GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 11.03.2021

MINUTES OF THE 31st MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 03rd March, 2021

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 informed by the EAC members on the minutes of its 30th Meeting of the EAC (Industry-2) held during 17th February, 2021 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.

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: -

03rd March, 2021 (Wednesday)

Agenda No. 31.1

Proposed expansion of distillery for production of ethanol capacity from 400 KLPD to 600 KLPD using sugarcane syrup by expanding

the sugarcane crushing from 15000 TCD to 20000 by M/s Godavari Biorefineries Ltd. located at Sy. No. 13, 14, 15, 16, 19, 21, 28, 29, 40 of Saidapur Village, Sy. No. 49, 50, 53 of Bisnal Village, Sy. No. 69, 72, 73, & 74 of Madabhai Village at post Sameerwadi, Tal: Mudhol, Dist: Bagalkot, Bagalkot, Karnataka-587316 - Consideration of Environment Clearance regarding.

[IA/KA/IND2/198268/2021, IA-J-11011/191/2007-IA-II (I)]

The project proponent and their consultant M/s. Samrakshan, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for Environmental Clearance to the project for proposed expansion of distillery for production of ethanol capacity from 400 KLPD to 600 KLPD using sugarcane syrup by expanding the sugarcane crushing from 15000 TCD to 20000 by M/s Godavari Biorefineries Ltd. located at Sy. No. 13, 14, 15, 16, 19, 21, 28, 29, 40 of Saidapur Village, Sy. No. 49, 50, 53 of Bisnal Village, Sy. No. 69, 72, 73, & 74 of Madabhai Village at post Sameerwadi, Tal: Mudhol, Dist: Bagalkot, Bagalkot, Karnataka-587316.

a. It is a proposed expansion of Distillery for production of Ethanol from 400 KLPD to 600 KLPD using sugarcane syrup by expanding the sugarcane crushing from 15000 TCD to 20000 TCD to augment the requirement of sugarcane syrup/juice as raw material during sugarcane crushing season.
b. During sugarcane crushing off season the production will be restricted to 320 KLPD RS/ETHNOL using C heavy molasses or Extra Neutral Alcohol of 260 KLPD; or 400 KLPD RS/380 KLPD Ethanol using B heavy molasses as raw material.
c. The distillery configuration will be as under:

Sl. No.	Product details	Existing quantity	Proposed quantity	Total quantity
A. During sugarcane crushing season using 100 % Sugarcane syrup/sugarcane juice as raw material. Capacity in KLD				
	Rectified Spirit **or**	400	200	600
	Ethanol **or**	380	190	570
	ENA	260	-	260
B. During sugarcane crushing off season using C –Heavy Molasses / B Heavy Molasses as raw material				
	Rectified Spirit **or**	400	-	400
	Ethanol **or**	380	-	380
	ENA	260	-	260

All Distilleries and Sugar Industry projects are listed at S. No.5 (g) & 5(j) of Schedule of Environment Impact Assessment (EIA) and as per MoEF& CC vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750 (E) dated 17th February 2020 the proposal is to be appraised as B2 category.

Public Hearing for the proposed project is not conducted as the proposal is appraised as per category B2 projects in line with Notification issued by MoEF & CC vide. S. O. 345(E) dated 17th January 2019. It was informed that no litigation is pending against the proposal.

SEIAA Karnataka, had issued EC earlier vide letter vide no. SEIAA:1: IND: 2007 dated 18.11.2009 to the existing project Sugar & Cogeneration Plant (Sugar Plant 15000 TCD, Cogeneration plant 46 M) and Ministry of Environment & Forest had issued prior Environment Clearance vide letter no. J-11011/191/2007-IA-II(I) dated 9th April 2020 to the existing Distillery unit for 400 KLPD capacity and captive power plant 5.5 MW capacity.

The details of products and capacity are as under:

Sl. No.	Product details	Existing quantity	Proposed quantity	Total quantity
1	Sugar cane crushing capacity, TCD	15000	5000	20000
2	Co-generation power plant, MW	46	-	46
3	Distillery KLD with Captive power plant MW	400 5.5	200 -	600 5.5
	During sugarcane crushing season 100 % sugarcane syrup/sugarcane juice only			
1	Rectified Spirit (KLPD)	400	200	600
2	Ethanol (KLPD)	380	190	570
3	ENA (KLPD)	260	-	260
	During off season using C Heavy/ B Heavy Molasses			
	RS (KLPD) ENA (KLPD) Ethanol (KLPD)	400 260 380	- - -	400 260 380

Existing land area of Sugar, Cogeneration & Distillery complex is 154.62 Hectares out of which 48.56 Hectares is of distillery plant area and remaining 106.06 Hectares is of Sugar Cogeneration plant area & proposed expansion will be within the existing industries premises. Industry has already developed greenbelt in an area of 33 % i.e., 51.02 Hectares or 510200 m^2 out of total area of the project. The estimated project cost is

Rs. 760.859 Crores including existing investment of Rs. 630.299 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 96.175 Crores and the Recurring cost (operation and maintenance) will be about Rs. 5.43 Crores per annum. Total Employment will be 1195 persons, out of this the direct employment is 1165 persons & indirect is 30 persons after expansion. Industry proposes to allocate Rs.2.5 Crores towards Corporate Social Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Ghataprabha is flowing at a distance of 6.5 km in South of the industry.

Baseline ambient air quality monitoring is not carried out since the project is to be appraised as B2 category as per the Notification of MoEF&CC no. 345 (E) dated 17th January 2019. However, ambient air quality monitoring is carried out by the industry as per the conditions of the Consent issued by KSPCB. The monitoring data during December 2020 indicate PM_{10} (75µg/m^3), $PM_{2.5}$ (29 µg/m^3), SO_2 (12 µg/m^3) and NOx (14 µg/m^3).

Total water requirement is as under;

a. Sugar & co-gen – (1825 + 2204 = 4029) KLD of which fresh water requirement is (575+1004) KLD. The condensate water generated from sugar plant is treated and reused for sugar plant requirement and cooling tower. There is no increase in fresh water for Co-generation plant as it will not be expanded.
b. Distillery water requirement is as in the table below;

Sl. No.	**Particulars**	**Existing (KLD)**			**Proposed scenario after expansion (KLD)**			
	Feed stock (any one of the raw materials will be used at given time)	C Heavy 320	B Heavy 400	Cane syrup 400	**C Heavy 320**	**B Heavy 400**	**Cane syrup 400**	**Cane syrup 600**
1	Fresh water for process	1172	1248	869	**1172**	**1248**	**869**	**1654**
	Fresh water for boiler	160	160	160	**160**	**160**	**160**	**160**
	Domestic water requirement	25	25	25	**25**	**25**	**25**	**25**
	Total Fresh water quantity	1357	1433	1054	**1357**	**1433**	**1054**	**1839**
2	Reuse from distillery CPU	1856	1856	2054	**1856**	**1856**	**2054**	**1866**
3	Total water requirement	2688	2731	3185	**2688**	**2731**	**3185**	**3520**

Fresh water will be met from Ghataprabha River located at about 6.5 km in southern direction from project site. (Permission to draw 97.70 MCFT per year, this amounts to 7689 m^3/day is obtained from Karnataka Neeravari Nigama Limited).

A. Effluent from the sugar plant is 1825 KLD and from the co-generation plant is 485 KLD. Effluent will be treated through Biological Treatment Plant of total capacity 2500 KL and used on land for irrigation.

B. waste water generated from the distillery is as in the table below;

Sl. No.	**Particulars**	**Existing**			**After expansion**			
		C Heavy Molasses 320 KLD	B Heavy Molasses 400KLD	Sugarcane Syrup 400 KLD	C Heavy 320 KLD	B Heavy 400 KLD	Sugar cane Syrup 400 KLD	Sugarcane syrup 600 KLD
1	Raw spent wash	1931	1789	1792	1931	1789	1792	1700
2	Concentrated spent wash	401	295	173	401	295	173	159
3	Spent lees	443	497	564	443	497	564	452
4	Total Condensate	1530	1490	1618	1530	1490	1618	1541
5	Boiler blow down	10	10	10	10	10	10	10
6	Cooling tower bleed	30	30	30	30	30	30	30

The spent wash from the distillery with respect to per KL of ethanol produced is as in the table below;

Sl No	**Description**	**Raw spent wash generation**		**Conc. Spent wash**	
		KLD	**KL/KL ethanol**	**KLD**	**KL/KL ethanol**
1	320 KLPD using C heavy Molasses	1931	6.034	401	1.25
2	400 KLPD using B Heavy Molasses	1789	4.47	295	0.73
3	400 KLPD using sugarcane syrup	1792	4.48	173	0.43

4	600 KLPD using sugarcane syrup	1700	2.83	159	0.26

Mode of treatment of distillery spent wash, spent leese & other utility effluents are as under:

- The first stream of spent wash concentrated in MEE and the concentrate will be incinerated.
- The MEE condensate along with process condensate and spent lees treated in BTP/CPU. Treated effluent is used in cooling tower makeup.
- The second stream of spent wash will be treated in bio-methanization plant, concentrated in stand-alone MEE and the concentrate will be composted. The condensate from MEE will be treated in stripper column and re-used mixing it with treated BTP/CPU effluent and reused in cooling tower.
- The distillery plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 28.5 MW including existing sugar cogeneration plant and Distillery power requirement and will be met from sugar Cogeneration plant of 46 MW and for distillery plant from distillery captive power plant of 5.5 MW capacity. Existing sugar and cogeneration plant has 1No. 625 kVA & 2 No. X 1010 kVA DG sets & distillery Plant has 320 kVA capacity DG set.

Existing unit has boilers as under;

a. Sugar plant – existing 2 x 37.5 TPH, bagasse fired boiler with independent chimney of 42 m AGL and wet scrubber as APC equipment respectively.
b. Sugar Co-generation plant – existing 1 x 130 TPH and 1 X 120 TPH bagasse fired boiler with independent chimney of 70 m height and ESP as APC equipment respectively.
c. Distillery – Existing distillery has 40 TPH incinerator boiler with fuel as concentrated spent wash supported with coal (65:35). ESP with stack of 81 m height is installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers. No boiler is proposed during expansion.

Details of process emissions generation and its management:

During fermentation 442 TPD of CO_2 is estimated to be released. The company is conducting research for value addition for making better use of CO_2. As and when the technology is developed the same will be implemented.

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

Sl. No.	Type of solid waste	Quantity generated after expansion MT/month	Disposal
	Distillery Plant		
1.	Yeast sludge	1800	By composting
2.	Bottom ash	1350	Sold to brick manufacturers and also mixed with bio-organic manure.
3.	Fly ash	1350	Sold to brick manufacturers and also mixed with bio-organic manure.
	Sugar Plant and Co-gen plant		
1.	Wet & dry ash from sugar Boilers	480	Given to brick manufacturers
2.	Cogeneration boiler fly ash	1260	Given to brick manufacturers
3.	Press mud	24000	Used as filler in converting spent wash to compost

Hazardous waste generation and its management

Waste category	Hazardous waste generated	Quantity	Method of handling
Sugar Unit			
5.1	Used Oil	1.25 KL/A	Stored in leak proof containers in secure manner and handed over to KSPCB authorized reprocessors/incinerator
5.2	Wastes Residues Containing Oil	0.100 MT	Stored in leak proof containers in secure manner and handed over to KSPCB authorized reprocessors/incinerator
Distillery unit			
5.1	Used Oil	0.1 KL/A	Stored in leak proof containers in secure manner and handed over to KSPCB authorized reprocessors/incinerator
5.2	Wastes Residues Containing Oil	0.01 MT/A	Stored in leak proof containers in secure manner and handed over to KSPCB authorized reprocessors/incinerator

Certified compliance report is issued by RO, MoEF&CC. Regional Office, Bangalore and visit was conducted on 20.01.2021. Bangalore RO, MoEF & CC has issued certified compliance report for the project vide File No.

EP/1201/633/KAR/207 & EP/1201/633/KAR/208 dated 11.02.2021. Status of compliance is 'Satisfactory'.

During deliberations, EAC desired additional information/commitments related to establishment of carbon dioxide recovery plant, spent wash disposal and commitment to switch from bio-composting to incineration/drier technology within 3 years, traffic management details, CER activities to be undertaken in the field of school development after consultation from Principal/management. PP has submitted the desired commitments in compliance to above.

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

The Committee noted that the compliance report to be satisfactory, reflecting the present environmental concerns and the projected scenario for all the environmental components. 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). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(iii). Total fresh water requirement for the proposed project will be 3418 KLPD which will be met from Ghataprabha River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Ground water monitoring shall be done regularly and report is to be submitted to concerned authorities regularly.

(iv). The spent wash/other concentrates shall be incinerated and bio-composting shall be switched to incineration/drier technology within 03 years as committed. Spent wash shall be stored maximum for 05 days only in spent wash storage lagoon. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys and installation of briquetting plant shall be explored for disposal of ash.

(v). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). 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.

(vii). 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.

(viii). 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.

(ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x). 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.

(xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

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

(xiii). 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.

(xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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

(xvi). 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.

Agenda No. 31.2

Proposed expansion of molasses based distillery capacity from 60 KLPD to 120 KLPD by M/s Sharayu Agro Industries Ltd. located at

Post Kapshi, Tal.: Phaltan, Dist.: Satara, Maharashtra - Consideration of Environment Clearance regarding.

[IA/MH/IND2/30511/2014, J-11011/403/2013-IA II (I)]

The project proponent and their consultant M/s. Equinox Environments (I) Pvt. Ltd., made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for Environmental Clearance to the project for Proposed expansion of molasses based distillery capacity from 60 KLPD to 120 KLPD by M/s Sharayu Agro Industries Ltd. located at Post Kapshi, Tal.: Phaltan, Dist.: Satara, Maharashtra.

All Molasses based distilleries >100 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 and as amended on 13.6.2019 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The Standard Terms of References (ToRs) has been issued by Ministry vide letter No. J-11011/403/2014-IA II (I) dated 18th October, 2019 for expansion of distillery from 60 KLPD to 120 KLPD. Public Hearing for the expansion project has been conducted by Maharashtra Pollution Control Board on 06th October, 2020 for Satara District and chaired by the Additional District Magistrate, Satara. No any specific issues were raised during public hearing. It was informed that no litigation is pending against the proposal.

Ministry has issued EC earlier vide letter No. J-11011/403/2014-IA II (I) dated 28th October 2016 to the existing 5,000 TCD Sugar Factory, 30 MW Co-Gen Plant and 60 KLPD molasses based Distillery Unit in favour of M/s. Sharayu Agro Industries Ltd. (SAIL).

The details of products and capacity are as under:

Industrial Unit	Product & By-product	Quantity (MT/D)		
		Existing	Expansion	Total
Distillery (Expansion -60 to 120 KLPD)	Rectified Spirit (RS)/ Extra Neutral Alcohol (ENA) / Ethanol (KLPD)	60	60	120
	By-products			
	CO_2 (MT/D)	46	46	92
	Fusel Oil (MT/D)	0.12	0.12	0.24

Total plot land area is 3,07,500 M^2. Existing built-up area 60,938.35 M^2; additional built up for distillery expansion is 2,000M^2. Industry has already developed Green Belt in an area of 63,836.48 M^2 (21% out of total plot area). Moreover, additional Green Belt area of 44,086M^2 (14% out of total plot area) will be developed. After expansion of distillery, the total Green

Belt area would be 1,07,922.48 M^2 which accounts for 35% of total plot area. The estimated proposed expansion project cost is Rs. 46.55 Crores. The distillery will be operated for 330 days. Total capital cost earmarked towards environmental pollution control measures under distillery is Rs. 1.75 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.37 Crores per annum. Total Employment under proposed expansion project would be 68 persons as direct as well as indirect after expansion of project. Industry proposes to allocate Rs. 235 Lakh @ of 5% towards Corporate Environmental Responsibility (CER).

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. Nira River is flowing at 16 Km from North to East of project site.

Ambient air quality monitoring was carried out at 8 locations during March 2019 – May 2019 and submitted baseline data indicates that ranges of concentrations of PM_{10} (47.80 - 68.20 µg/m^3), $PM_{2.5}$ (14.30 - 24.60 µg/m^3), SO_2 (15.00-29.50µg/m^3) and NO_x (20.50 -35.70 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs would be 1.17 µg/m^3 for PM_{10} (towards South East side), 0.306 µg/m^3 for $PM_{2.5}$ (towards South East side), 6.25 for SO_2 µg/m^3 (towards South East side) and 0.922 µg/m^3 NO_x (towards South East side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after expansion of Distillery project will be 1467 CMD. Out of which, 284 CMD will be fresh water taken from Neera Right Bank Canal Division, Phaltan while 963 CMD will be CPU treated effluent and 220 CMD will be harvested rainwater to be recycled. The effluent generated from 120 KLPD distillery would be in the form of raw spentwash to the tune of 960 M^3/Day. Here, raw spentwash shall be concentration in Multiple Effect Evaporator (MEE). Concentrated spentwash to the tune of 192 M^3/Day (1.6 KL/KL of alcohol against norm of 8 KL/KL of alcohol) shall be incinerated in incineration boiler.

Power requirement for distillery after expansion will be 3 MW will be procured from own co-gen plant. Existing distillery unit has 3 DG sets of 500 kVA capacity each. Stack of height 3M ARL is provided as per CPCB norms to the DG sets. No additional DG set will be installed. No new boiler will be installed under distillery unit. Steam for expansion activities will be taken from existing 25 TPH boiler. ESP with a stack of height of 65 M installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the boiler.

Details of process emissions generation and its management:

The CO_2 generation shall take place in fermenters of the distillery. CO_2 to the tune of 92 MT/Day shall be released from 120 KLPD distillery plant. CO_2 shall be compressed, bottled and supplied to manufacturers of beverages.

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

Details of Solid waste

No	Unit	Type	Quantity (MT/M)		Disposal
			Existing	After Expansion	
1	Distillery	Boiler Ash (coal +sp. wash)	840	1680	Supplied to Brick / Cement Industry
		Yeast Sludge	300	600	Burnt in Incineration Boiler
		CPU Sludge	15	27	

Details of Hazardous waste

No any hazardous waste will be generated from distillery unit.

Certified compliance report has been obtained by RO, MoEFCC, Nagpur. Visit of RO, MoEFCC was conducted on 21.02.2020 and certified compliance report was received on 06.07.2020. Action taken report to non- complied conditions observed by RO has been submitted on 27.01.2021.

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

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

and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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

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

(i). The 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 project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(iii). Total fresh water requirement for the proposed project will be 284 CMD which will be met from Neera Right Bank Canal Division, Phaltan. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.

(iv). The spent wash/other concentrates shall be incinerated. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(v). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). 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.

(vii). 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.

(viii). 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.

(ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x). 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.

(xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

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

(xiii). 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.

(xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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

(xvi). 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.

Agenda No. 31.3

Proposed expansion of molasses-based distillery of 60 KPLD to 180 KLPD with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) by M/s Shri Balaji Sugars and Chemicals Private Limited located at Survey Nos. 32/1, 32/5, 34/4, 34/5, 35/1, 35/2 & 35/3 of Yaragal Village in Muddebihal Taluk, Vijaypur District, Karnataka - Consideration of Environment Clearance regarding.

[IA/KA/IND2/198406/2021, J-11011/159/2014-IA- II (I)]

The project proponent and their consultant M/s. Samrakshan, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for Environmental Clearance to the project for Proposed expansion of molasses-based distillery of 60 KPLD to 180 KLPD with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) by M/s Shri Balaji Sugars and Chemicals Private Limited located at Survey Nos. 32/1, 32/5, 34/4, 34/5, 35/1, 35/2 & 35/3 of Yaragal Village in Muddebihal Taluk, Vijaypur District, Karnataka.

All Distillery projects are listed at S. No. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). As per MoEF&CC vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E)) dated 17th February 2020 the proposal is to be appraised as B2 category.

Public Hearing for the proposed project is not conducted as the proposal is appraised as per category B2 projects in line with Notification issued by MoEF & CC vide. S. O. 345(E) dated 17th January 2019. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter No. F. No. J-11011/159/2014-IA.II dated 18.04.2017 to the existing project for setting up of 60 KLD molasses-based distillery unit along with 3 MW co-gen power plant in favour of M/s. Shri Balaji Sugars and Chemicals Private Limited.

The details of products and capacity are as under:

Sl. No.	Products manufactured	Existing production	Proposed expansion	Scenario after expansion
1	RS/ENA/Ethanol	60 KLPD RS / ENA / Ethanol <u>Raw material</u>: C-Heavy molasses / B-Heavy molasses	120 KLPD Ethanol	Expansion of 60 KLPD distillery to manufacture 180 KLPD with following combinations: A. 60 KLPD Ethanol from existing plant + 120 KLPD Ethanol from new plant **OR** B. 60 KLPD RS/ENA + 120 KLPD Ethanol <u>Raw material</u>: C – Heavy molasses / B – Heavy molasses / Cane juice syrup
2	Captive power attached to distillery	2.25 MW	0.75 MW	• EC has been obtained for 3 MW captive power but only 2.25 MW capacity has been installed. • The same will be upgraded to 3 MW capacity during expansion. • Ultimate capacity of Captive power plant will be 3 MW

Existing land area is 40500 m^2; additional 67955 m^2 land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 35790 m^2 out of total area of the project. The estimated project cost is Rs. 248 Crores including existing investment Rs. 96 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 7.73 Crores and the recurring cost (operation and maintenance) will be Rs. 2.8 Crores per annum. Total employment will be 90 persons as direct & 40 persons indirect after expansion. As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environment Responsibility (CER), and as per the action plan proposed for socio-economic shall support for infrastructure development in nearby villages & schools, greenbelt development in villages, healthcare facilities and infrastructure development of hospitals, skill development programs within five years as proposed with a budgetary provision of Rs. 2.10 Crores.

There are no national parks, wild life sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. River Krishna is flowing at a distance of 3.2 km in South East direction.

Baseline ambient air quality monitoring is not carried out since the project is to be appraised as B2 category as per the Notification of MoEF & CC no. 345 (E) dated 17th January 2019. However, ambient air quality monitoring is carried out by the industry as per the conditions of the Consent issued by KSPCB. The monitoring data during November 2020 indicate PM_{10}(87 $\mu g/m^3$), $PM_{2.5}$ (29 $\mu g/m^3$), SO_2 (4.9 $\mu g/m^3$) and NO_X (18.87 $\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.67 $\mu g/m^3$, 2.31 $\mu g/m^3$ and 1.87 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NOx respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement in the distillery unit is in the Table below and fresh water will be met from Nala joining to Krishna River.

(a) Water requirement for the process and utility:

Scenario	Combination of production in 180 KLPD Distillery	Fresh Water		Recycled Water in KLD	Total Water Requirement in KLD
		in KLD	kL/kL of Ethanol		
1	60 KLPD C Heavy Molasses + 120 KLPD B Heavy Molasses	630*	3.5	1138	1768
2	60 KLPD C Heavy Molasses + 120 KLPD Cane Juice Syrup	630	3.5	1392	2022
3	60 KLPD B Heavy Molasses + 120 KLPD B Heavy Molasses	630*	3.5	963	1593
4	60 KLPD B Heavy Molasses + 120 KLPD Cane Juice Syrup	630	3.5	1217	1847
5	60 KLPD Cane Juice Syrup + 120 KLPD Cane Juice syrup	630	3.5	1368	1998

(b) Domestic Use: 25 KLD
(c) Gardening: 40 KLD

**When B/C heavy molasses is used as feed stock, freshwater will not be used in process and only treated recycled water from CPU will be used. The requirement of freshwater will be only in utilities. Whereas, when Cane juice syrup will be used as feedstock, freshwater will be used in both process (for dilution) and utilities.*

Effluent of 1255 m3/day spent wash & 1714 m3/day other effluents (condensate, spent lees, cooling tower bleed, boiler blowdown, lab washings & DM reject) will be generated. Spent wash is concentrated in MEE and concentrated spent wash of 238 KLD will be used as fuel for incineration Boiler with bagasse/coal as supporting fuel. Condensate and other utility effluents are treated in CPU with 2 stage RO process and will be used in process, cooling tower makeup & washing. Sewage of 21.5 KLD with be treated in septic tank followed by soak pits. The plant will be based on Zero Liquid discharge system. Details of effluent generation at different combinations of feedstock used is in Table below.

Combination of production	**Wastewater Generated in KLD**								**Total effluent (in KLD)**
	Raw Spent wash	**Conc. spent wash**	**Spent lees**	**DM reject**	**Boiler blow-down**	**Cooling tower bleed**	**Lab Wash**	**Condensate from MEE**	
60 KLPD C Heavy Molasses + 120 KLPD B Heavy Molasses	1139	238	255	22	23	94	54	890	2715
60 KLPD C Heavy Molasses + 120 KLPD Cane Juice Syrup	1255	238	223	19	40	87	16	1091	2969
60 KLPD B Heavy Molasses + 120 KLPD B Heavy Molasses	996	203	258	21	21	56	20	692	2267

60 KLPD B Heavy Molasses + 120 KLPD Cane Juice Syrup	1112	203	226	18	37	89	16	893	2594
60 KLPD Cane Juice Syrup + 120 KLPD Cane Juice syrup	1170	177	210	17	47	105	12	993	2731

Power requirement after expansion will be 2.69 MW including existing 0.9 MW and will be met from Captive power plant. Existing unit has no DG sets and no DG set is proposed in expansion proposal. Existing unit has 25 TPH incinerator boiler. Concentrated spent wash supported with Bagasse / Coal is used as fuel. The same will be upgraded to 30 TPH. Existing ESP and a stack of height of 70 m will be sufficient for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the upgraded boiler.

Details of process emissions generation and its management:

CO2 from fermentation will be collected. CO2 recovery plant will be established.

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

SI. No.	Details of the solid waste	Quantity in TPM	Mode of Collection	Mode of Disposal
1	Yeast Sludge	650-700	Mechanically removed and dried and transported	Provided to farmers to use as Bio manure
2	Fly Ash (ESP)	450-500	Collected from ash silo and transported by tractors & trucks	Rich in Bio- potash and used as farm land manure
3	Bottom Ash	550-600		

Certified compliance report submitted by RO, MoEF&CC. Bangalore RO, MoEF&CC has issued certified compliance report for the project vide File No. EP/12.1/03/2017-18/KAR/1185 dated 04.02.2021. Status of compliance is 'Satisfactory'.

During deliberations, EAC desired that PP shall reduce fresh water consumption to 3.5 KL/KL of alcohol produced and commitment to dispose Carbon dioxide in proper manner. PP has submitted the revised water balance and committed for the same.

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 compliance report to be satisfactory, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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

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

(i). The 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 project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(iii). Total fresh water requirement for the proposed project will be 630 KLPD which will be met from Nala joining to Krishna River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.

(iv). The spent wash/other concentrates shall be incinerated. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(v). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). 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.

(vii). 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.

(viii). 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.

(ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x). 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.

(xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery.

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

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

(xiii). 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.

(xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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

(xvi). 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.

Agenda No. 31.4

Expansion of existing molasses based distillery from 45 KLD to 125 KLD (RS/ENA/Ethanol) along with installation of new 4.0 MW Power Plant by M/s Kesar Enterprises Limited Distillery Division located at Village Jajoonagar, Tanda, Pargana: Chaumahala, Tehsil: Baheri District: Bareilly, Uttar Pradesh - Consideration of Environment Clearance regarding.

[IA/UP/IND2/198000/2019, IA/UP/IND2/110167/2019, No. IA-J-11011/223/2019-IA-II(I)]

The project proponent earlier submitted the proposal in IA(II) Ind-3 and it was deliberated in the EAC Ind-3 on 17th -19th November,2020. There was several incomplete information in the report. The Committee pointed out that the EIA consultant shall ensure providing complete information in the report. The Committee opined that the project proponent shall revise the Form- 2 and accordingly returned the proposal in its present form.

Now, PP applied a fresh in IA-II(Ind-2). The project proponent and their consultant M/s. Environmental and Technical Research Centre, Lucknow, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for Environmental clearance to the project Expansion of existing molasses based distillery from 45 KLD to 125 KLD (RS/ENA/Ethanol) along with installation of new 4.0 MW Power Plant by M/s Kesar Enterprises Limited Distillery Division located at Village Jajoonagar, Tanda, Pargana: Chaumahala,Tehsil: Baheri District: Bareilly, Uttar Pradesh.

All Molasses based Distilleries >100 KLPD are listed at S.N. '5(g)' Distilleries of Schedule of Environment Impact Assessment (EIA) Notification under Category "A" and are appraised at Central level by Expert Appraisal Committee (EAC).

Standard ToR has been issued by the Ministry of Environment, Forest & Climate Change vide letter no. No.IA-J-11011/223/2019-IA-II (I) dated 15th July 2019. Public Hearing for the proposed project has been conducted by Uttar Pradesh Pollution Control Board on 13th March, 2020 chaired by the Additional District Magistrate, Bareilly. The main issues raised during the public hearing are related to employment, rain water harvesting, ground water abstraction, control of air pollution. It was informed that no litigation is pending against the proposal (regarding environmental matters).

The details of products and capacity are as under:

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol/Extra Neutral Alcohol/ Rectified Spirit	45 KLD	80 KLD	125 KLD
2	Power	-	4 MW	4 MW

Total plant area is 20.831 Hectare (208310 m^2). The expansion & installation will be done within the existing plant premises; which is already under the possession of company. Industry will develop greenbelt in an area of 35% i.e. 7.29 Hectares (72900 m^2) out of total area of the project.

The estimated project cost is Rs. 98.50 Crore for proposed expansion project. Total capital cost earmarked towards environmental pollution control measures is Rs.18 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2 Crores per annum. Total Employment will be 75 persons as direct & 50 persons indirect after expansion. Funds towards CSR: 2% of total annual Profit as per the CSR Act (By Ministry of corporate affairs) Notification GSR 129 (E).

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. River Dhora is flowing at a distance of 3.49 kms in East direction; Kichha River is flowing at a distance of 2.15 Kms in West direction. Various canals and distributaries are seen in study area.

Ambient air quality monitoring was carried out at 8 locations during Winter Season (October to December, 2019) and the baseline data indicates the ranges of concentrations as: PM_{10} (68.5 to 89.2 µg/m^3), $PM_{2.5}$ (34.86 to 52.78 µg/m^3), SO_2 (6.92 to 14.90 µg/m^3) and NO_2 (11.92 to 17.5 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.07 µg/m^3, 1.36 µg/m^3, 1.52 µg/m^3, 0.77 µg/m^3 with respect to $PM_{2.5}$, PM_{10}, SO_2 and NO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for first run is 2400 m3/day of which daily fresh water requirement of 638 m3/day (Distillery operations: 438 KLD (@3.5 KL/KL of Products) For Power Plant (Turbine):180 KL/Day and for Domestic water requirement: 20 KLD) will be met from ground water.

Effluent of 815 KLD quantity will be treated through condensate treatment unit (based on anaerobic, aerobic treatment). The plant will be based on Zero Liquid discharge system. Spent Wash Treatment: Spent wash (750 KLD) from the bottom of distillation column shall be concentrate in Multi effect evaporator. In MEE; spent wash shall be concentrated. Then concentrate spent wash or SLOP shall be incinerated in Slop fired boiler.

Total power requirement will be 4.0 MW which will be met from proposed 4.0 MW co-generation power plant. The company has proposed 2 boilers: 27 TPH, 12 TPH incineration boilers which is slop (Conc. Spent Wash) fired Boiler with auxiliary fuel Bagasse. Electrostatic Precipitator with a stack height of 63 meters (with 27 TPH boiler) & 45 meter (with 12 TPH boiler) will be installed for controlling the particulate emissions within the statutory limit.

Details of process emissions generation and its management:

Source	Emissions	Management
Incineration Boiler (Co-generation power plant)	Particulate matter, SO_2, NO_2	Electrostatic Precipitator will be installed. Adequate stack height will be provided.

		Necessary temperature profile will be maintained.
Fermentation	Carbon dioxide	Carbon dioxide generated will be collected and sold to authorized vendors.

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

- Ash will be used as manure due to rich potash content (biomass ash)
- Conc. spent wash will be used as fuel in slop fired boiler combined with auxiliary fuel.
- Sludge generated will be used as manure.
- Used oil generated from plant machinery as hazardous waste will be provided to authorized vendors.

Unit was established in year 1951; at the time there was no provision for Environmental Clearance, unit is obtaining regular Consent (Air and Water) from UPPCB and unit is regularly complying with the stipulated conditions. Certified compliance report was issued by UPPCB on 01.02.2021.

During deliberations, EAC desired additional information regarding revised water balance and commitment for fresh water consumption to be reduced to 3.5 KL/KL of alcohol produced. PP agreed and submitted the desired information.

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). Environmental Clearance is subject to prior permission for ground water withdrawal which shall be obtained from the concerned regulatory authority/CGWA in this regard before expansion.

(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). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(iv). Total fresh water requirement for the proposed project will be 638 KLPD which will be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.

(v). The spent wash/other concentrates shall be incinerated. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(vi). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vii). 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.

(viii). 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.

(ix). 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.

(x). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(xi). 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.

(xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

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

(xiv). 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.

(xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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

(xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 31.5

Expansion of Molasses based distillery from 30 KLPD to multi feed (Cane Juice, B heavy molasses & C molasses) 110 KLPD by M/s Siddhi Sugar and Allied Industries Limited located at Mahesh Nagar, A/P Ujana, Taluka Ahmedpur, District Latur, State Maharashtra - Consideration of Environment Clearance regarding.

[IA/MH/IND2/196969/2021, J-11011/125/2014-IA- II (I)]

The Project Proponent and their accredited consultant M/s SD Engineering Services Pvt. Ltd., made a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for Environmental Clearance to the project Expansion of Molasses based distillery from 30 KLPD to multi feed (Cane Juice, B heavy molasses & C molasses) 110 KLPD by M/s Siddhi Sugar and Allied Industries Limited located at Mahesh Nagar, A/P Ujana, Taluka Ahmedpur, District Latur, State Maharashtra.

All molasses based distilleries (>100 KLPD) and cane juice/non molasses based distillery (>200 KLD) are listed at S.N. 5(g) (i) & (ii) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). As per MoEF&CC vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750 (E) dated 17th February 2020 the proposal is to be appraised as B2 category.

Ministry has granted amendment in ToR for exemption in Public consultation in order to support EBP programme in minutes of 22nd EAC meeting Dated 19th August 2020. Hence, the proposal is appraised as per category B2 projects in line with Notification issued by MoEF&CC vide. S. O. 345(E) dated 17th January 2019. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter No. J-11011/125/2014-IA-II (I) dated 22.02.2017 from MoEF&CC, New Delhi for 30 KLPD distillery and obtained amendment in Environment Clearance for change in treatment technology of Spent wash from composting to Multiple Effect Evaporator MEE followed by Agitated Thin Film Drying (ATFD), thereby achieving zero

liquid discharge vide F. NO. J-11011/125/2014-IA-II(I) dated 21/12/2018 from MoEF&CC, New Delhi.

The details of products and capacity as under:

Product	**Quantity (KLPD)**		
	Existing	**Proposed**	**Total**
Rectified Spirit	28.5	76.00	104.5
Impure Spirit	1.5	4.0	5.5
OR			
ENA	28.2	75.2	103.4
Impure Spirit	1.8	4.8	6.6
OR			
Anhydrous Alcohol (Ethanol)	28.5	76.00	104.5
Impure Spirit	1.5	4.0	5.5

Existing land area is 243.75 Acres & proposed expansion is in existing plot area, no additional land will be used for proposed expansion. Industry has already developed / will develop greenbelt in an area of 33 % i.e. 80.43 acres out of net plot area of the project. The estimated project cost is Rs 97.9287 Crore including existing investment of Rs 37.5163 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 1798.8 Lakh and the Recurring cost (operation and maintenance) will be about Rs 96.09 Lakhs per annum. Total Employment will be 98 persons as direct & 500-1000 persons indirect after expansion. Industry proposes to allocate Rs 0.604124 Crores @ of 0.1 % towards Corporate Environment Responsibility (CER).

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Manar is flowing at a distance of 3 Km in south direction.

Ambient air quality monitoring was carried out at eleven locations during January 2020 to March 2020 and the baseline data indicates the ranges of concentrations as: PM10 43.65 to 74.68 µg/m^3), PM2.5 (22.05 to 53.61 µg/m^3), SO2 (9.02 – 17.61 µg/m^3) and NO2 (13.02 – 21.49 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.264 µg/m3, 0.43 µg/m3 and 3.68675 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is max 2244 m3/day of which fresh water requirement of max 249 m3/day will be met from Upper Manar Irrigation Department/Division. Effluent of quantity 1699 m3/d (Raw Spent wash – max 880 + Process Condensate – max 819) will be generated. Spent wash will be treated through anaerobic digestion followed by concentration in

MEE and ATFD Drier and Process condensate will be treated in Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 3.2 MW including existing 1.2 MW and will be met from power generation from existing 1.5 MW & proposed 2 MW TG attached to Bagasse/multi-feed fire boiler. Existing unit has 1 No. of DG sets of 500 kVA capacity, additionally no DG sets are used as standby during power failure. Stack (height 5.) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 20 TPH bagasse fired boiler. Additionally, for 15 TPH bagasse fired boiler will be installed. ESP with a stack of height of 60 m and 50 m is/will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the proposed boilers.

Details of Process emissions generation and its management:

Sr. No	Source	Fuel	Pollutant	Control Equipment
Existing				
1	20 TPH boiler	Biogas & Bagasse	PM, SO_2, NOx	60 m stack height and ESP as APC Equipment is provided
2	D. G. Sets 1 Nos of 500 kVA	HSD	PM & SO_2	4m Stack Height is provided
3	Fermentation Unit	--	CO2	CO2 Recovery Unit
Proposed				
1	15 TPH Boiler	Biogas & Coal	PM, SO2 & NOx	50 m stack height and ESP as APC Equipment shall be provided
2	Fermentation Unit	--	CO2	CO2 Recovery Unit

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

Impacts	Mitigation Measures			
	Sr. No.	**Description of waste**	**Quantity**	**Mode of Collection and Disposal**
Solid waste (Non-Hazardous)	1.	Paper waste	0.2 MT/M	Manually collected and stored in a designated area and sold to scrap vendors
	2.	Plastic waste	0.2 MT/M	

	3.	Municipal Solid waste		
		Non-Biodegradable	10 MT/M	Manually collected and sold to scrap vendors
		Bio-degradable	15 MT/M	Used as manure

Waste		Quantity MT/Day			Mode of collection & Treatment	Mode of Disposal
		Existing (30 KLPD)	Proposed (80 KLPD)	Total (110 KLPD)		
Yeast sludge (Optional to each other) (MT/D)	C molasses	0.4	0.3	0.7	Sludge Drying Beds	After mixing with press mud given to farmers as manure.
	B heavy	-	0.3	0.3		
	Cane juice	-	0.15	0.15		
Boiler Ash (MT/D		2.85	2.48	5.33	Collected through mechanical conveyor onto common silo and further disposal	Will be sold to brick manufacturer
ETP sludge (MT/D)		0.04	0.8	0.84	Sludge Drying Beds	After mixing with press mud given to farmers as manure.
ATFD Powder (MT/D)	C Molasses	12.24	32.76	45	Will be sold to farmers as manure	Will be sold to farmers as manure
	B heavy	--	--	40		
	Cane juice	--	--	32		

Hazardous solid waste	The only hazardous waste generated is spent oil of quantity is 0.75 Kg/M, which shall be collected in Leak Proof Containers and utilized as lubricant for bullock carts

Certified EC compliance report has been obtained from Regional Officer, MoEF&CC, Nagpur vide File No.EC-390/RON/2017-NGP/6304 dated 19.02.2020. Site visit of RO was carried out on 08.01.2020. Action taken report against non-complied/partially complied points in certified EC compliance report is submitted on 27.04.2020.

During deliberations, EAC desired that project proponent shall not carry

out any bio-composting, storage of spent wash shall be maximum for 05 days only, no effluent shall be discharged outside plant premises of both sugar and distillery premises and Carbon di-oxide shall be collected and utilized. PP assured to follow the instructions given by EAC.

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

The Committee noted that the compliance report to be satisfactory, reflecting the present environmental concerns and the projected scenario for all the environmental components. 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). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(iii). Total fresh water requirement for the proposed project will be 249 KLPD which will be met from River Manar. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.

(iv). Spent wash shall be treated through anaerobic digestion followed by concentration in MEE and ATFD Drier. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(v). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). 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.

(vii). 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.

(viii). 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.

(ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x). 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.

(xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

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

(xiii). 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.

(xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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

(xvi). 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.

Any other Items with permission of the Chair

Agenda No. 31.6.1

The proposal is for clarification of applicability of Environmental Clearance for production of the Bitumen Emulsions - 50,000 MTA, Modified Bitumen – 36,000 MTA and Road bond - 1000 MTA the Bitumen Emulsions - 50,000 MTA, Modified Bitumen – 36,000 MTA and Road bond - 1000 MTA from Bitumen at Malkapuram VPT Industrial Zone in Visakhapatnam, Andhra Pradesh by M/s. Hindustan Colas Private Limited.

Observations as per the communication received from PP:

The main raw material of the plant is Bitumen, which is the last residue in the fractional distillation of Crude Petroleum sourced from HP-BOT. It has a flash point of 220 degrees centigrade minimum and is non-volatile.

Bitumen is treated as an unclassified product as per the OISD (Oil Industry Safety Directorate, Govt. of India) Standard. Bitumen Emulsion is a mixture of fine droplets of Bitumen and Water. Bitumen or Bitumen Emulsions neither pose a Safety nor a pollution hazard.

The plant is located adjacent to HPCL Black Oil Terminal/ Visakha Refinery in Malkapuram VPT Industrial Zone. The entire process of producing Bitumen Emulsion/ Modified Bitumen out of raw Bitumen involves predominantly a unit Operations like Agitation & Mixing which is carried out in a closed circuit with appropriate Automation. The main Emulsion plant is imported from COLAS SA, France which is zero discharge (of effluents) plant with very latest and sophisticated technology with complete automation and all necessary safety interlocks in place. The Equipment bears latest Technology and similar to the one used by COLAS in the city of Paris and elsewhere across the world including USA, UK & France.

Observation based on letter issued by Andhra Pradesh Pollution Control Board, Zonal Office, Visakhapatnam:

M/s. Hindustan Colas Private Limited had obtained Consent for Establishment (CFE) of the Board on 29.05.2018 to produce Bitumen Emulsions - 50,000 MTA, Modified Bitumen - 36000 MTA and Road bond - 1000 MTA.

The industry obtained CFO of the Board vide order dt.22.10.2019 to produce the Bitumen Emulsions - 50,000 MTA, Modified Bitumen - 36,000 MTA and Road bond -1000 MTA the Bitumen Emulsions - 50,000 MTA, Modified Bitumen - 36,000 MTA and Road bond - 1000 MTA which is valid up to 31.08.2020.

The industry has applied for CFO renewal and has paid requisite fee up to 31.08.2023.

Based on the information submitted for CFO renewal, the industry was inspected by Regional Office, APPCB on 16.10.2020 and observed the following:

i. The industry has provided 10 KL capacity of tank with dyke wall for storage of Hydrochloric acid. The industry provided storage shed to store other raw material like Crumb Rubber, Starch.
ii. No process effluent generation from the industry and the industry provided septic tank followed by soak pit for domestic effluents.
iii. The industry has provided closed circuit with appropriate automation to carry out process of manufacturing bitumen emulsion/modified bitumen.
iv. The industry stored empty drums and emulsifiers tanks openly.

Subsequently, the industry was called to attend the CFO Committee Meeting held on 23.10.2020 at APPCB Zonal Office, Vizag where the Hon'ble Committee after scrutinizing our CFO renewal application sought

certain clarifications about our Products & manufacturing process and Applicability of Environmental Clearance.

The industry informed that they are procuring bitumen from HPCL refinery. Regarding the applicability of Environmental Clearance, it informed that the production of Bitumen Emulsion, Modified Bitumen and Road Bond from Bitumen does not require EC.

The committee noted that the Bitumen Emulsion is an organic chemical and also petroleum products based processing unit which require prior Environmental Clearance from competent authority.

After detailed deliberations, the committee recommended to issue CFO to the industry subject to submission of the clarification from MoEF&CC who is the competent authority regarding the applicability of Environmental Clearance.

Observations of the IA-Policy Division, MoEFCC:

"Bitumen" is not specifically mentioned in the schedule of the EIA Notification 2006. However, on examination of the matter it was observed that bitumen is a semi-solid hydrocarbon product produced by removing the lighter fractions such as liquid petroleum gas, petrol and diesel from heavy crude oil during the refining process.

Further, it requested Industry-II, IA division to refer the proposal to the sectoral EAC for consideration, as the sectoral EAC would have the expertise to ascertain applicability of the schedule of the EIA Notification 2006 i.e.

4(a) [Petroleum Refining Industry] or

5(c) [Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)] or

5(e) [Petroleum products and petrochemical based processing such as production of carbon black and electrode grade graphite (processes other than cracking & reformation and not covered under the complexes)].

Observations and Recommendation of the EAC:

In view of the above, this case was placed before the 31st EAC (Industry-2) meeting held on 3rd March, 2021 for consideration.

EAC has deliberated on the proposal and clarified that prior Environmental Clearance is required for the production of Bitumen Emulsions, Modified Bitumen and Road bond from Bitumen. Further, EAC decided that the activity falls under category 4(a) [Petroleum Refining Industry] of Schedule of EIA Notification, 2006.

Agenda No. 31.6.2

Guidelines and format for rating of consultants by EAC Members

The matter pertains to the preparation of guidelines and format for rating the EIA/EMP consultants by the members of EAC as per Office Memorandum vide dated 4th January, 2021 for addressing the issue of quality of EIA/EMP Reports, presentation and performance of consultants.

IA (Policy Division) has shared a template for rating of consultants and requested to deliberate the template with the EAC during the meeting and provide inputs/comments for the same.

Accordingly, the matter was discussed and deliberated. EAC opined that the template prepared by the Ministry may be modified as follows:

Guidelines and Format for Rating of Consultants by EAC Members

Standards of Rating on Point Scale (1-10)
(A) EIA/EMP Report

Sr. No.	**Standards (Weightage %)**	Allotted Marks (Score 1-10)	Marks Based on Assessment	Remarks
1.	Whether Working on stay of the Hon'ble Court	-2		
2.	I. Certification of Plagiarism w.r.t. EIA/EMP Reports as per MoEFCC OM dt. 7th July 2020. II. If the above certification found or turnout to be negative	+1 -2		
3.	Factual accuracy in EIA/EMP report; • Baseline data, • Socio-Economic • Risk Studies	+5		

	• Measurement of impacts & its adequate mitigation to protect environment • EMP			
4.	Any Concealing of the fact of any kind in EIA or Any Concealing of the fact w.r.t. project proponent	-2		
5.	Inconsistency of information in the report , if any			
6.	Correctness of documents uploaded in support of the claims	+2		
7.	Implementability of suggested Environmental Management Plan(especially linkage of baseline data w.r.t. EMP)	+2		
Average			X	

(B) Form Filled on PARIVESH PORTAL

Sr.No.	**Standards (Weightage - %)**	Allotted Marks (Score 1-10)	Marks Based on Assessment	Remarks
1.	Factual accuracy in filling up of Forms and consistency of information with EIA/EMP and coordinates of PP /Company	+4		

2.	Quality of response to ADS raised	+2		
3.	Correctness of documents uploaded in support of the claims	+2		
4.	Completeness of information in Forms	+2		
Average			Y	

(C) Form Filled on PARIVESH PORTAL

Sr.No.	**Standards (Weightage - %)**	Allotted Marks (Score 1-10)	Marks Based on Assessment	Remarks
1.	Quality of presentation	+5		
2.	Quality of inputs/Knowledge/answers provided against queries by EAC	+5		
3.	Discrepancy between the data presented and submitted reports/forms	-3		
4.	Incompetency in terms of justification of the project	-1		
Average			Z	
Weighted Average				

Total Marks: 30

1. A rated Consultant (EXCELLENT): 22 and above
2. B rated Consultant (GOOD): 15 and above
3. C rated Consultant (POOR): below 15

[Some weightage to number of projects considered might also be allocated) if cumulative average score more than say 5, with every 10

projects upto 50, the score increases by say 0.05, beyond 50, every 10 project the score increases by say 0.01. ii) if cumulative average score less than say 5, with every 10 projects upto 50, the score decreases by say 0.05, beyond 50, every 10 project the score decreases by say 0.01].

The meeting ended with thanks to the Chair.

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ANNEXURE

GENERAL CONDITIONS

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

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

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

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

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

(vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance

conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

(ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

(xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Shri Ashok Agarwal	Member
3.	Dr. Y.V. Rami Reddy	Member
4.	Ms. Saloni Goel	Member
5.	Shri S.C. Mann	Member
6.	Dr. I. Indrasena Reddy	Member
7.	Dr. T. K. Joshi	Member
8.	Dr. J. S. Sharma	Member
9.	Dr. Uma Kapoor	Member
10.	Shri Dinabandhu Gouda, CPCB	Member
11.	Shri Sanjay Bist	Member
12.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
13.	Dr. Mahendra Phulwaria	Scientist 'C'
14.	Sh. Kanaka Teja	Research Assistant
15.	Ms. Meetika Gupta	Research Associate

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