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

Dated: 19.05.2023

Meeting ID: IA/IND2/13504/16/05/2023 MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE (INDUSTRY-2 SECTOR PROJECTS) HELD ON 16th 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/IND2/13493/03/05/2023) held on 03rd 04th May, 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: -

16th May, 2023 (Tuesday)

Agenda No. 01

Onshore Oil & Gas development drilling and production in Tengakhat-Kathaloni-Dikom area in Dibrugarh district Assam by M/s. OIL INDIA LIMITED - Consideration of Environment Clearance.

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

PP vide email dated 11.03.2023 informed that the proposal has already been appraised in EAC meeting ID dated: IA/IND2/13456/09/03/2023 held on 09th – 10th March, 2023, wherein committee recommended the proposal for grant of EC. Subsequently, Ministry has issued EC to the proposal on vide EC ID No. EC23A002AS188131 on 17.04.2023 which is visible on parivesh portal. Due to some technical glitch the same proposal is listed in current Agenda. Accordingly, matter was taken up with NIC to resolve the issue and no further action is required.

Agenda No. 02

Development and Production Wells along with Surface Facilities Phase - III of CBM Block RG(East) - CBM- 2001/1, Raniganj CBM Block, West Bengal by M/s. Essar Oil and Gas Exploration and Production Ltd. - Consideration of Extension in validity of Environmental Clearance.

[IA/WB/IND2/298747/2023, J-11011/491/2011-IA-II(I)]

The proposal is for amendment in the Environment Clearance granted by the Ministry vide F. No. J-11011/491/2011-IA-II (I) dated 26th February, 2013 for the project Development & Production Wells along with Surface Facilities, Phase- III of CBM Block RG (E)-CBM-2001/1 located at Raniganj CBM Block, Durgapur, West Bengal by M/s. Essar Oil and Gas Exploration and Production Ltd. The project was given extension vide letter dated F. No. J-

11011/491/2011-IA-II (I) dated 9^{th} May, 2019 for three years which was valid upto 26^{th} February, 2023.

The project proponent requested to amendment for extension in the validity of EC with the details is as under;

S.	Para of EC issued by MoEF&CC	Details as per	To be revised/	Justification/
No		the EC	read as	reason
01.	Para- 4 of EC vide F. No.J- 11011/491/2011 -IA-II (I) dated 9 th May, 2019.	Based on the recommendatio n of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval to the proposed amendment in the environment clearance dated 26th February, 2013, and extension of its validity for a period of 3 years i.e. up to 26th February, 2023.	Extension of validity of the Environment Clearance (EC) vide F. No.J-11011/491/2011 -IA-II (I) dated 9th May, 2019 for a period of another 01 year i.e. up to 25th February, 2024, under the notification- S.O. 1807(E), dated 12th April 2022 of the Ministry.	EOGEPL has drilled only 193 CBM wells out of the planned 630 CBM wells under Phase III development. ■ Drilling campaign was temporarily stopped in 2017, due to delay in pipeline connectivity poising a significant constrain to evacuate the CBM gas produced. ■ The pipeline commissioning timeliness further got extended due the pandemic situation created by COVID 19 Coronavirus and the nation-wide lockdown. ■ Non availability of

			the evacuation pipeline and
			the pandemic
			has badly
			affected our
			operations and
			delayed the
			planned
			development
			activities.
		<u>Lead</u>	ing Indicator:
		>	Urja Ganga
			Pipeline
			(UGPL) was
			commissioned
			and
			connectivity to
			our CBM block
			was
			established. Connectivity
			with the
			national gas
			grid has
			ensured
			seamless
			evacuation of
			the entire CBM
			gas produced
			from the block
			since June
			2021.
			EOGEPL is now
			geared up to
			commence
			major
			developmental
			activities to
			enhance gas
			production from the
			Raniganj CBM
			block.
		>	ML valid till
		•	May, 2032.
		>	CBM contract
			valid till May,
	 		2041.
 	 		Page 4 of 31

During deliberations EAC discussed following issue:

- EAC noted that the extension has been already been given to the project vide letter dated F. No. J-11011/491/2011-IA-II (I) dated 9th May, 2019 which was valid upto 26th February, 2023.
- As per S.O. 1807(E), dated 12th April 2022, the validity of EC of this project shall be 10 years which can be extended for one more year within validity of EC. Accordingly, the validity of this EC can be extended till 25th February, 2024.
- The application for extension of validity of EC was submitted on 20.03.2023 which is within 30 days after the expiry of the validity of EC.
- As per para 9 (v) (a) of EIA, notification 2006 extension of ECs applied within 30 days after the validity of EC shall be referred to EAC and based on the recommendations, the delay shall be condoned at the level of Joint Secretary in the the Ministry.
- The Committee also suggested that since number of wells to be drilled is high and validity of EC even after extension is less than 8 months, the PP should also start the process parallely for obtaining the fresh clearances for the remaining wells to be drilled.

After detailed deliberations EAC found the justification for amendment sought satisfactory and recommended for extension of EC till 25th February, 2024 as proposed by the project proponent subject to condonation of delay in submitting the application for extension as per para 9 (v) (a) of EIA, notification 2006 with the following additional condition:

 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.

All other terms and conditions in the EC issued vide F. No. J-11011/491/2011-IA-II (I) dated 26th February, 2013 remain unchanged.

Agenda No. 03

Establishment of 120 KLPD Distillery unit to produce 120 KLPD Rectified Spirit/Extra Neutral Alcohol/Fuel Ethanol plant based on sugarcane syrup/"C" Molasses /"B" Heavy Molasses as raw material at Warphal Village, Taluka Partur, District Jalna, Maharashtra State by M/s. Shraddha Energy & Infra-projects Private Limited - Consideration of Amendment in Environmental Clearance.

[IA/MH/IND2/298969/2023, IA-J-11011/198/2016-IA-II(I)]

It has been informed to EAC by PP vide mail dated 11.05.2023 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. 04

Establishment of new sugar syrup / Grain / B or C-Heavy Molasses Distillery having Capacity – 540 KLD along with 12 MW Co-gen power at Village: Maqsudapur, Udra Tikri & Kuinyan Maholiya, Block: Banda, Tehsil: Powayan, District: Shajahanpur, Uttar Pradesh By M/S. Bajaj Hindusthan Sugar Limited, Unit: Maqsudapur - Consideration of Amendment in Terms of Reference.

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

It has been informed to EAC by PP vide mail dated 14.05.2023 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. 05

Proposed Project for 5000 TCD Sugar Plant along with 33.65 MW Cogeneration Power Plant and 120 KLPD Distillery/Ethanol Plant at V.P.O Paniar Village, Dist. Gurdaspur, Punjab by M/s. The Gurdaspur Cooperative Sugar Mills Ltd – Consideration of Environmental Clearance.

[IA/PB/IND2/402748/2022, IA-J11011/502/2021-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its meeting dated 21^{st} - 22^{nd} December, 2022 wherein EAC returned the proposal and desired certain requisite information/inputs.

The Project Proponent and the accredited Consultant M/s. Eco Chem Sales & Services (ECSS) – Surat (NABET certificate no. NABET/EIA/2023/SA 0156 and validity 13th June, 2023), made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the proposed project for 5000 TCD Sugar Plant along with 33.65 MW Co-generation Power Plant and 120 KLPD Distillery/Ethanol Plant located at V.P.O Paniar Village, Dist. Gurdaspur, Punjab by M/s. The Gurdaspur Cooperative Sugar Mills Ltd.

Integrated Sugar Industry, Co-Generation Power Plants and Distilleries are listed at S. No. 5(j), 1(d) & 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

S.No.	Products & Co-products	Unit	Quantity
1.	Sugar Unit (5000 TCD)		
	Sugar	TPD	525
	Molasses	TPD	250
	Filter Cake	TPD	200
	Bagasse	TPD	1,425
2.	Power Plant		·

	Co-generation	MW	28
	Spent wash Incineration Boiler based	MW	5.65
3.	Molasses & Grain Distillery/ Ethanol Unit		
	Absolute Alcohol	KLPD	120
	Carbon-di-oxide	TPD	93.6
	DDGS (Distillers Dried Grain Soluble)	TPD	52.65
	Fusel oil	LPD	131
	Technical Alcohol	LPD	3,930

Existing industry is operational on the basis of Consent to Operate, Environmental Clearance was not applicable for the existing unit as the plant capacity is below threshold limits as per EIA Notification, 2006 and amended thereafter. CTO under Air Act, 1981 Vide letter CTO/Renewal/GRP/2018/7086711 valid up to 31/03/2023 and under Water Act, 1974 Vide letter no. CTOW/Renewal/GRP/2018/7087223 valid up to 31/03/2023. Certified CTO compliance report has been issued dated 21.03.2023 from RO, PPCB. Unit has also obtained the renewal of CTO under Air Act, 1981 vide letter no. CTOA/Renewal/GRP/2023/21618195 valid up to 31/03/2024 and under Water Act, 1974 Vide CTOW/Renewal/GRP/2023/21618164 valid up to 31/03/2024. EAC found the action plan submitted satisfactory.

Standard Terms of Reference have been obtained vide F. No. No. IA-J-11011/502/2021-IA-II(I) dated 8th December 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 Punjab Pollution Control Board on 23.05.2022 at project site of the industry located in the revenue estate of village Paniar, District Gurdaspur chaired by Additional Deputy Commissioner (G), Punjab. The main issues raised during the public hearing and their action plan:

Sr. No.	Issue in brief	Reply of the query statement information clarification given by the project	Action plan in brief	Budget allocated and timeline
------------	----------------	---	-------------------------	--

		proponent		
1.	He welcomed the AddI. Deputy Commissioner, Gurdaspur and other Officers. He appreciated the establishment of Sugar Mill of capacity 5000 TCD and Distillery/Ethanol Plant of 120 KLPD. He further stated that the local persons/youngsters shall be employed in theSugar Mill so as to give benefit to the local area. He further asked the Sugar Mill authorities to ensure that proper arrangements are made to control air and water pollution.	Sugar Mill informed that the public hearing is being conducted by the Punjab Pollution Control Board to know the problems of the public from the existing unit. He informed that the preference will be given to local persons for employment in the Sugar Mill.	nos. of manpower will be generated and preference will be given to local persons. For control of air pollution, standardized Air pollution control system will be installed and adequate mitigation measures will be ensured.	Unit has allotted capital cost of Rs 200 lakhs for air pollution & 600 lakhs for water pollution management system respectively.
2.	He welcomed the AddI. Deputy Commissioner, Gurdaspur and other Officers. He stated that the local persons/youngsters shall be employed in	Representative of the Sugar Mill informed that the public hearing is being conducted by the Punjab Pollution Control Board to	Around 332 nos. of manpower will be generated and preference	

	the Sugar Mill so as to	·		
	give benefit to the local area.	the public from the existing unit.	to local persons.	
		He reiterated that	personial	
		the preference will be		
		given to local		
		persons for employment in the		
		Sugar Mill.		
3.	He stated that due to	•		
	establishment of 5000 TCD Sugar Mill, the	the Sugar Mill informed that around		
	local farmers will gain	Rs. 10 crore has		
	financial benefits. He	been paid to the		
	further stated that now			
	the farmers are facing	<u> </u>		
	problem regarding late payment of Sugar Cane	to be paid by Govt. of Punjab for which		
	unloaded by them In	they have already		
	the Mill.	sent reminders. He		
	He asked the Sugar Mill	assured that due to		
	authorities to ensure	the expansion of the		
	timely payment of the farmers.	Sugar Mill, the revenue to the Govt.		
	Tarrilers.	will Increase due to		
		which the payments		
		to be farmers will be		
		done timely		
		Representative of the		
	He stated that the	Sugar Mill Informed that the fly ash will		
	Sugar Mills authorities	be generated from		
	shall make proper	_		
	arrangement for the			
4.	disposal of fly ash. He	per their demand for		
	also added that the construction work of the	agricultural purpose and remaining fly ash		
	Sugar Mill shall be	will be disposed off		
	completed within the	Environmentally		
	stipulated time period.	Sound manner.		
		He further Informed		
		that the Mill		

		authorities will ensure that the		
		construction work of the Sugar Mill and		
		distillery is completed		
		well within the time period.		
5.	He stated that the press mud and fly ash shall be given to the farmers as per their demands on less rates for use in agricultural land as It Is a good alternative of fertilizers. He also appreciated the expansion work of the Sugar Mill and congratulated the Sugar Mill authorities. He informed that during rain in winters, due to water logging in cane yard, it is very difficult for the farmers to enter the Sugar Mill and he	Representative of the Sugar Mill informed Informed the farmers can contact the authorities for the lifting of fly ash and press mud for use in the agricultural land. He also added that a new cane yard will be constructed with the proposed Sugar Mill and there will be no problem of water logging.	The unit have decided to sell unutilized press mud and fly ash within own agriculture land to the nearby farmer at no profit no loss rate.	- -
	requested for the construction of rest houses for the farmers coming in the Sugar Mill for the unloading of Sugarcane.			
6	He stated that earlier there was problem of water pollution in the nearby villages however, same was resolved by the officers of the Punjab Pollution Control Board and District Administration. He requested the Mill	Sugar Mill informed that they have proposed to install the water pollution control devices and air pollution control devices of latest technology to control	The proposed unit will be Zero Liquid Discharge, so the chances of water pollution due to operation of plant will be negligible.	Unit has allotted capital cost of 600 lakhs for water pollution management system.

management to ensure	pollution.	
that no such problem		
shall occur in the near		
future due to the		
expansion of the Sugar		
Mill.		

Total land area required is 39.2545 hectares. Greenbelt will be developed in total area of 13.74 hectares i.e., 35 % of total project area. The estimated project cost is Rs. 665.24 Crores. Capital cost of EMP would be Rs. 21.23 Crores and recurring cost for EMP would be Rs. 5.8380 Crores per annum. Industry proposes to allocate Rs. 9.98 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 332 persons as direct & indirect.

There is Keshopur Bird Sanctuary at a distance of 4.89 km in W direction of Project site. Conservation plan for schedule I species has been submitted to Forest Division Officer (Wildlife), Pathankot dated 20.04.2023 and a budget of 0.038 Crores has been earmarked for the same. River Ravi River is at a distance of 12.0 km in NW direction.

Ambient air quality monitoring was carried out at 8 locations during December 2021 to February 2022 and the baseline data indicates the ranges of concentrations as: PM10 (62.3 - 75.1 μ g/m³), PM2.5 (37.7 - 45.1 μ g/m³), SO2 (4.9 - 7.7 μ g/m³) and NO2 (10.0 - 13.6 μ g/m³). AAQ modelling study for point source emissions and vehicular emissions indicates that the maximum incremental GLCs after the proposed project would be 1.96 μ g/m³, 0.30 μ g/m³ and 0.86 μ g/m³ with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement of 1320 KLPD for sugar unit and 95 KLPD for distillery unit.

Sugar and Cogen Plant

 Total industrial wastewater generation from Sugar and Cogen Plant will be 1528 KLD, out of which 1026 KLD effluent from Sugar Plant will be treated in sugar ETP (Primary, Secondary and Tertiary treatment) having treatment capacity of 1200 KLD and 502 KLD effluent from Cogen plant will be sent to Condensate Polishing Unit of distillery plant for further treatment.

- Treated effluent from sugar unit will be sent to RO plant having treatment capacity of 770 KLD.
- Domestic sewage of 50 KLD will be treated in STP (50 KLD capacity) and 45 KLD will be reused for gardening purpose.

Distillery Plant

 Total industrial wastewater generation from Distillery Plant will be 1069 KLD, which will be treated along with 502 KLD effluent from Cogen plant in Condensate Polishing Unit (1600 KLD capacity) followed by RO Plant.

For molasses based distillery operations, spentwash will be concentrated in MEE followed by inceration in the incineration boiler. Condensate Polishing Unit comprising UASB, extended aeration system, membrane bio reactor (MBR) and Reverse osmosis (RO) system will be installed for treatment of condensate, spent lees and blow down etc. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

For grain based distillery operations, spent Wash/stillage will be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS will 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

Power requirement will be 12.5 MW, which will be met from proposed 33.65 MW cogeneration power plant/Punjab State Power Corporation Limited grid. Bagasse fired 145 TPH capacity boiler and Slop Fired 45 TPH capacity boiler will be installed. Individual Electrostatic Precipitator (5 field) with a stack of height of 65 m & 83 m respectively will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³ for the proposed boilers. Three numbers of D.G. sets (two D. G. set of 1000-kVA

capacity and one D. G. Set of 625-kVA capacity) will be used as standby during power failure and stack height (6.5 m above rooftop) will be provided as per CPCB norms to the proposed D.G sets.

Details of Process emissions generation and its management:

There will be no process gas emission from proposed project.

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

- 9 kL/Annum Used oil will be generation, collection, storage, and used as lubricant in plant machineries.
- 20 TPD Bagasse Ash & 42 TPD Incineration & Boiler Ash will be generated and will be sold to brick manufacturer/ Mixed with pressmud and used as manure.
- 1.5 TPD ETP Sludge & 6.0 TPD Yeast sludge will be generated and will be used for greenbelt development within premises.

Total land of 39.2545 Hectares is already under possession of the company. The Gurdaspur Co-Op Sugar Mills. Ltd., is an operating sugar plant with an installed capacity of 2000 TCD. However, the existing 2000 TCD unit will be completely dismantled before operation of new Greenfield plant of 5000 TCD Sugar Plant along with 33.65 MW Co-gen Plant and 120 KLPD Distillery/Ethanol Plant. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

S. No.	Name of the unit	Capital Cost Rs. Lakhs	Operating cost Rs. Lakhs/Month	Maintenance Cost Rs. Lakhs/Month	Total Recurring Cost Rs. Lakhs/Month
1.0	Water Environment				
1.1	Primary, secondary & tertiary ETP	250.00	0.75	0.25	1.00
1.2	STP	75.00	0.50	0.50	1.00
1.4	MEE for concentrated	80.00	10.00	0.75	10.75

	effluent				
1.5	RO plant	75.00	5.00	0.50	5.50
1.6	Laboratory & Monitoring	120.00	0.50	0.50	1.00
	Total Water	600.00	16.75	2.50	19.25
2.0	environment				
2.0	Air Environment	150.00	0.75	2.52	1.05
2.1	ESP for boiler	150.00	0.75	0.50	1.25
2.2	Scrubber for CO ₂	50.00	0.5	0.05	0.55
2.2	Air monitoring	-	1.25	0	1.25
	Total Air	200.0	2.50	0.55	3.05
	environment				
3.0	Hazardous waste				
3.1	Storage facility	50.0	0	2.0	2.0
	Total	50.0	0	2.0	2.0
4.0	Occupational health and safety				
4.1	OHC (AC room +	25	0	0.25	0.25
7.1	stretcher)	25	O	0.23	0.25
4.2	Medical kits,	15	0.10	0	0.10
	oxygen cylinder &		0.120		0.120
	antidotes				
4.3	Medical check up	0	1.50	0	1.50
4.4	Safety training,	25	0.50	0	0.50
	safety equipments				
	like PPE's & Fire				
	equipment like fire				
	extinguishers, fire				
	proximity suits				
4.5	Fire hydrant	75	0	1.50	1.50
	system				
4.6	PLC control for	50	0	0.50	0.50
	process				
	Total	190	2.1	2.25	4.35
5.0	Green belt				
5.1	Development	0	3.00	0	3.00
5.1	Gardener	85.00	3.00 0	-	
5.2	Plants, fencing, rain water	05.00	U	17.00	17.00
	harvesting				
	Total	85.00	3.00	17.00	20.00
6.0	CER Activity	998	5.00		
0.0	Grand Total		24.25	24.30	48.65
	Grand Total	2123.00	24.35	24.30	40.05

Details of CER with proposed activities and budgetary allocation:

S.	Particulars	Description		Year	
No.		Description	1	2	Total
1.	Infrastructure	Development /Repairing of Roads, Provide Drinking water facilities, Contribution in construction of facility in Anganwadi and primary school, etc. at Saidipur, Talwandi and Ghulla Village.		200	250
2.	Health	Up gradation of Existing Hospital and/or Aarogya Kendra, Organize free health medical checks-up, eye camp, blood donation camp. Provide first aid box and training at Nano Nagal, Bhola and Mokha Village.	80	200	280
3.	Environment	Tree plantation with tree guard, Development of garden at Gram panchayat in Talwandi, Ghulla, and Saidipur village	50	100	150
4.	Education	Donation in school like computers, books for library, Projector for digital learning, School kits like bags, note books, crayons etc. Organize painting completion at Nano Nagal, Talwandi and Bhangwan Village.	50	150	200
5.	Sports	Development of playground at village school and provide sports equipments, Organize vocational training in Bhola and Saidipur Village	50	68	118
		Total (Rs. in Lakhs)	280	718	998

During deliberations, EAC discussed following issues:

• Keshopur Bird Sanctuary is located at a distance of 4.89 km in W direction of Project site. Punjab govt has declared the area as Keshopur – Miani Community reserve in 2007. Further, Committee noted that the Keshopur-Miani community reserve has been declared as Ramsar Wetland site in 2019. PP has informed that as per Ministry's F. No 6-30/2019 WL (Part) dated 30th January, 2023 the proposed site does not attract NBWL clearance even though Miani Community reserve which is a protected area is located within 10 km of the proposed site.

- Conservation plan for schedule I species has been submitted to Forest Division Officer (Wildlife), Pathankot dated 20.04.2023 and a budget of 0.038 Crores has been earmarked for the same.
- As desired by EAC, PP has submitted an undertaking net fresh water consumption during cane crushing season for distillery will not exceed 2.5 kL/kL of alcohol production and will not exceed 4 kL/kL of alcohol production during off season.
- EAC suggested that Industry should install air cooled condensers in the sugar unit for reducing fresh water requirement. Accordingly, PP has submitted revised water balance diagram with net fresh water requirement of 1320 KLPD for sugar unit and 95 KLPD for distillery unit.
- Further, PP clarified that fresh water requirement shall be met from own water reservoir. Industry will neither extract ground water nor utilise water from any river.
- EAC suggested to increased the budget towards CER from 1.00% to 1.5 % and commitment that all activities proposed under CER i.e extended EMP shall be completed within 2 two years of issuance of EC. PP shall submit the revised timeline for completion of activities proposed under extended EMP.Accordingly, PP has submitted revised CER details increasing the budhet to 1.5 % of total project cost i.e Rs. 9.98 Crores with a commitment to complete the proposed activities within 2 years after issuance of EC.
- As desired by EAC, PP has submitted revised air modelling details considering vehicular emissions along with flue gas emissions. AAQ modelling study for point source emissions and vehicular emissions indicates that the maximum incremental GLCs after the proposed project would be 1.96 μg/m³, 0.30 μg/m³ and 0.86 μg/m³ with respect to PM10, SOx and NOx.
- As desired by EAC, PP has submitted revised plant layout having uniform greenbelt area in periphery.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iii). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from own water reservoir for the integrated sugar and distillery project. 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.
- (iv). Total Fresh water requirement shall not exceed 1415 m³/day which will be met from own water reservoir. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). As proposed, fresh water requirement shall be met from own water reservoir. Industry shall not extract ground water or utilise water from any river.
- (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). Bagasse fired 145 TPH capacity boiler and Slop Fired 45 TPH capacity boiler will be installed. Individual Electrostatic Precipitator (5 field) with a stack of height of 65 m & 83 m respectively will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm³ for the proposed boilers. 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). 20 TPD Bagasse Boiler ash & 42 TPD Incineration & Boiler Ash will be generated and will be sold to brick manufacturer/ Mixed with pressmud and used as manure. PP shall use 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 (93.6 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.
 - (xi). PP shall allocate at least Rs. 1.90 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 m width shall be developed in nearly 13.74 hectares i.e., 35 % of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.
- (xvii). PP proposed to allocate Rs. 9.98 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. 06

Proposed Expansion of Polyester Manufacturing Capacity and Establishing r-PET unit at Silvassa Manufacturing Division (SMD) Village: Kharadpada, District: Silvassa, Dadra & Nagar Haveli by M/s. Reliance Industries Limited - Consideration of Environmental Clearance.

[IA/DN/IND2/425936/2023, IA-J-11011/448/2022-IA-II(I)]

The Project Proponent and the accredited Consultant Precitech Laboratories Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/RA 0256 and validity 29th July, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Proposed Expansion of Polyester Manufacturing Capacity and Establishing r-PET unit at Silvassa Manufacturing Division (SMD), Village: Kharadpada, District: Silvassa, Dadra & Nagar Haveli by M/s. Reliance Industries Limited.

The proposed PFY expansion will be classified, under Environment Impact Assessment (EIA) Notification 2006 - Schedule I, in category 5(d) as category B (Manmade fibres manufacturing – Others). Due to location of the project within 1.21 km of inter-state boundary, the project activity will be considered as 'category A' project and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

Sr. No.	Product	Present Capacity (A) (TPM)*	Proposed capacity (B)	Total Capacity – post expansion = A + B (TPM)
1	POY	22,500	26,000	48,500
2	FDY	12,000	22,500	34,500

3	PTY	30,000	17,000	47,000
4	Texturising and Twisting Yarn	150	Nil	150
5	Densified polyester Waste - 'Popcorn'	Nil	1,200	1,200
6	r-PET	NA	9,000	9,000
7	Polyester Chips	NA	9,000	9,000

*TPM:Tons/month

Ministry had issued Environment Clearance to the existing capacity of products as detailed in the EC vide file no. J-11011/429/2010-IA II (I); dated 8th June, 2011. Certified Compliance report has been issued by Regional Office, MoEFCC, Gandhinagar, after conducting monitoring at site on 19th January, vide File no J-11/14-2023-IROGNR dated 1st March, 2023. Action Taken Report has been submitted to IRO, MOEFCC, Gandhinagar, dated 25th April, 2023 for 4 partial compliances.

Standard ToR for undertaking EIA Study for proposed Project has been granted vide F. No. IA-J-11011/448/2022-IA-II(I) dated 16th November 2022. It was informed that there is no litigation is pending against the project.

PP sought exemption of Public Hearing under para 7(i) III Stage (3) (i)(b) of EIA Notification 2006 as the proposed project is located in the industrial area. In this regard, EAC suggested to submit the requisite document i.e notification of industrial area.

Total plot area at SMD is 62.32 Ha which is under possession of the company. No additional land will be acquired for the expansion project as the same will be set up within the existing plant premises. Within the existing plot, about 19.99 Hectares have already been developed as greenbelt. The estimated project cost is Rs. 7,500 Crores. The estimated capital cost of EMP (including Fire & Safety and Occupational Health) would be about Rs. 368.15 Crores and the estimated recurring cost for EMP, post-project, would be Rs. 4.45 Crores per annum (excluding Fire & Safety). During operational phase of the proposed projects, about 370 personnel will be employed directly and about 4,000 people will be employed on

contractual basis.

Dadra & Nagar Haveli wildlife sanctuary is at a distance of about 2.4 Km (SE direction) from the project site. ESZ for same is finalized vide Gazette Notification S.O. 2413 (E) dated 4th September, 2015. The Dadra & Nagar Haveli Wildlife Sanctuary is spread over an area of 26.57 square kilometers and the extent of the Eco-sensitive Zone is 100 meters on all sides of the sanctuary. Silli RF in Dadra & Nagar Haveli is at a distance of about 10.75 Km (NE direction) from the project site and Zaroli RF in Gujarat is at a distance of about 2 Km (SW direction) from the project site. Conservation plan for Schedule-I species of WL Protection act 1972 has been submitted to the Forest Department, Dadra & Nagar Haveli.

The names and distances of the rivers and ponds, in the 10 Km study area, are as follows:

River/Pond	<u>Approximate</u>	aerial	distance	from	the
project site (Km)					

Damanganga river	4.2 (NE direction)
Darotha river	2.8 (WSW direction)
Anklash Pond	2.6 (SSW direction)
Nagvas Pond	1.8 (W direction)
Talavpada Pond	5.7 (NW direction)

Ambient air quality monitoring was carried out at 10 locations during October, 2022 to December, 2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (45 $\mu g/m^3$ to 89 $\mu g/m^3$), $PM_{2.5}$ (17 $\mu g/m^3$ to 51 $\mu g/m^3$), SO_2 (6 $\mu g/m^3$ to 23 $\mu g/m^3$) and NO_2 (12 $\mu g/m^3$ to 31 $\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.91 $\mu g/m^3$, 0.66 $\mu g/m^3$ 10.07 $\mu g/m^3$ and 9.74 $\mu g/m^3$ with respect to PM_{10} , $PM_{2.5}$, SO_2 and NO_2 . The resultant concentrations, on superimposition of the incremental valued obtained from modelling, are within the National Ambient Air Quality Standards (NAAQS).

The proposed project during its operations phase will require 5,200 m³/day of fresh water, which will met from Damanganga Canal Distributary. "Narmada, Water Resources, Water Supply and Kalpsar Department", vide their letter dtd. 29/03/2011 has allocated 14,000 m³/day of water to SMD. The expansion projects during operation phase are expected to generate about 2,450 m³/day of effluent which will be treated in a new ETP to be built as part of the proposed projects. The ETP will be designed in line with the existing ETP, to meet the stipulated standards. The treated effluent will be recycled for use as make-up water for cooling tower and other requirements. Sewage generated from the existing plants (currently treated in existing ETP) and the proposed plants will be treated in a new sewage treatment plant. Peak sewage generation is expected to be 160 m³/day. The treated sewage will be recycled within the plant for horticulture and other requirement.

Total power requirement after expansion will be ~ 179 MW, which will be sourced from D&NH Power Distribution Corporation Ltd. There will be 2 boilers (1 working & 1 standby) with a common stack of height 30 meters. There will be 5 DG sets, each with a capacity of 1200 kVA, which will be used as standby during power failure. Adequate stack height will be provided for the DG sets, as per CPCB norms.

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.

Details of Process emissions generation and its management:

Flue gas stacks

• For the proposed projects, for the HTM heaters and boilers, fuel will be natural gas/biomass/LSHS. The HTM heaters will be provided with stack height of 60 meters, for adequate dispersion of flue gases.

APCE-ESP (with dust collection efficiency 99%) will be provided for the HTM heaters using biomass as fuel, for controlling particulate matter emissions. There will be 6 HTM heaters out of which 4 will be working and 2 will be standby. There will be 2 boilers (1 working & 1 standby) with a common stack of height 30 meters.

Process Stacks

- In the polyester soft waste densification plant, waste gases and fumes, generated during the densification process, will be passed through a pollution control equipment, as required in detailed engineering design, before being released into atmosphere through a stack.
- In r-PET plant, very small quantity of fumes/gases generated in the process will be passed through a pollution abatement equipment in case of design requirement, before being released into atmosphere, or connected to central VOC stream going to dowtherm heater furnace.

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

- The existing unit has been granted authorization for 06 numbers of hazardous wastes which are collected, stored, transported and disposed of as per HOW (M&TM) Rules 2016.
- Quantities of the above wastes are expected to increase due to the proposed project. These additional hazardous wastes will also be disposed in line with HOW (M&TM) Rules, 2016 and the existing established procedures.
- It is endeavored to maximize environment friendly disposal of hazardous wastes by adopting practices for recycle / reuse / coprocessing.

During deliberations, EAC desired the following additional information:

- PP shall submit the copy of gazette notification of the Industrial area for exemption of Public Hearing.
- EAC noted Industry has already developed 33% greenbelt in the existing premises. Further, it was also noted that PP has now proposed

expansion in such a way that greenbelt developed will be reduced to 22% within the existing premises. In this regard, committee desired to submit the layout of the existing plant clearly demarcating 33% of the greenbelt and also submit another layout after superimposing proposed expansion on existing plant clearly demarcating the remaining greenbelt of 22% to understand the disturbance in existing greenbelt.

- EAC opined that proposed expansion should not result in reduction in greenbelt area as stipulated in earlier EC dated 8th June, 2011. PP shall try to reorient the proposed expansion in such a way that greenbelt shall not reduce below 33%.
- Committee has also noted that incremental GLCs of SO_x and NO_x for the proposed project are 10.07 $\mu g/m^3$ and 9.74 $\mu g/m^3$ which are on the higher side. EAC suggested that PP should reduce the overall incremental GLC w.r.t. SO_x and NO_x by considering air pollution control measures alongwith supporting details.
- PP shall submit ATR for the all the non/partial compliances reported in CCR issued by IRO vide letter J-11/14-2023-IROGNR dated 1st March, 2023.
- PP shall submit details of capital and recurring cost of EMP and details of CER with proposed activities and budgetary allocation along with timeline.

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

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> participated during Video Conferencing (VC) meeting

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. Rahul Rameshrao Mungikar	Member		
6.	Dr. Onkar Nath Tiwari	Member		
7.	Shri A. N. Singh, Scientist 'E'	Member		
		Secretary		
MoEFCC				
8.	Dr. Mahendra Phulwaria	Scientist 'C'		
9.	Mr. Kanaka Teja Research Assistan			