & water sprinkling during construction phase	0.30	-
5	Health & Medical facilities to labours during construction phase	0.10	-
6	Stacking of excavated earth and construction of garland drains around the construction site	0.20	-
7	Installation of Water Treatment Plant	0.80	-
8	Provision of piezometers	0.02	-
9	Closed conveyor belts to conveyor belts to control dust	0.20	-
10	Noise Level Mitigation Measures - installations on anti- vibrating pads, provision of acoustic enclosures	0.20	-
11	Provision of CPU, ETP & STP	6.00	0.15
12	Online Continuous Monitoring of Emissions & Effluents System (OCMES)	0.35	0.05
13	Rainwater harvesting, construction of surface rainwater storage tanks & construction of recharge pits	0.30	0.05
14	Installation of stacks for Boiler & DG set	0.40	0.022
15	Solid & hazardous waste management	0.10	0.062 5
16	Green belt development	0.635	0.145
17	Risk and Hazards Management	0.25	0.10
18	Installation of MEE	0.50	0.10
19	Traffic management and asphalting of internal roads	0.60	
20	Provision of solar lighting as part of Energy Conservation measures	0.20	0.11
21	Environmental Monitoring during construction phase	0.0319	0.052
22	Water sprinkling in internal roads & around bagasse	0.15	-
23	Socio Economic Awareness programme	0.07	0.03

SI. No.	Particulars	Capital Cost in Crores	Recu rring cost in Cror es/ Annu m
24	Corporate Environmental Responsibility (CER) cost	6.51	-
	Grand Total	20.2169	0.97 25

Details of CER with proposed activities and budgetary allocation:

SI. No.	Topic	Work to be done	Units	Total Cost (in lakhs)	1st year FY 23-24 (in lakhs)	2nd Year FY 24 - 25 (in lakhs)	3rd Year FY 25 - 26 (in lakhs)	Completion Date
	Drinking Water Supply	Provision of RO water treatment units in villages for drinking water supply i.e., Alagawadi, Adukali, Hunshikodi, Nidgundi, Badabyakud, Bastwad, Hidkal, Harugeri & Morab.	9 Units	90.00	3 Units at Alagawadi, Adukali & Hunshikodi 30.00	3 Units at Nidgundi, Badabyakud & Bastwad 30.00	3 Units at Harugeri, Hidkal & Morab 30.00	Dec 2026
		Renovation & construction of classrooms & admin buildings at Government School Buildings/ College Buildings in surrounding villages i.e., Harugeri, Hidkal & Yabaratti.		60.00	1 Units i.e., Harugeri 20.0	1 Units i.e., Hidkal 20.0	1 Units i.e., Yabaratti 20.0	Dec 2026
	Support for Education	Conducting awareness programs in schools & colleges on single use plastic ban in surrounding villages i.e, Harugeri, Hidkal & Yabaratti.	3 Units	9.00	1 Units i.e., Harugeri 3.00	1 Units i.e., Hidkal	1 Units i.e., Yabaratti 3.00	Dec 2026
		Construction toilets in Govt. schools i.e., Harugeri, Hidkal & Yabaratti.	3 Units	15.00	1 Units i.e., Harugeri 5.00	1 Units i.e., Hidkal 5.00	1 Units i.e., Yabaratti 5.00	Dec 2026
		Providing teaching aids/books, Computers, library, Sports materials to schools at Harugeri, Hidkal & Yabaratti.	3 Units	30.00	1 Units i.e., Harugeri 10.00	1 Units i.e., Hidkal 10.00	1 Units i.e., Yabaratti 10.00	Dec 2026
3	Sanitation	Construction of toilets at 6 villages i.e., Alagawadi, Hunshikodi, Alakhanur, Maddalipada, Nidgundi & Bastwad	30 Units	30.00	10 Nos at Alagawadi & Hunshikodi 10.00	10 Nos at Alakhanur & Maddalipada 10.00	10 Nos at Nidgundi & Bastwad 10.00	Dec 2026
4	Solar Lights	Provision of solar street lights to surrounding villages i.e, Alagawadi, Adukali, Hunshikodi, Alakhanur, Nidgundi, Badabyakud, Morab & Along the road from industry to Alagawdi village	8 Units (240 Nos)	36.00	100 Nos Along the road from industry to Alagawadi village	70 Nos Adukali, Hunshikodi & Alakhanur	70 Nos Nidgundi, Badabyakud & Morab	Dec 2026

SI. No.	Topic	Work to be done	Units	Total Cost (in lakhs)	1st year FY 23-24 (in lakhs)	2nd Year FY 24 - 25 (in lakhs)	3rd Year FY 25 - 26 (in lakhs)	Completion Date
					&Alagawadi			
					15.00	10.50	10.50	
		Construction of Bus stops and provision of RCC bench chairs to villages at Morab, Harugeri & Raibag		15.00	1 Units at Morab 5.00	1 Units at Harugeri 5.00	1 Units at Raibag 5.00	Dec 2026
5	Infrastructure	Development of Community halls & Religious places at Alagawadi, Hunshikodi, Alakhanur, Badabyakud &		100.00	1 Unit at Alagawadi	2 Unit at Hunshikodi & Alakhanur	2 Unit at Badabyakud & Nidgundi	Dec 2026
		Nidgundi			20.00	40.00	40.00	
	Total in Lakhs A			385	118	133.5	133.5	
	Total In Crores A			3.85	1.18	1.335	1.335	

Action Plan to address Public Hearing issues

SI. No.	Торіс	Work to be done	Units	Total Cost (in lakhs)	1st year FY 23-24 (in lakhs)	2nd Year FY 24 - 25 (in lakhs)	3rd Year FY 25 - 26 (in lakhs)	Completion Date
1	Employment	M/s. Alagawadi Bireshwar Sugars Pvt. Ltd. will provide total 425 Nos of employment opportunities to surrounding villagers. The industry will conduct employment	1275	30.00	3 Units i.e., 425 Nos Alagawadi, Adukali & Alakhanur	3 Units i.e., 425 Nos Maddalipada, Nidgundi & Badabyakud	3 Units i.e., 425 Nos Bastwad, Morab & Harugeri	Dec 2026
1	Стрюутенс	/skillful training programs to Youth in surrounding villages i.e., Alagawadi, Adukali, Alakhanur, Maddalipada, Nidgundi, Badabyakud, Bastwad, Morab & Harugeri	Villages	30.00	10.00	10.00	10.00	Dec 2020

SI. No.	Topic	Work to be done	Units	Total Cost (in lakhs)	1st year FY 23-24 (in lakhs)	2nd Year FY 24 - 25 (in lakhs)	3rd Year FY 25 - 26 (in lakhs)	Completion Date
		Conducting medical camps & Health check-ups to the surrounding villagers at villages i.e., Alagawadi, Adukali, Hunshikodi, Alakhanur, Kumbarkodi, Maddalipada, Nidgundi, Badabyakud, Bastwad, Hidkal, Harugeri, Chinchali, Bekkeri, Morab & Khairkodi.	1500 Nos @ 15 Villages	75.00	5 Units i.e., 500 Nos Alagawadi, Adukali, Hunshikodi, Alakhanur & Kumbarkodi 25.00	5 Units i.e., 500 Nos Maddalipada, Nidgundi, Badabyakud, Bastwad & Hidkal 25.00	5 Units i.e., 500 Nos Harugeri, Chinchali, Bekkeri, Morab & Khairkodi 25.00	Dec 2026
2	неакт	Conducting community awareness programme like aids awareness, polio camps, eye camps, preventive health programs on Women and children in the nearby villages i.e, Alagawadi, Adukali, Hunshikodi, Alakhanur, Kumbarkodi & Maddalipada		12.00	2 Units i.e., Alagawadi & Adukali 4.00	2 Units i.e., Hunshikodi & Alakhanu 4.00	2 Units i.e., Kumbarkodi & Maddalipada 4.00	Dec 2026
		Renovation of Government	3 Units	45.00	1 Unit i.e, Morab 15.00	1 Unit i.e, Hidkal 15.00	1 Unit i.e, Harugeri 15.00	Dec 2026
3	Plantation in nearby villages	Planting of various native species & fruit bearing plantations in nearby villages i.e., Alagawadi, Adukali, Hunshikodi, Alakhanur, Kumbarkodi & Morab.	1800	9.00	600 Nos at Alagawadi & Adukali 3.00	600 Saplings at Hunshikodi & Alakhanur 3.00	at	Dec 2026
		Construction of Farm Ponds in nearby villages i.e., Alagawadi, Hunshikodi, Alakhanur, Badabyakud, Bastwad & Morab.	6	18.00	2 Units i.e., Alagawadi & Hunshikodi 6.00	2 Units i.e., Alakhanur & Badabyakud 6.00	2 Units i.e., Bastwad & Morab 6.00	Dec 2026
1 4	Agriculture	Assisting farmers for Sugar cane cultivation by providing, Seeds, Fertilizers, awareness on new varieties and modern cultivation methods in	6 Units	12.00	2 Units i.e., Alagawadi & Hunshikodi 4.00	2 Units i.e., Alakhanur & Badabyakud 4.00	2 Units i.e., Bastwad & Morab 4.00	Dec 2026

SI. No.	Topic	Work to be done	Units	Total Cost (in lakhs)	1st year FY 23-24 (in lakhs)	2nd Year FY 24 - 25 (in lakhs)	3rd Year FY 25 - 26 (in lakhs)	Completion Date
		surrounding villages i.e., Alagawadi, Hunshikodi, Alakhanur, Badabyakud, Bastwad & Morab						
		Distribution of Modern agriculture equipment's & training programme on its usage at surrounding villages i.e,		65.00	1 Units i.e., Alagawadi	1 Units i.e., Alakhanur	2 Units i.e., Bastwad & Morab	Dec 2026
		Alagawadi, Alakhanur, Bastwad & Morab			15.75	15.75	33.5	
		Total in Lakhs (B)		266	82.75	82.75	100.5	
	Total In Crores (B)		2.66	0.8275	0.8275	1.005		
	Total in Lakhs (A) + (B)			651	200.75	216.25	234	
	T	otal In Crores (A) + (B)		6.51	2.0075	2.1625	2.34	

During deliberations, EAC discussed following issues:

- The Committee expressed displeasure over circulation of documents of the proposal by PP 2 days before the meeting.
- The reply submitted by PP does not completely address the issues raised in the representationnsent by Shri. AnirudhaR J Nayak, Advocate
- The PP has submitted undertaking stating that they will abide by the outcome of the court case.
- PP confirmed that CER activities will be implemented before commissioning of plant.
- PP submitted the action plan to address the issues raised during public hearing alongwith budget and time period.
- PP confirmed that they will select 30 varieties of species as a part of greenbelt development.
- PP has not submitted the information on impact due to traffic from the proposed project. Also PP did not submit the resultant incremental GLC values after superimposing the values from the point source emissions and vehicular emissions.
- PP has not submitted the revised water balance considering the use of treated effluent generated from sugar unit in the manufacturing process of distillery during sugar cane crushing period in order to reduce the fresh water requirement. PP shall also install air cooled condenser in the sugar unit.
- The Committee desired to submit the status of water permission.
- The committee desired the details of requirement of e-property registration.
- The Committee desired the copy of NCLT order for acquiring the existing unit.
- The Committee suggested to provide control measures for fugitive emissions from the storage and transfer points of coal and bagasses. PP did not mention the transfer of fuel in closed conveyor from storage to boiler.

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

Agenda No. 06

Establishment of 110 KLPD Molasses (C & B Heavy) / Cane Juice / Syrup / Grain based Distillery with 1.5 MW electricity generation located at Survey No. 25/1, 26, 40/1, 40/a, 42, 43, 44/1, 45, 58, 59, 60, 61 & 65, A/P: Nagarhalli - Malli, Taluka - Jewargi, District - Kalburgi, State - Karnataka by M/s. The Ugar Sugar Works Ltd. (TUSWL)- Consideration of Environmental Clearance.

[IA/KA/IND2/426013/2023, IA-J11011/188/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/SA 0177 and validity 10.10.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for Environmental Clearance to the Establishment of 110 KLPD Molasses (C & B Heavy) / Cane Juice / Syrup / Grain based Distillery with 1.5 MW electricity generation located at Survey No. 25/1, 26, 40/1, 40/a, 42, 43, 44/1, 45, 58, 59, 60, 61 & 65, A/P: Nagarhalli - Malli, Taluka - Jewargi, District - Kalburgi, State - Karnataka by M/s. The Ugar Sugar Works Ltd. (TUSWL).

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amended vide Notification No S.O. 3067 (E); dated 13.06.2019, the proposed project is listed as activity 5 (g) (i) (ii) – Distillery; Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

No.	Unit	Product/By Product	Quantity (MT/D)
	110 KLPD Distillery Unit	Rectified Spirit (RS)/ Extra Neutral Alcohol (ENA)/ Ethanol	110 KLPD
1	(C & B Heavy Molasses / Cane	Fusel Oil	0.2
1		CO ₂	83
	Juice / Syrup /	DWGS	241
	Grain)	DDGS	100

ı		Electricity	1.5 MW
		Licetificity	1131111

Existing 4,200 TCD Sugar Factory is operational on the basis of Consent To Operate because Environmental Clearance is not applicable. Latest CTO (Air and Water) has been issued on 25.10.2021 and is valid till 30.06.2026. Certified CTO compliance report has been issued dated 14.11.2022 from RO, KSPCB; Kalburagi. RO, SPCB has pointed out 8 observations. Accordingly, PP has submitted action taken report on the observations raised by SPCB. Redarding dyke wall, PP informed that the height of dyke wall is provided as per requirement. PP informed that rectification in electord for pH of treated effluent done and data recorded in OCMS during the foregone season was within the limit. PP informed that valve due to which leakage took place, have been rectified. PP informed that they have planned to construct covered shed for baggase storage yard and fly ash silo for which LOI has been sanctioned. Regarding preventive measures for spillage, PP informed that entire area has been cleaned and EMP cell has been created to review the housekeeping of the area. Regarding internal road repairing, PP informed that they have prepared action plan for internal road construction and LOI have been given to contractors to start the work. Flowmeter has been installed. EAC suggested that the following conditions shall be stipulated while granting EC:

1) PP shall implement the action plan for construction of covered shed for baggase storage yard and fly ash silo; height of dyke wall of molasses tank; construction of internal road etc. 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.

Standard Terms of Reference have been obtained vide F. No. J-11011/188/2021- IA II(I) dated 30.04.2021. It was informed that there is no litigation is pending against the project.

Public Hearing for the proposed project had been conducted by the Karnataka Pollution Control Board on 12.04.2022 at Project Site chaired by ADC; Kalburgi. The main issues raised during the public hearing and their action plan:

Issue in brief	Action plan in brief	Budget allocated and timeline
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Shri. Shankar Nimbaji Chouhan, Nagarahalli Village	He said that the place where they are conducting function is his land, which was given to the sugar company in 2006. While giving lands, the company has committed to give one job to one Sy. Number. Now, 14 years over by starting this factory but till date they have not given job. His children went to other places in search of job. They have come to the streets and they have no lands. His one son has given job, but he is in home due to accident. They have given their land for just Rs. 40000/- per acre. They given their lands to the factory with a hope that their children will get jobs in the factory. Since 16 years they are fighting to get job in the factory and went to the court also. He has requested to give justice for him and said that for this purpose only he came to this public meeting.	Response: In response to the above, the representative of project replied that they will verify the details and action will be taken accordingly. Additional Deputy Commissioner said that company shall take request of the above person & action taken report shall be submitted within week. Company representative agreed for same. In Sugar Factory out of total employee of 272 Nos., about 127 Nos. employee are from local villages, 130 Nos. from Karnataka & 15 Nos. out of Karnataka.
		Current Status (CS): Mr. Raju Chauhan joined industry in 2009 was an employee who had met an accident in Dec. 2021 outside industry. He got recovered & joined duty in July 2022. Presently jobs given to 127 local people.
Shri. Rudragauda Belavara, Nagarahalli Village	He said that they are having land Sy. No. 24 adjacent to the factory. He had more expectations of employment will be generated due to this factory. But there is an increase of unemployment after establishment of this factory, because they have not given employment to local people.	Response: The management have decides to give maximum employment to locals under distillery project. Page 274 of 292

Their ancestors have given lands to the factory just for Rs. 40000/- per acre with intension to get jobs for their children. But farmers are suffering due to this sugar factory. They are not allowing farmers to meet the factory management. They are not giving compensation to surrounding farmers. They are not following uniform rules to give compensation. Far away farmers even more 10 km away are also than given compensation. But they are not giving compensation to local farmers. All their agriculture crops depends on rain. Company said due to distillery, employment will be generated but they have not told anything about environment impacts. About 30% damage occurs to the environment because due to establishment of this factory, ash is going to fall in villages and in farmer lands. Unemployed youths should be taken to the company. Local language is not spoken by the management, hence they are not able to correspond with them. Not much publicity was given to this meeting. Very few farmers have come. He urged not to give permission distillery plant. Environment Department should assess the impacts of this project, then only permission can be given. Because it is having more impacts on Environment. He submitted that Shri Shankar told they have given their lands to the company and not given jobs also. What in their future life. Many have given lands by hope that their children will get jobs. If the worker accidentally died their children are given jobs in the company. questioned the project proponent why they are not offering jobs to the farmer who had earlier sold the land. He further expressed that instead of local people they are giving jobs to outsiders. Company should take responsibility of family of employees. If company support and help the farmers, company will be developed. Company is giving more problems to the local people. There is famous ancient historic place is located 4 km away at Kulageri village. This place was not reflected in your presentation. Company not spent any amount for development of Kulageri and Nagarhalli villages. Nagarahalli villagers have lost their land, Farmers problems should be heard before taking decision on this project. During 2014, the lands were damaged due to

Action Plan & CS

- Grievance
 Redressal
 Committee has
 been formed with
 representatives
 from Industry &
 Local
 Grampanchyat.
- Compensation is given for overmatured cane crop / late cane arrival at Factory.
- Technical training program to be conducted in offseason for educated local youths who can become prospective employees / staff.
- CSR after consultation with Grampanchyat & DC.
- The Kulageri though ancient it is not a notified Archeological structure. However, same will be incorporated in final EIA.

impact

The

details have been presented in EIA as well as Power Point presentation given to public. As presented therein, ZLD will be achieved for distillery effluent as spentwash will be incinerated in

flooding. As per the commitment the company should give one job to one Sy. Number and should give compensation. Affected farmers should be given compensation

boiler and ESP and stack will be provided for controlling the air pollution.

Budget: Rs. 10 Cr. for EMP

Timeline: Before commissioning of project.

Shri. Mallanagouda Patil, Kulageri Village

He said that he is farmer and ex member of Taluka Panchayat. He has grown Sugarcane in 10 acres. This company will be benefitted to the farmers. There is availability of water in this area. Now the company has proposed to establish distillery unit and farmers shall be benefitted more due to this project. The benefit should reach the farmers. The company presented that there is no historical places in the surrounding area. This is wrong. Because within 10 km radius there is historical places at Kulageri village. This is town of Kunthala Rajya and capital of Chandrahasa. For development of this place, historical they have submitted requests to Deputy Commissioner, through village and Taluka Panchayats and so far no development work has been taken up. There are rare features like 21 wells, Narasimha statue, Elephant grazing field etc. are still existina. He requested the factory management for development of this ancient historical place located within 5 km from the factory. The company has presented the activities carried out in the surrounding villages. But company has not taken up any development works in the surrounding area. have not helped for education. Company is giving contributions during festivals and giving sugar. There are about 6-7 people on duty have died, but they have not given jobs to their children. Eligible candidates shall be given jobs. Company is not helping the farmers by giving fertilizers for cane development in this area. This was done 5-6 years back, then it was stopped. He urged to restart this scheme again. The farmers are facing problem of cane cutting. There is shortage of labor. Hence, they are unable to send the sugar cane in time to the factory for crushing. After 13-14 months, the farmers will be in loss as there is weight loss

Response:

- Fertilizer will be given in subsidized rates to farmers.
- Green Belt will be developed in premises on area of 2,15,342 M2.
- Safe Drinking water facility will be provide in Village Nagarhalli.
- Infrastructure bridge like on nalla in Malli village which is about 3 km from site will be provided under Govt. Scheme. & Industry, PP can help expedite the Govt. procedure.

Action Plan:

- Industry will intensify the actions towards drip irrigation promotion, & high yield cane species distribution,
- Water conservation through RWH by funding for farm ponds.
- Assistance to local ZP & other schools for library, laboratories,

of sugar cane. If the sugar cane is cut within 11-12 months, then they will get 30-35 tons per acre. Sometimes, it may go up to 50 tons. Today also there is about 25 acre standing crop is there and company should give check against the standing crops. Company can do the new project, but they have to give employment to the educated youths in the surrounding 20 km radius and local people shall be employed. Due to any factory, both benefits and affects will be there. Due to this factory some impacts may on the Environment but farmers will be benefitted. Hence farmers also to be benefitted and environment should also be protected. Company presented that about 15000 trees have been grown, but actually not developed much trees. He said that other factories have developed surrounding village roads. There is shortage of drinking water in the villages. Earlier this was paddy growing area. Due to over application of fertilizers and pesticides, the water and lands were destroyed. There is RO plant in Kulageri and Allapur villages. But no RO plant in Nagarahalli, Malli, Nagarahalli Tanda and Biral villages. Hence there is problem of water in each village and company should provide drinking water facility. For cutting sugar cane the labor charge is Rs. 21000/per Hectare. Cane development section should follow the cane cutting time schedule. Dairy farming shall be increased in the surrounding villages. Fertilizers shall distributed to farmers. There is bus facility problem in this area. Children have to go to Sindhagi or Shorapur for college. College has started in Malli, two years back, but it is not in good condition and not maintained properly. There is no power and water supply to college. Company should help the farmers to grow more cane sugar in this area. More than 5000 acre land is available for sugar cane crops. They have given lands to the factory and they have to work in this area. There is large Nalla in Malli village, it flows from 46 km away Talikote and no bridge for it in 3 places. Bridge is required for this Nalla. They have submitted their demands and these demands should be fulfilled by the company.

computers, digital literacy, wifi & online learning facilities etc.

• Supply of safe drinking Water ATM with RO & UV arrangements. **Budget:**GB development & RWH in premises - Rs. 350 Lakhs

Timeline: 33% GB implementation before distillery commissioning.

Shri. Mallikarjuna Biradar, Nagarahalli Village He said that since the establishment of the factory, no officer has come to the area to listen the problems of farmers and villagers.

Response:

Due to distillery100 Nos. new

What is the status of environment in this area? Officers has to take action to protect the environment. No doubt this factory has come to their village as God. But today situation is different. Company is not giving importance to environment. Company is adopting British policy and guidelines shall be followed by the company. He said that the company should help the farmers and trouble should not be given to the farmers. Officers have not conducted any meetings with farmers. Again they have proposed another plant and hence meeting is conducted today. There are many faults in the presentation made by the company. They have worked for establishment of this factory. 15000 trees are not grown here. Company has left vacant lands without any plantations. The farmers who have given lands to the factory have come to the streets. The company is discharged waste water and is not treated properly. Due to rains their lands will be flooded. Company is not giving jobs to the children of died employees. Company has given more trouble to him. They have damaged his lands and not giving compensation. He opposed to give permission to another plant. They are opposing this factory, as their lands have been damaged and not getting employment. All employees working here have come from outside places. No employment to local people. Officers are from Maharashtra and Belgaum and all are speaking in Marathi. There is several problems due to new plant. He urged not to give permission for establishment of new plant.

- employment will be generated. Here, maximum locals will be hired.
- Under Sugar Factory, ETP have been provided & treated water is used for irrigation.
- After Distillery project, no treated effluent from sugar factory will be let out of premises but same will be used for gardening in own premises thereby reducing the fresh water demand & achieving ZLD.
- For achieving this, existing ETP will be upgraded tho' provision of improvised primary chemical **PTS** treatment, and tertiary treatment through PSF, ACF & RO. CPU will

for

provided

excess treating condensate and its recycling. Action Plan: Agri. Farm soils are routinely tested by Industry, No adverse impact seen. This practice will be maintained. Free farmer training, education awareness campaigns will be arranged twice a year.

		Budget: Rs. 10 Cr. allocated for Sugar ETP upgradation & CPU provision. Timeline: Before commission of distillery.
Shri. Prashanth Chouhan, Malli Village	He said that he has completed B.Com Degree. Company is taking 100 new employees for this new project. He asked how many people company has taken for the existing factory. They have their land in the nearby area. The roads are damaged here. His father use to grow more crops. Now due to industry waste water and dust crops are not growing. They have to beg the company to get compensation. Rs. 10000/- to Rs. 15000/- will be given to the farmers which is not sufficient. Company has not given job to him, so he became reporter to the paper and kept his mobile shop. Company has not made the employees permanent. Outsiders will be given job here. Company is cheating the local people.	Response: Refer Point No. 2 responses for employment.
Shri. Ashok Halladakere, Malli Village	He said that he is BA, MA graduate and said that he knew what environment pollution is and why it is caused. Establishment the company in their village, they have to help the villages for their development and help the farmers. Company presented they are going to establish another unit and 100 people will be given employment. There are about 300 people are working in the existing plant and about 100 local people are working. Other 200 people are from outside places. Company has to see the education and technical skills during appointment. Many educated youths are available in their area, they have to be appointed. The youths completed Technical courses shall also be appointed. Company should not bring the people from outside. Company have to give employment to local people and they can lead happy life. His brother was working in this company and he died during his service in the factory. They have requested to give job to his son. But company has not given job. Company has to create jobs when new unit is proposed. Due to this company, only business people are benefitted. When the new plant is established employment will be generated and educated youths will get jobs.	Response: Refer Point No. 2 responses for employment. Action Plan & CS: Mr. Suresh Halladakere (brother of Mr. Ashok Halladakere died natural death out of industry premises. So, question of job giving to his relatives did not arise.

He urged the company to give jobs only to the educated youths within 10-15 km radius	
of the factory.	

No additional land will be acquired for the proposed distillery project as the same will be done within existing plant premises of 64.77 Ha which is under possession of Industry. Greenbelt will be developed in total area of 21.53 Ha i.e. 33% of total project area. The estimated project cost is Rs. 80 Crores. Capital cost of EMP would be Rs. 24.89 Crores and recurring cost for EMP would be Rs. 5.75 Crores per annum. Industry proposes to allocate Rs. 1.73 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after proposed project will be 372 persons as direct & indirect.

There is no presence of national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve forests/protected forests, etc. within 10 km distance. Water bodies: Indi (Basavsagar) Branch Canal at 100 m and its distributary is adjacent to plot boundary. Kempa Halla at 2 Km and Hind Halla at 7 Km. PP submitted the copy of NOC issued by Executive Engineer, KBJNL IBC Div. No 1 vide letter No KBJNL/IBCD-1/PB/2022-23/115 dated 13.02.2023 for canal passing near the plot.

Ambient air quality monitoring was carried out at 8 locations during October 2022 to December 2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (47.6 – 64.8 $\mu g/m^3$), $PM_{2.5}$ (11.1 – 25.5 $\mu g/m^3$), SO_2 (10.0 – 18.9 $\mu g/m^3$) and NO_X (10.8 – 25.6 $\mu g/m^3$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.088 $\mu g/m^3$, 0.013 $\mu g/m^3$, 5.11 $\mu g/m^3$ and 0.392 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_X . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 339 CMD which will be met from Karnataka Neeravari Nigam Ltd. Application has been submitted The Executive Engineer, KBJNL, IPC Division No.1, Kalburgi dated 31.03.2021. Effluent of 894 CMD quantity will be treated through Condensate Polishing Unit of capacity 1200 KLPD. STP of capacity 25 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero

Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 1.5 MW and will be met from existing 15 MW cogeneration power plant. 40 TPH Spentwash & Coal fired incineration boiler will be installed. APCE ESP with a stack of height of 80 M will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler.

Existing sugar & cogen has 85 TPH Bagasse fired boiler. APCE ESP with stack of height of 75 M is installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. Industry has 2 nos. of DG sets with capacity 1350 KVA & 380 KVA which are used as standby during power failure and stack height 30 M & 6 M (ARL) is provided as per CPCB norms. No new DG set will be installed under proposed project.

Details of Process emissions generation and its management:

- Total CO₂ (83 TPD) is being/will be bottled and supplied to manufacturers of beverages /secondary uses.
- ESP is being/will be installed with all the existing and proposed boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ & 30mg/Nm³
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.

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

- a. Solid Waste:
 - Existing of sugar & cogen- Solid waste generated in the form of ETP sludge 3.5 T/M; used as manure. Boiler ash 900 T/M; brick making unit/ used as manure.
 - Establishment of distillery- Boiler ash 1830 T/M; Potash Recovery/ brick making. Yeast sludge 600 T/D & CPU sludge26 T/M, used as manure.
- b. Hazardous Waste:
- From Sugar, Cogen & Distillery unit- Spent Oil 0.8 MT/Yr.; to authorized re-processor. Empty Containers 35 Nos./Yr.; to authorized reseller, Contaminated Cotton rags or other cleaning materials0.2MT/Yr.; Forwarded to Authorized agency.

Capital cost and recurring cost of EMP are given below:

		Cost (Rs	s. Lakhs)
No.	Description	Capital	O & M / Year
Α	Proposed Project		
1	APC - ESP & 80 M Ht. Stack & Ash handling system, OCMS.	Rs.700	Rs.200
2	Water Pollution Control – DDGS Dryer, CPU; 2 Nos. (Distillery & Sugar Factory), MEE, Sugar ETP upgradation, STP	Rs.1000	Rs.250
3	Noise Pollution Control	Rs.50	Rs.15
4	Occupational Health & Safety	Rs.100	Rs.25
5	Solid & Hazardous Waste Management	Rs.15	Rs.10
6	Green Belt Augmentation Plan & RWH System	Rs.350	Rs.35
7	Environmental Monitoring & Management	Rs.90	Rs.25
8	Budget for infrastructure under CCCR: Bagasse Yard Rs. 92 Lakhs + Internal Concrete Roads Rs. 97 Lakhs + Ash Silo Rs. 10 Lakhs = Rs. 199 Lakhs	Rs.199	Rs. 15
	Total (31% of Expansion Investment of Rs. 80 Cr.)	Rs. 2,489	Rs. 575
В	Existing Project	-	
1	APC - ESP, Stack (75 M), Ash collection system	Rs.500	Rs.50
2	Water Pollution Control - ETP & OCMS	Rs.250	Rs.30
3	Noise Pollution Control	Rs.25	Rs.5
4	Solid & Hazardous Waste Management	Rs.30	Rs.5
5	Occupational Health and Safety	Rs.50	Rs.5
6	Green Belt Development & RWH System	Rs.75	Rs.7
7	Environmental Monitoring & Management	Rs.25	Rs.5
	Total (6% of Existing Investment of Rs. 150.18 Cr.)	Rs. 955	Rs. 107

Details of CER with proposed activities and budgetary allocation:

No	CER Activity Details	Amount (Lakhs)
1	RO Plant Installation (Village Nagarhalli-Malli):	Rs. 18
	Arrangement of Drinking Water Supply Infrastructure:	
	Total 4 Nos. of Safe Drinking Water Units with Filtration,	
	RO Module & Storage Tank, Piping, electrical control panel	
	etc. with dispensing & metering systems. Capacity of 500	

	ZP & other schools for library, laboratories, computers, digital literacy, wi-fi & online learning facilities etc. Total Amount (2% of Capital Cost)	Rs. 173
5	Educational Infrastructure & Facilities: Assistance to local	Rs. 15
4	Installation of Solar Photovoltaic Energy System: For supply of uninterrupted power to School and college in Sindhagi Village. Solar Photovoltaic Electricity Generation System: 20 KW System to be installed at School & College Buildings in Sindhagi Village. Cost: 2 Nos. x 20 KW x Rs. 50,000/- per KW = Rs. 20 Lakhs	Rs. 20
3	Supply of Drip Irrigation for water conservation & Fertilizers: For about 200 Ha	Rs. 35
2	Lit/Hr each - 4 Nos. x Rs. 4.50 Lakhs / No = Rs. 18 Lakhs Repair & Maintenance of Village Road (Villages: Yalgi, Ainapur, Yadrami, Magangera, Saladahalli, Asantapur, Gundaknal), Construction of Bridge (Village: Malli), CD Work including corrective & preventive maintenance.	Rs. 85

During deliberations, EAC discussed following issues:

- PP confirmed that Distillery CPU of capacity 1200 CMD, a Double Module RO System will be installed instead of single module type.
- The combined GLC values were presented for simultaneous effect of stack emissions from proposed 40 TPH Incineration Boiler and emissions from the vehicular exhaust. The Committee suggested that Low sulphur coal with maximum sulphur content of 0.5% shall only be used.
- PP confirmed that the Industry will install Air Cooled Condensers for Distillery unit.

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 Page 283 of 292

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). PP shall implement the action plan for construction of covered shed for baggase storage yard and fly ash silo; height of dyke wall of molasses tank; construction of internal road etc. 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.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from surface 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 shall obtain such permission.
- (v). Total Fresh water requirement shall not exceed 339m³/daywhich will be met from Karnataka Neeravari Nigam Ltd. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash form molasses based distillery shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Spent Wash/stillage from grain based distillery shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be

treated in the condensate polishing unit (CPU) comprising of three stage RO. No wastewater or treated water from integrated unit of sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall install air cooled condensor in sugar unit to reduce fresh water requirement.

- (vii). Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.
- (viii). APCE ESP (5 field) with 80 meters high stackshall be installed with the Spentwash&Coal (with 15% coal usage as auxiliary fuel) fired 40 TPHboiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm³for distillery.. SO₂ and NOx emissions shall be less than 100 mg/Nm³. APCE ESP (5 field) with 75 meters high stackshall be installed with the Bagasse fired 85 TPH boiler for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³for Existing sugar &cogen .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 (900 T/M) will be used for brick making unit/ used as manure. Existing of sugar & cogen- Solid waste generated in the form of ETP sludge 3.5 T/M; used as manure. PP shall use Rice husk/ Bagasse/Coal (only startup) fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

- (x). CO₂ (83 TPD) is being/will be bottled and supplied to manufacturers of beverages /secondary uses.
- (xi). PP shall allocate at least Rs. 1.0 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xii). 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 21.53 hectares i.e., 33 %of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Thick green belt shall be developed around the parking area. 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 plant saplings 4-6 feet high of atleast 20 variety of species as part of greenbelt development. 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.

- (xvii). PP proposed to allocate Rs. 1.73 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
 - (xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
 - (xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
 - (xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring

functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

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

ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.
- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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

S.	Name and Address Position		
No.			
1.	Shri S. C. Mann	Chairman	
2.	Dr. J. S. Sharma	Member	
3.	Prof. Y. V. Rami Reddy	Member	
4.	Shri. J.S. Kamyotra	Member	
5.	Dr. Dilip Majumdar (one day 04.05.2023)	Member	
6.	Dr. Rahul Rameshrao Mungikar	Member	
7.	Dr. Onkar Nath Tiwari	Member	
8.	Dr. Seshagiri Rao Ambati	Member	
9.	Dr. Sanjay V. Patil (VSI) (one day 04.05.2023)	Member	
10.	Sh. Siddhartha Singh (one day 04.05.2023)	Member	
11.	Shri A. N. Singh, Scientist 'E'	Member	
		Secretary	
MoEFCC			
12.	Dr. Mahendra Phulwaria	Scientist 'C'	
13.	Mr. Kanaka Teja	Research Assistant	