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

\*\*\*

Dated: 28.09.2020

# MINUTES OF THE 23<sup>rd</sup> MEETING OF THE EXPERT APPRAISAL COMMITTEE (INDUSTRY-2 SECTOR FOR CHEMICAL BASED PROJECTS), HELD DURING 15<sup>th</sup> to 17<sup>th</sup> September, 2020

Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 <a href="https://documents.com/to-state-110003">through Video Conferencing (VC)</a>

Time: 10:30 AM

### (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 the Minutes of the 22<sup>nd</sup> Meeting of the EAC (Industry-2 Chemical) held during 17<sup>th</sup>-19<sup>th</sup> August, 2020 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC members on the minutes of its 22<sup>nd</sup> Meeting of the EAC (Industry-2) held during 17<sup>th</sup>-19<sup>th</sup> August, 2020 conducted through Video Conferencing (VC), confirmed the same.

### (iii) Issues related to detailed availability/facility/capacity of the treatment of waste water in the CETP

The Committee, after detailed deliberations, is of the view that PP has to submit the detailed availability/facility/capacity of the treatment of waste water in the CETP and its working status from the concerned authority /SPCB, in case of the treatment of waste water through CETP. The Committee asked the Member Secretary to include this as a pre-requisite instruction for the agenda onwards.

### (iv) Grading of Consultants based on the EIA/EMP Report and its presentation before the EAC

The Committee, after detailed deliberations, is of the view that Consultants are now being graded based on the EIA/EMP Report, Impact assessment and its mitigation measures to the projects and its presentation before the EAC.

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:-

### DAY 1: 15<sup>th</sup> September, 2020 (Monday)

### **Consideration of Environmental Clearance**

#### Agenda No. 23.1

Establishment of 100 KLPD Molasses Based Distillery by M/s Deccan Sugar Private Limited, located at Deorao Patil Nagar, Mangrul, Post Belora, Tal. & Dist. Yavatmal, Maharashtra - Consideration of Environment Clearance

### [IA/MH/IND2/95900/2019, IA-J-11011/53/2019-IA-II(I)]

The Project Proponent and their accredited Consultant M/s Equinox Environments (I) Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for Environmental Clearance (EC) to the project for establishment of 100 KLPD Molasses based distillery at Gat No. 52/1, 53, 54, 55, 58, 61, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 87, 88, 89, 90, 91, 92, 93, 94, 95, 120/1, 121/1, 126, 127, 128, 129, 130, 131, 141, 147 Deorao Patil Nagar Post.: Belora, Tal.: Yavatmal, Maharashtra by M/s Deccan Sugar Private Limited(DSPL).

The Standard ToRs has been issued by Ministry vide letter No. F. No J-11011/53/2019-IA-II (I) dated 12<sup>th</sup>March, 2019 for Establishment of 100 KLPD Molasses based Distillery.

The Committee during deliberations noted that, as per the EIA Notification, 2006 and its amendments, all the Molasses Distilleries of capacity  $\leq$  100 KLPD are listed at S.N. 5 (g) under Category B, requiring appraisal at the State level by the SEAC/SEIAA. The Committee has noted that the Consultant has misguided the project proponent and submitted the proposal at the Central level even during the existence of SEAC/SEIAA in the State of Maharashtra. The Committee has been informed that as per the extant quidelines of the Ministry, the project requires appraisal at the State level.

The PP/Consultant mentioned that there is very less meeting being conducted at SEIAA and also the tenure of SEIAA being expired in coming days, therefore they applied at the Central level.

The Committee, after detailed deliberations, has decided to **defer** the proposal and suggested the Consultant to come out with facts and never misguide the PP. EAC also suggested that the proposal of Category B can only be appraised at Central Level when

the tenure of SEIAA expired. The Committee suggested to check the tenure of SEIAA and if expired after this present EAC meeting, may be included in the next agenda.

### Agenda No. 23.2

Proposed project for establish Bulk Drugs and Drug Intermediates with 60.0 TPM Manufacturing Unit by M/s Vision Biotech, located at Plot No. 2B/1, APIIC Industrial Park, Gollapuram Village, Hindupur Mandal Andhra Pradesh (Project area: 6513.54 Sq. m)-Consideration of Environment Clearance- reg. [IA/AP/IND2/168827/2020,]

The project proponent, vide email dated 05.09.2020, has requested to withdraw the project as PP want to revise the application as per the provisions of the EIA Notification, 2006. The Committee has accordingly decided not to consider the proposal and recommended to **RETURN** in present form as **PP want to withdraw**.

### Agenda No. 23.3

Expansion of Dyes Intermediates by M/s Colorband Dyestuff Pvt. Ltd. Plot No.-J 2327, Phase III, Notified Industrial Area, GIDC Vapi, Ta-Pardi, Valsad, Gujarat - Consideration of Environment Clearance-reg.

### [IA/GJ/IND2/150213/2019, IA-J-11011/246/2019-IA-II(I)]

The project proponent, vide email dated 02.09.2020, has requested to postponed the project appraisal as the certified compliance report of existing project is still awaited from the Gujarat Pollution Control Board. The Committee accepted the request of Project Proponent and **deferred** the proposal accordingly.

### Agenda No. 23.4

Setting up of Pesticides and Synthetic organic chemical manufacturing unit by M/s Jeevan Chemicals Pvt. Ltd., located, at Plot No. D-2/CH-51, GIDC Dahej – II, Village Dahej, Taluka Vagra, District Bharuch, Gujarat – Re-Consideration of Environment Clearance- reg.

### [IA/GJ/IND2/114411/2019, IA-J-11011/255/2019-IA-II(I)]

The project proponent and their accredited consultant M/s En-vision Enviro Technologies Pvt Ltd, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 14-16 July, 2020. The requisite information desired by the Committee and response from the project proponent is as under:

S. No.	Query Raised	Query Reply Given by PP	Comment of EAC		
1.	Effluent treatment mechanism with plan for Zero Liquid Discharge.	PP has revised Effluent treatment mechanism from CETP disposal to Zero Liquid Discharge.	The Committee deliberated the issues and observed that Zero Liquid Discharge plan is not adequate for addressing the issues. The Committee observed that the PP/Consultant has not presented the adequate details on the Effluent treatment mechanism. The Committee suggested to revise the Effluent treatment mechanism with plan for Zero Liquid Discharge and submitted for further deliberations by the Committee.		
2.	Revised water balance with details of total water and fresh water requirement and details of water recycling and reuse.	water balance diagram which covers water	The Committee observed that the PP/Consultant has not presented the adequate details on the water balance. The Committee suggested to resubmit the same as per ZLD plan for further deliberations by the Committee.		
3.	Plan for storage of rain water	The project proponent has proposed for two water storage tanks of capacity 60 KL each for storage of harvested rain water. Roof top area and other open area along with average rain fall and rainy days of Dahej is considered for potential of rain water.	Rain water harvesting plan with Two storage tank of capacity 60 KLD each need to be submitted and presented in the next Committee.		

The EAC, after detailed deliberations, deliberated the issues and observed that that the PP/Consultant has not presented the adequate details on the Effluent treatment mechanism and ZLD. Consultant has not properly addressed the issues for mitigation of the impacts and accordingly decided to defer the proposal for want of

requisite information as under and **have asked the PP to revise the Report along** with following clarification/information: -

- (i). The Committee deliberated the issues and observed that Zero Liquid Discharge plan is not adequate for addressing the issues. The Committee observed that the PP/Consultant has not presented the adequate details on the Effluent treatment mechanism. The Committee suggested to revise the Effluent treatment mechanism with plan for Zero Liquid Discharge and submitted for further deliberations by the Committee.
- (ii). The Committee observed that the PP/Consultant has not presented the adequate details on the water balance. The Committee suggested to resubmit the same as per ZLD plan for further deliberations by the Committee. Plan for storage of rain water harvesting in two tanks (60 KL each).
- (iii). Rain water harvesting plan with Two storage tank of capacity 60 KLD each need to be submitted and presented in the next Committee.

### Agenda No. 23.5

Manufacturing Synthetic Organic Chemicals (41 MT/Month) by M/s R J Industries, Located at 2662/61, Village- Bhujela, Tehsil-PindwaraDist: Sirohi, Rajasthan – Re-Consideration of Environment Clearance

### [IA/RJ/IND2/155630/2018, IA-J-11011/101/2019-IA-II(I)]

The Project Proponent and their Consultant M/s Earthood Services Pvt. Ltd. made a detailed presentation on the salient features of the project through Video conferencing.

The proposal was earlier considered by the EAC (Industry-2) in its meeting held during 14-16 July, 2020. Additional information sought by the Committee and information provided by the project proponent is as under:

S.	Additional information	Reply by PP and EAC deliberation				
No.	sought by the EAC					
1	Detailed/revised project	The detailed project cost along with EMP				
	estimate including for EMP	details are provided. The committee				
		deliberated the issue and found in order.				
2.	Status of NBWL clearance of the	Application for NBWL Clearance has been				
	project	submitted vide No. FP/RJ/IND/4642/2019				
		dated 08/11/2019. The committee				
		deliberated the issue and found in order.				
3.	Conservation plan for schedule	There are two Scheduled I fauna (Sloth				
	1 species with budget	bear and Panthera pardus) found within				
		the study area. Accordingly conservation				
		plan was prepared and submitted to Chief				
		wild life warden for approval on				
		29.05.2020. The committee deliberated				

		the issue and found in order.			
4.	Detailed ZLD plan	Details of ZLD plan has been provided.  The committee deliberated the issue and found in order.			
5	Alternate source of water	Alternate source of water has been explored. Now, waste water generated from the nearby granite cutting and shining unit will be used as source of water after treatment. The committee deliberated the issue and found in order.			
6	Issues raised during public hearing, response and CER plan to address the same	CER plan has been submitted based on Public hearing issues and commitment. The committee deliberated the issue and found in order.			

The proposal is for environmental clearance to the project for Manufacturing Synthetic Organic Chemicals (41 MT/Month) at Sy. No. 2662/61, Village Bhujela, Tehsil Pindwara District Sirohi, Rajasthan.

The project/activities are covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry. TOR was granted on dated 17<sup>th</sup> May 2019.

The total area of plant is 4169.77 sqm. Industry has will develop greenbelt in an area of  $\sim 33$  % i.e.,  $1361\text{m}^2$  out of total area of the project. The estimated project cost is Rs 3.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 51Lakhs and the Recurring cost (operation and maintenance) will be about Rs 12.5 Lakhs per annum. Total Employment will be 19 persons as direct &15 persons indirect. Industry proposes to allocate Rs 8.75 Lakhs of 2.5 % towards Corporate Social Responsibility.

The Mount Abu Wildlife Sanctuary is located almost 4.4 km in west direction from the project site. Application for NBWL Clearance has been submitted vide No. FP/RJ/IND/4642/2019 dated 08/11/2019.

Baseline data was collected from  $1^{\rm st}$  March 2019 to  $31^{\rm st}$  May 2019. AAQM was carried out in 7 locations on 24 hourly average basis as per guidelines of CPCB and NAAQS within 10 km radius of the study area. PM10 and PM2.5 was found in the range of 60 to 68  $\mu$ g/ m3 and 30 to 36  $\mu$ g/ m3 respectively. SO2 found in the range of BDL to 31.54  $\mu$ g/ m3 and NOx: 10 to 22  $\mu$ g/ m3. VOC and CO were found BDL. The PM10, PM2.5, SO2 &NOx parameters are found within the permissible limit as per NAAQS level. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.8  $\mu$ g/m3, 3.63  $\mu$ g/m3 and 23.8  $\mu$ g/m3 with

respect to PM10, Sox and NOx. The Committee has noted that the incremental GLC is at higher level and the project proponent shall ensure comprehensive pollution control measures.

The total fresh water requirement during the operation phase for the proposed project will be 28.91 (m3/day). Main source of Waste water generated from granite cutting and shining unit after treatment will be used as source of water for production of S.O Dyes after treatment. Tanker water supply also used as source of water.

The total waste water generation after proposed project from Industrial will be 15.0 KLD effluent will be treated in ETP followed by RO & MEE. 1 KLD Domestic effluents shall be disposed through septic tank& soak pit. The plant will be based on Zero Liquid discharge system.

Total power requirement of plant is 175 kW met through Jodhpur Vidyut Vitran Nigam Ltd. To meet the power requirement in the event of grid power failure, R.J Industries has proposed DG sets of 125 KVA capacities to meet the power requirement of the plant during power failure.

Total steam requirement at full production of R.J. industries will be about 07 MT, which is meet through Coal or agro waste fired boiler. Fuel consumption for this boiler is 1ton/day coal or agro waste.

Stack emissions from coal or agro waste fired 0.8 TPH boiler. Stack emissions from DG Sets having capacity 125 KVA. Bag filter are used for stack emission from 0.8 TPH boiler. Encaustic enclosure stack emissions from DG Sets.

Used Oil (0.03 TPA) generated from the maintenance of DG sets is handed over to CPCB authorized used oil recyclers. Discarded containers (drums, carboys) contaminated with hazardous chemicals are sent for decontamination to CHWTSDF. Gypsum from Process (Metanilic Acid) ~155TPA, Gypsum from ZLD ~1140 KLD, Iron sludge (~338 TPA) from process Sludge (~90 TPA) generated from the ETP are also sent to CHWTSDF for landfilling. Fly approx. 50 tons per year fly ash will be generated from coal or agro waste fired boilers, which is sold to bricks manufacturers / cement industry.

The public hearing was conducted on 13.03.2020 by the State Pollution Control Board, which was presided over by the District Magistrate. The major points are raised during Public Consultation area, Job opportunity, arrangement of solar lightings, Industrial training, Strom water management, Impact on Socio Economic development of the area etc.

Details of products and capacity are as under

S. No.	Name of Product/Nature	M.W.(g/mol) Nature	CAS No.	Use of Product	Quantity (MT/Month)
1	Metanilic Acid	173.19	121-47-1	Dyestuff & Dyestuff Intermediate	4

2	BDSA (Benzen Di SulPhonic Acid)	344	117-61-3	Dyestuff & Dyestuff Intermediate	5			
3	MPDSA (Meta Phenyl Di Amine Sulphonic Acid)	188	88-63-1	Dyestuff Intermediate	10			
4	SPVS (Sulphopara Vinyl Sulphon Ester)	361	42986-22- 1	Dyestuff Intermediate for Direct Dyes	12			
5	PAABSA (Pera Amino Azo Benzene 4 Sulfanic Acid)	277.32	104-23-4	Dyestuff Intermediate	10			
	Total							

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 additional information submitted by the project proponent found to be satisfactory.

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 environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8<sup>th</sup> August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken.
- (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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). 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.
- (v). The project proponent shall submit a comprehensive plan to control the incremental GLC due to the project to the SPCB. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (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). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x). As proposed by the project proponent, treated water from the granite cutting/shining unit shall be used. The project proponent shall not use ground water.
- (xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiii). 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.
- (xiv). As committed, project proponent shall allocate 2% of project cost towards Corporate Environment Responsibility (CER) as per Ministry's OM dated 01.05.2018, and shall be utilized properly to address the socio-economic and environmental issues in the study area. The CER plan shall be completed before commissioning of the project.
- (xv). The project proponent shall prepare a site specific conservation plan and wildlife management plan for the Schedule-1 species in the study area, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (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. 23.6

Proposed Expansion of existing capacity of Butadiene based Synthetic Lattices and Setting up facility of Adhesives and Wood Finishes manufacturing plant at Block no. 129, Village Samlaya, Taluka Savali, Vadodara, Gujarat by M/s Jubilant Agri & Consumer Products Ltd. – for Environmental Clearance.

### [IA/GJ/IND2/108562/2019, IA-J-11011/209/2019-IA-II(I)]

The project proponent and their accredited consultant M/s. Kadam Environmental Consultants made a detailed presentation on the salient features of the project though Video Conferencing (VC).

The proposal is for environmental clearance to the project for expansion of synthetic organic chemical manufacturing plant by M/s Jubilant Agri & Consumer Products Ltd at Block no. 129, Village Samlaya, Taluka Savali, Vadodara (Gujarat).

The proposal was earlier considered by the EAC in its meeting held during 25-27 February, 2020. The additional information desired by the Committee and response from the project proponent is as under:

S.	Query Raised	Query Reply Given by PP
No.		
1.	unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In	OMs/Circular/Guidelines issued by the Ministry from time to time.
2.	TOR compliance is not adequate in EIA/EMP report and need to revise as per the terms of reference granted for the project, and shall conform	TOR compliance adequacy reviewed and revised confirming to the standards as per Appendix III of EIA Notification, 2006. PP resubmitted the report along with revised TOR compliance confirming to the standards as per Appendix III of EIA Notification, 2006. The Committee deliberated the issues and found in order.
3.	Permission granted by CGWA for withdrawal of fresh water.	NOC for 141 KLD granted by CGWA for existing plant capacity.  > Total 588 KLD fresh water requirement for project expansion including existing fresh

4.	Submit documentary evidence that unit is not located inside the Critically Polluted Area.	water requirement.  NOC application made for 588 KLD fresh water submitted by PP.  Present status: Pending approval at CGWA, Delhi  PP submitted the letter of GPCB vide letter no. GPCB/P-1/CEPI-12/526552, dated 11th November, 2019 from Gujarat State Pollution Control Board, Gujarat. Two areas of Vadodara namely 1) Nandesari GIDC and 2) Petrochemical Complex (PCC) are declared as CPA / SPA. Distance from Nandesari GIDC: 20.16 KM and Petrochemical Complex (PCC): 19.68 KM. The Committee deliberated the				
5.	MSIHC Rules and occupational	issues and found in order.  On Site Emergency Plan and Occupational Health Plan has been deliberated by the EAC				
6.	ZLD plan needs to be submitted.	<ul> <li>PP submitted the following:</li> <li>Effluent generation quantity is only 26.2 KLD, which is very low. Cost of ZLD is prohibitively high making product cost unviable in stiff international market competition.</li> <li>Expansion planned for Butadiene Based Synthetic Lattices has National Significance, as we are Number 2 in the world and Number 1 producer in India having 65% exports.</li> <li>PP have learnt from reliable Industry Sources that Government of India is in consultation with CII &amp; FICCI for reconsideration of ZLD norms. We shall incorporate changes as per the guidelines issued by GOI as and when it is made public with "15KLD feed capacity Horizontal Skid Mounted Double Effect Forced Circulation" Evaporation plant with Thermo</li> </ul>				
		Compressor".  It was informed to the Committee that the Unit is not with complete ZLD. The Committee deliberated the issues.				

7.	Revised water requirements	PP mentioned that with installation of RO & MEE
	needs to be explored	PP will have fresh water requirement of 562.5
		KLD. Few examples of reduction in water
		consumption and effluent generation in existing
		facility are:
		(i) Closed loop water circulation with HE for water ring vacuum pump
		(ii) High jet pressure, less water consumption for reactor cleaning
		(iii) Reactor rinsing water after reactor cleaning storage and re-use
		(iv) Use of steam condensate in cooling tower
		(v) RO Permeate re-use at cooling tower.
		The Committee deliberated the issues and found
		in order.

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee in the Ministry.

The details of product and capacity as under:

C No	Name of Products	Production Capacity in TPA				
S. No.	Name of Products	Existing	Proposed	Total		
1	Adhesives	0	18000	18000		
2	Wood Finish	0	6000	6000		
3	Butadiene Based Synthetic Lattices viz VP Latex, SBR Latex, NBR Latex	-16440	0	-16440 <b>\$</b>		
4	Butadiene Based Synthetic Lattices	16440	63560	80000		
	Total	16,440	87,560	1,04,000		
<b>\$</b> Note:						

The standard ToR for the project was granted on 1<sup>st</sup> August, 2019. Public hearing for the project was conducted by the State Pollution Control Board on 13<sup>th</sup> December, 2019. The Public hearing was chaired by the Resident Additional District Collector & Additional District Magistrate. The main issues raised during the public hearing and its action plan were deliberated by the Committee.

Existing land area is 34,657 sqm. Additional 40,400 m<sup>2</sup> land will be used for proposed expansion. Industry has already developed greenbelt in an area of 39% i.e. 29059 sqm out of total area of the project. The estimated project cost is Rs.151 Crores. Total capital

cost earmarked towards environmental pollution control measures is Rs. 683 Lacs and the recurring cost (operation and maintenance) will be about Rs. 216.1 Lacs per annum. Total Employment will be  $\sim$ 224 persons as direct &indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Meni Riveris flowing at 0.33 km in SSE direction.

Ambient air quality monitoring was carried out at 8 locations during March, 2019 to May, 2019 and the baseline data indicates the ranges of concentrations as: PM10 (73-80  $\mu$ g/m3), PM2.5 (24-30  $\mu$ g/m3), SO2 (8-10  $\mu$ g/m3) and NO2 (13-15  $\mu$ g/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.1  $\mu$ g/m3, 5.8  $\mu$ g/m3 and 17.4  $\mu$ g/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 656 m3/day including existing requirement of 54 KLD of which fresh water requirement of 588 m3/day will be met from bore well. Effluent of 104 KLD quantity will be treated through RO / ETP from that 68 KLD will recycle back for reuse. Effluent generated will be treated at designated ETP for JACPL within JLSL premises as per existing consent and discharged to CETP – EICL, Vadodara by JLSL.

Power requirement after expansion will be 3000 kVA including existing 475 kVA and will be met from Madhya Gujarat Vij Company Limited (MGVCL). Existing unit has one DG set of 1010 kVA, additionally two DG set of 1010 kVA each are used as standby during power failure. Stack (height 30m) will be provided as per CPCB norms to the proposed DG sets.

Additionally, 2 Boilers of 3 TPH each HSD/ Agro waste fired boiler will be installed. Multi cyclone separator/ bag filter with Adequate stack height of 30m as per CPCB norms will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

### Details of Solid waste/ Hazardous waste generation and its management are as mentioned below:-

		Hazard ous Waste Categor y	Quantity in MTPA				Method	
S. N o.	Type of Waste		Existi ng	Propos ed	Total	Source	of Collecti on	Treatment / Disposal
1	Used/ Spent Oil	5.1	1.5	4.0	5.5	Moto rs/ Gear Box	Drum s	Collection, storage, Transporta tion, Disposal by selling to registered re-refiners

2	Proces s/ Waste	28.3	70. 0	101. 7	171 .7	Plant	HDP Bags	Collection, storage, Transporta tion, Disposal to M/s. Nandesari Environme nt Control Ltd (NECL)/ Recycling Solutions Pvt Ltd. (RSPL)/ Bharuch Enviro Infrastruct ure Limited
3	Solid Waste	35.1	10. 0	15	25. 0	Packi ng	HDP Bags	Collection, storage, Transporta tion, Disposal to M/s. Nandesari Environme nt Control Ltd (NECL)/ Recycling Solutions Pvt Ltd. (RSPL)/ Bharuch Enviro Infrastruct ure Limited
4	Discar ded Drums	33.3	750 0 nos.	3000 0 nos.	375 00 nos.	Plant	Stack ing	Collection, storage, transportat ion & disposal to authorized recyclers
5	Discar	33.3	5.0	25.8	30.	Plant	Wast	Collection,

	ded Liners/ Bags				8		e Bins	storage, transportat ion & disposal to authorized recyclers
6	Spent Solven t	20.2	0.0	1.4	1.4	Plant	Drum s	Collection, storage, Transporta tion, Disposal by selling to registered re-refiners

The unit did not require getting EC for operation since unit was in operation before EIA Notification dated 14th September 2006 with duly acquired CCA in the name of Jubilant Organosys Limited vide Consent Order # 1636 dated 09-02-2004 from GPCB with the same capacity as it is now existing that is 548 MT (Dry Basis) / 1370 MT (Wet Basis). Jubilant Organosys Limited has been rename / demerged to its present name i.e. M/s Jubilant Agri & Consumer Products Limited. There were changes in Company names only and no change in production quantity before and after 14th September 2006 and hence no EC was required. The Committee deliberated the issues.

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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 (EC).

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 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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured for expansion project and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Process safety and risk assessment studies carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (v). 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.
- (vi). 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.
- (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). Total fresh water requirement shall not exceed 588 cum/day, proposed to be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
  - (ix). Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
  - (x). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
  - (xi). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xii). 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.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% 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.
- (xv). As committed 2% of total project cost shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting requirement in the study area, as proposed. The CER plan shall be completed before commissioning /expansion of the project. Preference shall be given to local villagers for employment in the unit.

(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. 23.7

Amendment in EC on management of total Spent Acid of 419.8 MT/m in Synthetic Organic Chemicals Manufacturing Plant by M/s Prakhar Estates Pvt. Ltd., located at Plot No 821, GIDC Sachin, City Surat, District Surat, Gujarat-Amendment in Environment Clearance regarding

### [IA/GJ/IND2/165349/2020, IA-J-11011/189/2020-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. SEIAA/GUJ/EC/5(f)/590/2017 dated 30.04.2017 for the project of Synthetic Organic Chemicals manufacturing located at Plot No 821, GIDC Sachin, City Surat, District Surat, Gujarat in favour of M/s Prakhar Estates Pvt. Ltd.

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However, being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

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

S. No	Para of EC issued by MoEF&CC / SEIAA	Details as per the EC	To be revised as/ read as	Justification/ reasons by PP
1	Condition No. 1 & 2	Spent acid 233.25 MT/Month would be reutilized out of a total spent acid generation of 419.8 MT/Month, and the excess spent acid of 186.55 MT/Month would be neutralized in the ETP.	be permitted under the provisions of the HW	After installation of the plant it was found that the ETP installed can neutralise 100 KL/Month, but the sludge generation during the process of neutralisation will be very high and it is very difficult to handle. Since the generated sludge (ETP sludge/ Primary chemical sludge) is treated as Hazardous Waste under H&OWM Rules 2016; hence it is to be sent to TSDF Site for its management which

All the effluent generated is to be sent to ETP requires payment to the vendor and makes the project unviable.

Also, during monsoon season TSDF sites are closed as per State Pollution control board's guidelines so due to non-availability of the place for the storage of Hazardous Waste; Plant has to be shut down. Secondly TSDF sites do not take HW if moisture content is above 25%.

Hence, it is very difficult to manage gypsum sludge under such conditions. Unit being small scale industry with the limitation of space area storage of hazardous waste. It is our humble request to you to permit disposal of spent acid to end users.

PP mentioned that presently this gypsum sludge needs to be disposed off at TSDF Site (approved by GPCB) located at around 535 km from our factory which is also expensive and requires long transportation.

PP has also to achieve Zero Liquid Discharge through in the evaporation Spray Dryer. Due to this Spray Dryer ash (which is а Hazardous Waste) generated which is majorly gypsum due to spent acid mixing with wastewater in ETP. Therefore, by our amended proposal this Hazardous Waste will also reduce. Thus, giving permission of disposal of Spent Acid to authorized end

				users, will reduce the pollution load drastically.
				As per the guidelines defined by CPCB, this spent acid (hazardous waste) can be sent to the approved recyclers having registration under rule 9 of HOWM 2016 and will convert this spent acid into gypsum which can be utilized in cement manufacturing. So spent acid will be disposed to only in the co-processing industry. As per the Rule-9 regulations there are no such restrictions levied on spent acid transportation.
				The recyclers will take this acid without any cost except the transportation charges. To comply and utilise the provisions of this guideline PP wish to give our excess spent acid to an approved recycler.
				PP also assure you that spent acid will be disposed to authorized end users with a GPS tracking system. And also, SOP for the transportation of Spent Acid is attached as Annexure II.
				Therefore, the proposed scenario after grant of amendment in EC would result in a more sustainable operation.
				Note- The acid re-utilization was 44.4% in the environmental clearance, however now it is proposed between 38.8% - 55.5%.
2	Product at	Product	Removed	One of the products approved

S.N. 8 para 2	Blue HEGN STAGE I	from the product list	in EC, <i>Blue HEGN I</i> is longer viable to be produced in the
	[2-(2-Amino- Ethylamino)-5- Nitro- Benzensulfonc Acid], CAS no (859916-35-1)		industry due to drastically lowered market potential. This product has the highest spent acid utilisation potential in the <i>Isolation process</i> . Therefore, PP <i>undertake to remove this product from the product list. The revised product list is given in the Table 1</i> .

**Table 1: List of Revised Products List** 

S. No.	Name of the Products	CAS no	Quantity as per earlier EC (MT/Month)	Proposed Quantity (MT/Month)
1	4 Chloro 2 Amino Phenol 6 Sulphonic Acid (4 CAPSA)	88-23-3 5		
2	6 Chloro 2 Amino Phenol 4 Sulphonic Acid (6 CAPSA)	5857-94-3	5	5
3	Ortho Amino Phenol Para Sulphonic Acid (OAPSA)	98-37-3		
4	6 Nitro 2 Amino Phenol 4 Sulphonic Acid (6 NAPSA)	96-93-5 10	10	10
5	Aniline 2,5 Di Sulphonic Acid	98-44-2 25		
6	Aniline 2,4 Di Sulphonic Acid	137-51-9	25	25
7	Blue HEGN STAGE I [2-(2-Amino-Ethylamino)-5- Nitro-Benzensulfonc Acid]	859916-35-1		Removed
8	Copper Formazone BASE	77840-01-08		
9	Blue HEGN STAGE II [Diarylamino-3,6-dichloro-1,4-benzoquionone]	697-91-6	20	20
10	Mesitylene Acid (M ACID)	32432-55-6		
11	Blue 49 Base	24124-40-1		
12	Blue HEGN STAGE III [3, 1 0-di-(2'-Aminoethylamino)-6, 13 di chloro triphendioxazine- 4, 11-disulphonic acid)	60316-87-2 4	4	

13	amine 2 Sulfonic Acid (4 NADPSA)  Total	91-30-5	40 <b>104</b>	
	4 Nitro 4 Amino Diphenyline			

### Details of safety precautions to be taken during transportation of hazardous waste to approved recycler:

The spent acid shall be transported more than 300 kms to the spent acid recycler who converts the spent acid into gypsum sludge which is utilised in cement manufacturing. Presently the identified recyclers are Shree Cement Ltd, Rajasthan (700 km) and Novel Vatva Spent Acid Management Pvt Ltd, Gujarat (300km). Both the identified recyclers have registration under Rule 9 of HOWM 2016 to manage spent acid along with CTO by SPCB. Transportation of spent acid into tankers shall be done by PP and PP has submitted precautions during transportation. PP shall ensure that no accidents take place and all applicable laws and regulations are compiled during the activity. PP shall comply with PLI Act 1991, Applicable rules/ SOPs of CPCB, H&OWM 2016 and Motor Vehicle Act 2019 while transporting the hazardous waste to the registered recycler.

The EAC, after detailed deliberations, **recommended** the amendment in environmental clearance as proposed by the project proponent with all other terms and conditions stipulated in the environmental clearance dated 30.04.2017 shall remain unchanged.

### Agenda No.23.8

Proposed Change in Product Mix for Bulk Drugs & Intermediates Manufacturing Unit by M/s CIPLA, located at Plot No 285, 286 & 287, KIADB Industrial Area, Bommasandra-Jigani Link Road, Phase-IV, Taluk Anekal, Bangalore-Amendment in Environmental Clearance regarding.

### [IA/KA/IND2/163806/2020, J-11011/382/2019-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. F.No.-J-11011/382/2019-IA-II(I) dated 22.04.2020 for the proposed change in Product Mix for Bulk Drugs & Intermediates Manufacturing Unit by M/s CIPLA, located at Plot No 285, 286 & 287, KIADB Industrial Area, Bommasandra- Jigani Link Road, Phase-IV, Taluk Anekal, Bangalore, Karnataka.

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' to be appraised at State level. However, being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

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

S.no	Para of EC issued by MoEF&CC	Details as per the EC	To be revised as/ read as	Justification/ reasons by PP and deliberations by the EAC
1.	Page No.2, Product category no. 2	Product 'GEMCITABINE HCL' was missed out but total production capacity was same 113.46 MTPA and Formulations Tablets: 1500 L/A & Capsules 1560 L/A	Product 'GEMCITABINE HCL 800 kg/A' may be included in Environmental Clearance	PP requested that the instant product was part of EIA/EMP and it is missed out due to missing in summary report. After inclusion of the said product, there will be no change in the total Production quantity for existing and proposed as per the EC issued vide F.NoJ-11011/382/2019-IA-II(I) dated: 22.04.2020. PP mentioned that they had not read the minutes and apologize for the same.  The Committee deliberated and is of the view that minutes being uploaded on Parivesh Portal well before issuance of the EC and PP should read the minutes immediately and if any corrections found, can be rectified. The management of Company shall instruct the officials handling the subject accordingly.
2.	Page No. 5, Section A. Specific Conditions, Point No.1	The project proponent shall obtain wildlife clearance form standing committee of NBWL, if	The project proponent shall obtain wildlife clearance form standing committee of NBWL, if	As per submitted EIA report, Chapter 1, Page No. 5, Table 1-1 (Salient features of the project site and its environs), S.No. 17, The Bannerghatta

applicable as the project site is located at a distance of 2.5 km from Dadra & Nagar Haveli wild life sanctuary	applicable as the project site is located at a distance of 5.26 km from Bannerghatta National Park	National Park boundary is at a distance of 5.26 Km towards West from the project site (as per Range forest office, Bannerghatta wild life Range, Kalkere, Bengaluru, Letter No. 415/2018-19 dated: 18.01.2019).
		The Committee deliberated and is of the view that minutes being uploaded on Parivesh Portal well before issuance of the EC and PP should read the minutes immediately and if any corrections found, can be rectified. The management of Company shall instruct the officials handling the subject accordingly.

The Committee deliberated and is of the view that minutes being uploaded on Parivesh Portal well before issuance of the EC and PP should read the minutes immediately and if any corrections found, can be rectified. The management of Company shall instruct the officials handling the subject accordingly.

The EAC, after detailed deliberations, **recommended** the amendment in environmental clearance as proposed by the project proponent with all other terms and conditions stipulated in the environmental clearance dated 22.04.2020 shall remain unchanged.

### Agenda No.23.9

Revalidation of expansion of existing chemical manufacturing unit M/s Diamines and Chemicals Limited, located at Plot No 13 PCC Area Po Petrochemicals Vadodara, Gujarat – Amendment in EC- reg. IA/GJ/IND2/130181/2019SEIAA/GUJ/EC/5(f)/372/2012

The project proponent, vide email dated 15.09.2020, has requested to withdraw the project. The Committee has accepted the request of PP and recommended to **RETURN** in present form as **PP want to withdraw.** 

### DAY 1: 15<sup>th</sup> September, 2020 (Monday)

#### **Consideration of Environmental Clearance**

### Agenda No.23.10

Setting up of Synthetic Resin Adhesive Manufacturing unit of capacity 355 TPM by M/s Dell Laminate, located at Survey Mo. 22, plot no 1 B/H pentagon forgings, National Highway 27 (8B), Taluka Gondal, District Rajkot, Gujarat - Consideration of Environment Clearance regarding.

### [IA/GJ/IND2/92422/2019, IA-J-11011/26/2019-IA-II(I)]

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

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up of Synthetic Resin Adhesive Manufacturing unit of capacity 355 TPM by M/s Dell Laminate in an area of 1084.03 sqm Located at Survey Mo. 22, plot no 1 B/H pentagon forgings, National Highway 27 (8B), Taluka Gondal, District Rajkot, Gujarat.

The details of products and capacity as under:

Sr. No.	Name of Product	CAS NO.	Quantity MT/Month	End use of Product
1	Urea Formaldehyde Resin	9011-05-6	175	
	Melamine Formaldehyde Resin	9003-08-1	30	End use applications include fiberglass
3	Cardanol Phenol Formaldehyde Resin	37330-39-5	75	insulation, decorative and industrial
4	Phenol Formaldehyde Resin	9003-35-4	75	laminates and under- the-hood components in automobiles
TOTAL			355	in adcomobiles

#### Unit has valid CCA for manufacturing of Laminated Sheets & Details as follow,

Laminated Sheets  Nos./Month  Valid Up to 07/09/2021	Laminated Sheets		CCA No. AWH-82000, Valid Up to 07/09/2021
--	------------------	--	--

Note: Existing manufacturing activity/ Products is not covered under EIA Notification 2006. So unit has not available EC in past.

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and requires appraisal/approval at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The standard terms of reference (ToR) was granted by the Ministry vide file no No. IA-J-11011/26/2019-IA-II(I) on 5<sup>th</sup> March, 2019. The public hearing was conducted by the Gujarat Pollution Control Board on 15<sup>th</sup> October, 2019. The public hearing was presided over by the Resident Additional District Collector & Additional District Magistrate. The main issues raised during the public hearing are related to employment, education & scholarship, Waste water management and development of surrounding Villages. No litigation is pending against the proposal.

Total land area is 1084.03 sqm. Greenbelt will be developed in an area of 33 % i.e., 358.0 sqm out of total area of the project. The estimated project cost is Rs 0.95 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs 6.5 Lakh and the Recurring cost (operation and maintenance) will be about Rs 4.8 Lakh per annum. Total Employment will be 9 persons as direct. PP reported that there are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during March-19 to May-19 and the baseline data indicates the ranges of concentrations as: PM10 (51.49-94.1 $\mu$ g/m3), PM2.5 (22.16- 40.5  $\mu$ g/m3), SO2 (5.79- 10.4  $\mu$ g/m3) and NO2 (10.00 - 19.80 $\mu$ g/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.04  $\mu$ g/m3, 0.25  $\mu$ g/m3 and 0.42  $\mu$ g/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is  $20~\text{m}^3/\text{day}$ , of which fresh water will be met through Borewell. Effluent of  $5.80~\text{m}^3/\text{day}$  will be treated through ETP followed by Evaporator. The plant will be based on Zero Liquid discharge system.

Power requirement will be 50 kVA and will be met from Paschim Gujarat Vij Company Limited (PGVCL). Unit will have 1 DG sets of 62.5 kVA capacity, which will be used as standby during power failure. Stack (height 6 m) will be provided as per CPCB norms to the proposed DG sets. Unit will have 3 TPH Bio Coal/ Briquettes fired boiler will be installed. Stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers. Generated fly-ash will be sold to paver block / bricks manufacturers.

### Details of Solid waste/ Hazardous waste generation and its management is as follow:

Sr. No.	Type of waste	Waste Categorygenerating process	Physical Characteristics	Quantity	Management	
------------	------------------	----------------------------------	-----------------------------	----------	------------	--

Sr. No.	Type of waste	Category	Waste generating process	Physical Characteristics	Quantity	Management
1.	ETP Sludge	35.3	ETP	Solid/Semi-solid	10 MT/Annum	Collection, Storage, Transportation, Disposal at TSDF site.
2.	Used/spent oil	5.1	D.G set	Liquid	10-15 L/Annum	Sold to authorized re processor
3.	Discarded containers	33.1	Production processes	Solid	3 MT/Annum	Return back to raw material supplier/ Handover to authorized re processor
4.	Edge cutting waste	28.1	Process	Solid	12 MT/Annum	TSDF

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. 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 (EC).

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, during deliberations, noted that the Consultant [M/s. Green Circle Inc.] is not serious for preparation of the EIA/EMP Report and the EAC is of the opinion that the Ministry may request QCI for taking strict action against the Consultant for not providing correct information in the EIA report. The Ministry may take necessary action against the Consultant.

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) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii) Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) Total fresh water requirement shall not exceed 20 m³/day, proposed to be met from bore well. Necessary permission shall be obtained in this regard from concerned regulatory authority/CGWA. The fresh water demand shall be reduced by 10% using rain water harvesting system.

- (viii) Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (ix) 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (x) Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xi) 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.
- (xii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiii) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 33% out of the total project area.
- (xiv) As proposed 2% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.

(xv) 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.23.11

Setting up of Synthetic Resin Adhesive Manufacturing unit of capacity 855 TPM by M/s Shri Sairaj Enterprise Located at Survey no. 82, plot no. 13,14,15,16 Village Bhuvana, Taluka Gondal, District Rajkot, Gujarat- Consideration of Environment Clearance regarding.

### [IA/GJ/IND2/92425/2019, IA-J-11011/27/2019-IA-II(I)]

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

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up of Synthetic Resin Adhesive Manufacturing unit of capacity 855 TPM by M/s Shri Sairaj Enterprise in an area of 2730.13 sqm at Survey no. 82, plot no. 13,14,15,16 Village Bhuvana, Taluka Gondal, District Rajkot, Gujarat.

The details of products and capacity as under:

S. No.	Name of the product	CAS Number	Production Qty. MT/Month
1.	Phenol Formaldehyde Resin	150	
2.	Urea Formaldehyde Resin	350	
3.	Melamine Formaldehyde Resin	60	
4.	Cardanol Phenol Formaldehyde	150	
Total Pro	oduction Capacity of Proposed Proc	ducts - 710 MT/Month	
5.	Laminated Sheet	855 MT/Month	
	(As per CTO obtained from Gujara		
	Board) CTO No. AWH-32592, Vali	d Up to 30/06/2023	

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and requires appraisal/approval at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The standard terms of reference (ToR) was granted by the Ministry vide file no No. IA-J-11011/27/2019-IA-II(I) on  $5^{th}$  March, 2019. The public hearing was conducted by the Gujarat Pollution Control Board on  $15^{th}$  October, 2019. The public hearing was presided

over by the Resident Additional District Collector & Additional District Magistrate. The main issues raised during the public hearing are related to employment, education & scholarship, Waste water management and development of surrounding Villages. No litigation is pending against the proposal.

Total land area is 2730.13 sqm. Greenbelt will be developed in an area of 33 % i.e., 910.0 sqm out of total area of the project. The estimated project cost is Rs 2.74 crore. Total capital cost earmarked towards environmental pollution control measures is Rs 8 Lakhs and the Recurring cost (operation and maintenance) will be about Rs 4.5 Lakhs per annum. Total Employment will be 18 persons as direct. Industry proposes to allocate Rs 6.86 Lakh towards CER. PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during March-19to May-19and the baseline data indicates the ranges of concentrations as: PM10 (51.49-94.1 $\mu$ g/m³), PM2.5 (22.16-40.5 $\mu$ g/m³), SO2 (5.79-10.4 $\mu$ g/m³) and NO2 (9.8-19.80 $\mu$ g/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.80 $\mu$ g/m³, 0.22  $\mu$ g/m³ and 0.40  $\mu$ g/m³ with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is  $41\text{m}^3$ /day of which fresh water. Effluent of 11.6 KLD quantity will be treated through ETP followed by Evaporator. The plant will be based on Zero Liquid discharge system.

Power requirement will be 180 kVA and will be met from Paschim Gujarat Vij Company Limited (PGVCL). Unit will have 1 DG sets of 100 kVA capacity, which will be used as standby during power failure. Stack (height 6m) will be provided as per CPCB norms to the proposed DG sets. Unit will have 3 TPH Bio Coal/ Briquettes fired boiler will be installed. Stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers. Generated fly-ash will be sold to paver block / bricks manufacturers.

### Details of Solid waste/ Hazardous waste generation and its management is as follow:

S. No.	Particulars	Category	Total Qty.	Management
1.	ETP Sludge/Evaporation Residue	35.3	20 MT/Annum	Collection, Storage, Disposal at Approved TSDF Site / co - processing
2.	Used Oil	5.1	10-15 LP/Annum	Collection, Storage and used within premises as a lubricant / sold to registered recycler/ co processing
3.	Discarded containers /Barrels	33.3	6 MT/Annum	Collection, Storage & sold to authorized vendor

4.	Edge cutting waste	23.1	12 MT/Annum	Collection, Storage & send to common incineration facility/
				co processing

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. 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 (EC).

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, during deliberations, noted that the Consultant [M/s. Green Circle Inc.] is not serious for preparation of the EIA/EMP Report and the EAC is of the opinion that the Ministry may request QCI for taking strict action against the Consultant for not providing correct information in the EIA report. The Ministry may take necessary action against the Consultant.

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) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii) Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) Total fresh water requirement shall not exceed 41m³/day, proposed to be met from bore well. Necessary permission shall be obtained in this regard from concerned regulatory authority/CGWA. The fresh water demand shall be reduced by 10% using rain water harvesting system.
- (viii) Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
  - (ix) 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
  - (x) Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing

shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (xi) 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.
- (xii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiii) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 33% out of the total project area.
- (xiv) As proposed 2% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.
- (xv) 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.23.12

Expansion of Molasses based Distillery from 60 KLPD to 110 KLPD by modernization and enabling usage of B- heavy molasses and cane juice by M/s Dalmia Chini Mills Nigohi-Distillery Division (A unit of Dalmia Bharat Sugar and Industries Limited), located at Village Kuiyan, Post Areli, Tehsil Tilhar, District Shahjahanpur, Uttar Pradesh - Consideration of Environment Clearance under provisions of para 7 (ii) of the EIA Notification, 2006

[IA/UP/IND2/168105/2020, IA-J-11011/315/2017- IA II (I)]

The Project Proponent and their accredited Consultant M/s JM EnviroNet Pvt. Ltd. made a detailed presentation on the salient features of the project through video conferencing and informed that:

The proposal is for environmental clearance to the project for Expansion of Molasses based Distillery from 60 KLPD to 110 KLPD by Modernization and Enabling usage of B-Heavy Molasses and Cane Juice at Village Kuiyan, Post Areli, Tehsil Tilhar, District Shahjahanpur, State Uttar Pradesh by M/s Dalmia Chini Mills Nigohi-Distillery Division (A unit of Dalmia Bharat Sugar and Industries Limited).

The project/activity is covered under category A of item 5 (g) 'Distilleries' and item 5(j) 'Sugar Industry' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral EAC in the Ministry.

The details of products and capacity as under:

S. No.	Unit	Product	Existing	Propose d Addition al	Total after expansion by modernizatio
1.	Molasses based	Ethanol/RS/Impure alcohol/ENA	60 KLPD	50 KLPD	110 KLPD
2.	distillery Co- generation power plant	Power	2.5 MW	0	2.5 MW

The Ministry had issued EC earlier vide letter no. J-11011/315/2017- IA II (I) dated 30<sup>th</sup> May, 2018 to the existing project in favor of Dalmia Chini Mills Nigohi-Distillery Division (A unit of Dalmia Bharat Sugar and Industries Limited). Certified EC compliance Report has been obtained by Regional Office, MoEFCC, Lucknow vide RO office file no. IV/ENV/UP/Ind – 164/525/2019 and site visit was conducted on 10<sup>th</sup> September, 2019. There is no litigation pending against the project.

PP reported that the existing land area is 4.5 Ha (45000 m2). The proposed expansion will be done within the existing plant premises so no additional land is required. Industry is being/will develop greenbelt in an area of 33% i.e. 1.5 ha (15000 m²) out of total area of the project. The estimated project cost is Rs. 10.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 5.0 Crores (MEE, Upgradation in CPU and recycling units) and the Recurring cost (operation and maintenance) will be about Rs. 10 Lakhs per annum. Total Employment will be 101 persons (Permanent 58 & temporary 43) during operation phase after expansion. Being a brownfield project, according to the latest OM dated 1st May, 2018 on CER, the budget allocated shall be Rs. 10 Lakhs @1% of total project cost i.e. Rs. 10 Crores) towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/ Elephant Reserves, wildlife corridors etc., within 10 km distance from the plant site. River/

waterbody i.e. River Kaimua is flowing at a distance of 2.9 km in WNW direction, River Barah is flowing at a distance of 3.0 km in East direction, River Barahi is flowing at a distance of 6.0 km in ESE direction, River Deoha/Garra is flowing at a distance of 6.8 km in SSW direction, River Katna is flowing at a distance of 7.5 km in West direction, Nigohi branch canal is flowing at a distance of 0.1 km in South direction, Tisango Nala is flowing at a distance of 5.5 km in SW direction, Khandni Nala is flowing at a distance of 7.0 km in NNE direction, Kalmua nala is flowing at a distance of 6.8 km in NNE direction, Beor Distributary is flowing at a distance of 5.0 km in ENE direction, Sakaria Nala is flowing at a distance of 7.2 km in ENE direction.

PP reported that after expansion, the fresh water requirement for 110 KLPD distillery as per 3 KL/KL will be 330 KLPD, for 2.5 MW Co- generation power Plant will be 150 KLPD and for domestic usage, greenbelt and others will be 20 KLPD. Thus, total fresh water requirement will be 500 KLPD and will be sourced from ground. Effluent of 820 KLPD quantity after expansion will be treated through state of art ETP (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 1.75 MW including existing 1.4 MW and will be met from existing 2.5 MW Co-generation Power Plant & D.G. Sets (for emergency). Existing unit has 1 DG sets of capacity 500 KVA which is used as standby during power failure. Stack (Height – 5 m) has been provided as per CPCB norms to the existing DG set. No additional DG set is proposed.

Existing unit has 24 TPH Concentrated spent wash & bagasse fired boiler. No additional boiler will be installed. ESP with a stack height of 65 m is already installed for controlling the particulate emissions within the statutory limit for the existing boiler.

#### **Details of Process emissions generation and its management**

- ESP with stack of adequate height (65 m) is already installed with the boiler to control the particulate and gaseous emissions as per CPCB guidelines. No new boiler is proposed as the existing will cater to the needs after expansion also.
- CO2 generated during the fermentation process is being/ will be sold to vendors.
- Online Continuous Emission Monitoring System has been installed with the existing stack and data transmitted to CPCB/SPCB servers.

## Details of Solid waste/ Hazardous waste generation and its management.

- Concentrated spent wash is being/will be burnt in boiler along with bagasse.
- Ash (22 TPD) is being/will be used as manure due to rich potash content or sold to fertilizer manufacturers.
- Sludge is being/will be dried and given to farmers to be used as soil manure.
- Used oil generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

It was informed that presently, the company is manufacturing ethanol and contributing in Ethanol Blending Programme of Government of India. Now, the company has proposed expansion of Molasses based Distillery from 60 KLPD to 110 KLPD by modernization and enabling usage of B- heavy molasses and cane juice within existing

plant premises. Expansion in capacity shall be done with the utilization of alcohol rich B molasses and cane juice and upgradation in existing equipment & machinery. The fermentable sugar content in B- heavy molasses is approximately 55% and in sugar cane juice it is more than C-heavy molasses (44%) which will result in higher yield of Ethanol subsequently. Also, there will be overall decrease in requirement of fresh water, steam, power on per KL of alcohol basis. Existing (24 TPH Incineration Boiler) will cater to the requirement of slop generation with this expansion.

PP reported that Dalmia Chini Mills Nigohi-Distillery Division (A unit of Dalmia Bharat Sugar and Industries Limited) is operating 60 KLPD Molasses based distillery & 2.5 MW co-generation power plant at Village Kuiyan, Post Areli, Tehsil Tilhar, District Shahjahanpur, State Uttar Pradesh. For this, Environmental Clearance was obtained from MoEFCC, New Delhi vide letter no. J-11011/315/2017- IA II (I) dated 30th May, 2018. Presently, the company is manufacturing maximum possible ethanol and contributing in Ethanol Blending Programme of the Government of India. Now, the company has proposed expansion of Distillery from 60 KLPD to 110 KLPD by modernization and enabling usages of B- heavy molasses and cane juice within existing plant premises.

The Ministry had issued EC earlier on 30<sup>th</sup> May, 2018 to the existing. In this context Certified EC compliance Report has been submitted by Regional Office, MoEFCC, Lucknow and site visit was conducted on 10<sup>th</sup> September, 2019. For this proposed expansion, the company has not started any modernisation or construction activities till date. The ongoing work in the plant is a part of routine O&M and not related to this expansion proposal. No violation has been done by the company at any point of time. PP has submitted the affidavit in this regard. For proposed expansion, along with utilization of alcohol rich B heavy molasses and cane juice and upgradation in existing equipment & machinery is proposed and shall be maintained. It will be achieved due to fermentable sugar content in B- heavy molasses is approximately 55% and in sugar cane juice it is more than C-heavy molasses (44%) which will result in higher yield of Ethanol. After proposed expansion, our company would be able to contribute more in to the Ethanol Blending Programme of the Government of India.

The Committee noted that the instant proposal has submitted under provisions of para 7 (ii) of the EIA Notification, 2006. The Committee deliberated the compliance status of earlier EC submitted by PP and found in order. The Committee has also deliberated on the justification submitted by the project proponent on the non-complied points and has noted that the reported ongoing work in the plant is a part of routine maintenance and not for the proposed project. It was also noted that there is no litigation pending against the project. There is no major impact envisaged on the environment due to the modernization of the plant.

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 PFR 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 PFR 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 Form 1/PFR report is in compliance of the notification/guidelines/OMs issued by the Ministry for such projects, reflecting the present environmental concerns and the projected scenario for all the environmental components. The compliance of the existing EC conditions found to be satisfactory. 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 as per para 7(ii) of the EIA Notification, 2006 exempting ToR, fresh public hearing and EIA report.

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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). As proposed, total fresh water requirement shall be 500 cum/day, proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time.

- (iv). The spent wash/other concentrates shall be incinerated.
- (v). CO<sub>2</sub> 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 byproducts 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 committed, project proponent shall allocate Rs. 10 Lakhs @1% of total project cost towards Corporate Environment Responsibility as per the Ministry's OM dated 01.05.2018. The CER shall be utilized properly to address the socio-economic and environmental issues in the study area. The CER plan shall be completed within three year of expansion of the project.
- (xiii). The project proponent shall develop solar power facilities and majority of the lighting facility in the unit shall be met from solar.

- (xiv). The project proponent shall ensure rain water harvesting system in the project area and reduce dependency on ground water.
- (xv). 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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). 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.
- (xviii). 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.23.13

Setting up malt based distillery unit of capacity 30 KLD by M/s Microbrew Bistro Private Limited, located at Village Mahuakheraganj, Tehsil Kashipur, District Udham Singh Nagar, Uttarakhand - Consideration of Environmental Clearance regarding.

## [IA/UK/IND2/98132/2019, File No. J-11011/66/2019-IA-II(I)]

The project proponent and their accredited consultant M/s. Gaurang Environmental Solutions Private Limited made a detailed presentation on the salient features of the project though Video Conferencing (VC).

The proposal is for environmental clearance to the project for setting up malt based distillery unit of capacity 30 KLD by M/s Microbrew Bistro Private Limited located at Khasra No. 933, 934, 936, 937, 938, 940, village Mahuakheraganj, Tehsil Kashipur, District Udham Singh Nagar, Uttarakhand.

The proposal was earlier considered by the EAC in its meeting held during April 2020 & 14-16 July, 2020. The requisite information desired by the Committee in July 2020 and response from the project proponent is as under:

S.	Query Raised	Query Reply Given by PP	Comment of
No.			EAC

1. PP reported that they have to lay the pipeline of water in 9 km. EAC noted that the reply submitted by Consultant/PP is not satisfactory and suggested to rework on the alternate source of water and details of how the fresh water will be drawn. Also cost of the pipeline, its impact and mitigation measure and cost of water shall also be included in the project cost.

The fresh water supply and work and work of laying the pipeline till Uttar Industrial Estate (where PP site is situated) shall be carried out by Uttarakhand Jal Sansthan in association with Nagar Palika Parishad and Uttar Industrial Estate. In view of the same, no alternate source of water will be required. PP will lay the pipeline from Utter Industrial Estate supply point to its inlet point (approx. 500 meters length) at cost of Rs. 3.5 lacs, including 3 inch HDPE piping with fittings, trenching/ laying etc which is negligible % of project cost. Cost of water at Rs. 31.98 per KL is included in Raw Material cost, as it is 0.5% of RM cost.

EAC deliberated the issues found the reply is satisfactory.

2. Revised water and fresh requirement and reduction in plan to construct RCC tank to collect rain water from the roof top.

balance The industrial fresh water requirement with details of total water is reduced to 146 KLD @4.9 KL/kl of water production. Further, RCC tanks will be constructed to collect rain water from fresh the roof tops. The collected rain water water demand as per 5 is estimated to be to the tune of KL/kl of production. Also 23,300 cu. m. per annum (approx 70 KLD).

3. Complete flowsheet for Total treatment of waste water: and its management Considering needs to be submitted.

Waste water generated 450 **KLD** 90% reusable water removing (after sludge and evaporation losses) from ETP: 405 KLD (i) Treatment from Ro-three stage RO is envisaged resulting into 93% recovery of water: 377 KLD (ii) Ro reject of 28 KLD will be subjected to 3 stage MEE followed by ATFD for maximum recovery of 95% Total recovered water : 27 KLD

- Total water recovery (RO + MEE + ATFD) : 404 KLD
- Total water recovery (STP) b. : 7 KLD

		Total Recovered water (a+b):411 KLD
4.	Plan for management CO2.	of CO2 gas generated from the process will be passed through two nos. of scrubbers to remove and cleans all heavy particles/ impurities and recovery of alcohol by spraying water into the Scrubber to mix with CO2 gas, which dissolves the alcohol. This solution will be taken back into fermenters, while the gas will be passed through the chillers to get the desirable temperature and finally sent to be the cylinders for filling. The filled CO2 cylinders will be sold to the vendors.
5.	Truck parking plan to submitted.	be Total Parking Plan for 12 trucks per day inside plant premises has been provided. The details are given as under:  Raw Material : 4 Trucks Finished Goods : 4 Trucks Others : 4 Trucks

The project is categorized as "Category B" project under Item 5(g) {Distilleries (Non-molasses based distilleries < 200 KLD)} of schedule of Gazette Notification dated 14<sup>th</sup> September, 2006 and subsequent amendments, but due to the applicability of general conditions (interstate boundary at a distance of 1.3 km towards SE) of EIA Notification, 2006 the project is categorized as "Category A" project.

The details of product and capacity as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
	Malt Spirit	Nil	30 KLD	30 KLD
	Total	Nil	30 KLD	30 KLD

The standard terms of reference (ToR) was granted by the Ministry vide file no No. IA-J-11011/66/2019-IA-II(I) on 12<sup>th</sup> March, 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board "Uttrakhand Environment Protection and Pollution Control Board" (UEPPCB) on 16.08.2019. The public hearing was presided over by the Municipal Commissioner. The main issues raised during the public hearing are related to water scarcity, impact on surrounding environment, Employment and CER etc. The Committee deliberated the issues and its action plan and found satisfactory. No litigation is pending against the proposal.

Total land area is 6.07ha. Industry will develop greenbelt in an area of 33% i.e. 20,031.92 m² out of total area of the project. The estimated project cost is Rs. 195 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 600 Lacs and the Recurring cost (operation and maintenance) will be about Rs. 61.5 lacs per annum. Total Employment will be 230 persons as direct & 130 persons indirect.

Ambient air quality monitoring was carried out at 8 locations during Dec 2018 to Feb 2019 and the baseline data indicates the ranges of concentrations as: PM10 (64.0 - 04.7 $\mu$ g/m³), PM2.5 (21.5-41.3 $\mu$ g/m³), SO2 (8.1-10.6 $\mu$ g/m³) and NO2 (13.5-24.1 $\mu$ g/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 104.77 $\mu$ g/m³, 12.04 $\mu$ g/m³ and 36.14  $\mu$ g/m³ with respect to PM10, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 717 m³/day of which fresh water requirement of 306 m³/day (95 KLD rain water collection) will be met from municipal department. Effluent of 450 KLD quantity will be treated through ETP, RO and MEE followed by ATFD. The plant will be based on zero liquid discharge system.

Power requirement for the proposed project will be 3500 KW (4375 kVA) and will be met from (UKPCL) State power distribution corporation limited (SPDCL). Proposed unit will have 2 DG sets of 1000 kVA each capacity, DG sets are used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed boilers. Proposed unit will have 2 nos. of 15 TPH each husk fired boiler. Multi cyclone separator with a stack of height of 36 m will be installed for controlling the particulate emissions within the statuatry limit of 115 mg/NM³ for the proposed boilers. Details of Process emissions generation and its management are as under: Process emissions will be generated through grain handling and processing, which will be controlled through the use of Multi cyclones and bag house.

# Details of Solid waste/ Hazardous waste generation and its management are as under:-

Table 1: Solid Waste (Non-hazardous waste)

S. No.	Name	Quantity (per Annum)
1.	Paper Waste Carton	2 MT
2.	PPE Bags	20 M Ton
3.	Plastic waste	0.5 M Ton
4.	Spent Grain	20,000 M Ton
5.	ETP Sludge	80 M Ton
6.	Boiler Ash	226 ton

Table 2: Solid Waste (Hazardous waste)

S.	Type of hazardous	Category	Quantity/unit	Disposal
No.	waste			

1.	Empty barrels/ Containers/ liners contaminated with hazardous chemicals/wastes	33.1	750 nos./annum	Recycled, broken ones to be disposed via approved agencies
2.	Oil soaked filter	35.1	50kg/month	Hazardous waste disposal
3.	Used or spent oil	5.1	500 litres/ yr	Sale/ disposal to registered/ approve agencies
4.	Oil soaked cotton	5.2	50/month	Disposal to registered/ approve agencies

**Table 3: Municipal Solid Waste** 

Population	Basis	waste generation (Kg/day)	Management
230	0.113 kg/day	26 Kg/day	The same will be disposed of as per SWMR, 2016

# Management

- DDGS generated as a byproduct in the process will be used as a cattle feed.
- Boiler ash will be sold for bricks manufacturing industries.
- > Various nonhazardous solid waste generated during the process like cardboard boxes, polythene bags, butter paper etc. will be sold to the registered recyclers.
- > Hazardous solid waste will be disposed off to nearest TSDF.

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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 (EC).

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) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii) As proposed, total water requirement is 717 m³/day of which fresh water requirement of 306 m³/day (95 KLD rain water collection) will be met from municipal department. 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.
- (v) CO<sub>2</sub> 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 byproducts 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 committed Rs. 3.42 Crore shall be allocated for Corporate Environment Responsibility (CER) as per OM dated 01.05.2018 on slab basis, and shall be utilized as proposed. The CER plan shall be completed before commissioning /expansion of the project.
- (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.23.14

Expansion of Cosmaceutical, Active Pharmaceuticals and Specialty Chemicals manufacturing unit by M/s Kumar Organic Products Limited, Located at Plot No. 379 & 395, Village Luna, Tehsil Padra District Vadodara (Gujarat) – Consideration of Environmental Clearance regarding.

## [IA/GJ/IND2/53481/2009, J-11011/118/2009-IA II(I)]

The project proponent and their accredited consultant M/s Aryan Greens, 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 expansion of Cosmaceutical, Active Pharmaceuticals and Specialty Chemicals manufacturing unit from 162.17 to 409.17 TPM by M/s Kumar Organic Products Limited at Plot No. 379 & 395, Village Luna, Tehsil Padra District Vadodara (Gujarat).

Earlier environmental clearance was granted by the Ministry on 28<sup>th</sup> October, 2009 in favour of M/s Kumar Organic Products Ltd. for manufacturing of specialty chemicals manufacturing unit of capacity 129.17 TPM.

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Standard Terms of References (TORs) for the Project was granted by the Ministry on 8<sup>th</sup> October, 2018.

The proposal was earlier considered by the EAC in its meeting held during 11-13 May, 2020. The additional information desired by the Committee and response from the project proponent is as under:

S.	Query Raised	Query Reply Given by PP
No.		
1.	The environmental clearance was granted for manufacturing of specialty chemicals of capacity 129.17 TPM, however, the	<ul> <li>PP submitted the following:</li> <li>Earlier environmental clearance was granted by the MoEF&amp;CC on 28th October, 2009 in favor of M/s Kumar Organic Products Ltd. for manufacturing of specialty chemicals for production quantity of 129.17 MTM.</li> </ul>
	proposal has been submitted for expansion from 162.17 TPM to 409.17 TPM, the	<ul> <li>Committee found the difference of the quantity between CC&amp;A &amp; EC is 33 MTM, Out of 33 MTM difference, company had CC&amp;A for the product of sodium acetate (18 MTM) before EC</li> </ul>

same reveals that the project proponent has increased the production capacity without prior permission.

The EAC suggested the project to proponent to submit clarification with proof proper to establish that existing unit is operating with proper prior permission and to confirm that unit is violating not the provision contained in EIA Notification, 2006.

notification S.O.1533(E) dated 14.09.2006 came into the implementation. Hence company had not received EC for this product. However for 15 MTM, In 2014, CTE amendment was applied for Potassium Thioglycolate, Calcium Thioglycolate and Sodium Thioglycolate product to SPCB. Thereafter SPCB has granted CTE & CC&A for Thioglycolate products in year 2014. Product is not generating any pollution load in terms of Air and Hazardous waste. Moreover no additional utility was installed for these products, existing utility was sufficient to manufacture these products.

- SPCB had approved the application and company had started the production of thioglycolates. Moreover, there is no process gas emission and hazardous waste generation from thioglycolate products. Only generation of 0.13 KLD wastewater, which goes to ETP for further treatment.
- Company has always worked towards cleaner environment to contribute in social welfare. As above matter happen unknowingly, company takes its moral responsibility and will increase CSR activity.

The Committee noted that environmental clearance was granted for manufacturing of specialty chemicals manufacturing unit of capacity 129.17 TPM. However, PP has enhanced production without obtaining the prior EC and it is a violation case. The PP needs to submit the application as per provisions of the Notification, dated 14.03.2017. This instant case to be handled by the EAC dealing the proposals related to violation. Therefore, the Committee suggested to transfer this proposal to Violation Committee.

## Agenda No.23.15

Proposed Modernization of Synthetic Organic Chemicals Manufacturing Unit of capacity 173.88 TPA by M/s Kothari Phytochemicals International (Division of Kothari Phytochemicals & Industries Limited), located at Nagari and Thiruvalavayanallur villages, Vadipatti Taluk and Madurai District, Tamil Nadu - Consideration of Environment Clearance regarding.

[IA/TN/IND2/122790/1991, IA-J-11011/180/2018-IA-II(I)]

The project proponent and their accredited consultant M/s KKB Envirocare Consultants 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 Modernization of Synthetic Organic Chemicals Manufacturing Unit (173.88 TPA) by M/s Kothari Phytochemicals International (Division of Kothari Phytochemicals & Industries Limited), located at villages Nagari and Thiruvalavayanallur, Taluk Vadipatti District Madurai, Tamil Nadu.

All Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates) are listed in S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

Standard Terms of References (ToRs) was issued by MoEFCC vide Letter No. IA-J-11011/180/2018-IA-II (I) on 23-06-2018.

The proposal was earlier considered by the EAC in its meeting held during 13-15 April, 2020. The additional information desired by the Committee and response from the project proponent is as under:

S. No.	Query Raised	Query Reply Given by PP
1.	Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard PP needs to submit all the old CTE/CTO to verify the violation, if any.	1976. Consent order for Operation was issued in favour of M/s Kothari Phytochemicals International by TNPCB in 1991 for manufacturing APIs &
2.	This is a modernization case and as per TOR PP needs to submit the certified compliance report of CTO from SPCB. However, PP has not submitted the same.	PP have requested TNPCB for issue of Certified Compliance report. Owing to COVID, the Board is operating with

3.	PP needs to submit the details of	During this pandemic period, we could
	production capacity since inception of	gather information since 2005 to 2019
	the unit to verify violation, if any.	and we are herewith enclosing the
		records showing production details for
		the years 2005 to 2019. The
		Committee deliberation the issue.
4.	Alternate source of fresh water needs to	Request to supply the fresh water of
	be submitted and commitment not to	32 KLD from Madurai Corporation STP
	use ground water.	Plant is submitted. The Committee
		deliberation the issue.
5.	Revised prediction of GLC due to the	Revised predictions of GLC was not
	proposed project.	adequate and the Committee is of the
		view that PP/Consultant is not serious
		and has not done proper prediction of
		GLC. PP needs to resubmit with
		mitigation measures.

The EAC, after detailed deliberations decided to **defer the proposal** for want of most important information as under and have asked the PP to revise the Report along with following clarification/information: -

- (i) This is a modernization case and as per TOR, PP needs to submit the certified compliance report of CTO from SPCB. However, PP has not submitted the same.
- (ii) Revised predictions of GLC was not adequate and the Committee is of the view that PP/Consultant is not serious and has not done proper prediction of GLC. PP needs to resubmit with mitigation measures.
- (iii) The EAC, during deliberations, noted that the Consultant is not serious for preparation of the EIA/EMP Report.

The EAC therefore deferred

#### **Agenda No. 23.16**

Expansion of Sugar Plant from 7000 TCD to 10000 TCD, Co-gen plant from 28MW to 38MW and Distillery from 60 KLPD to 90 KLPD village & Taluka Kagal, District Kolhapur (Maharashtra) by M/s Shree Chhatrapati Shahu Sahakari Sakharkarkhana Ltd.-Amendment in Environment Clearance

#### [IA/MH/IND2/30200/2015,J-11011/225/2015-IA II (I)]

The project proponent did not attend the meeting. The Committee has been informed that a similar application of the applicant has been considered already. The Committee has accordingly desired that the proposal may be **RETURNED** in its present form.

## <u>Agenda No.23.17</u>

Expansion of Pesticide & Pesticide Specific Intermediate Manufacturing Unit by M/s UPL Limited, located at Plot No 3-11, A-2/1, A-2/2, A-2/6 & A-1/2, Phase-I, GIDC Notified Industrial Area Vapi, District Valsa, Gujarat -Amendment in Environment Clearance regarding.

## [IA/GJ/IND2/150509/2020, J-11011/330/2016-IA-II (I)]

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter No J-11011/330/2016-IA-II(I) dated 25<sup>th</sup> November, 2019 for the project expansion of Pesticide & Pesticide Specific Intermediates Manufacturing Unit Located at Plot No 3-11, A-2/1,A-2/2,A2/6 & A-1/2, Notified Industrial Estate, Phase 1, GIDC Vapi, District: Valsad (Gujarat) in Favour of M/s UPL Limited.

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

S.	Para of	Details as per EC	To be Revised /	Justification
No	EC issued		Read as	(Reasons)
	by			
	MoEF&CC			
1	EC	As committed fund	Request for	• The competitive
	Condition	allocation for	Amendment As	landscape post COVID
	No	Corporate	Follows:-	19 is becoming
	11 (XVI) -	Environmental		economically
		Responsibility	As committed fund	challenging with both
		(CER) shall be 5 %	allocation for	shrinking demand and
		of the total project	•	competitive prices.
		cost. Item-wise		Entire chemical
		details along with	Responsibility (CER)	•
		time bound action	shall be 1.5 % of the	projects are passing
		plan shall be	total project cost.	through critical time
		prepared and	Item-wise details	for their business
		submitted to the	along with time	viability.
		Ministry's Regional	bound action plan	•The high CER % of our
		Office.	shall be prepared	projects are becoming
			and submitted to the	unviable in current
			Ministry's Regional	challenging market
			Office	situation. On the other
				hand, our projects
				once implemented will
				support substituting
				imports currently done
				from China.
				• We like to Inform, in
				response to COVID-19
				pandemic situation,

UPL has already
,
contributed Rs. 75
Crores to PM Cares
Fund in April 2020.
Additionally, following
contributions have also
been made by UPL.
• Handed over almost
1.75 Lakhs Personal
Protective Equipment
(PPE) Kit to Ministry of
Health and Family
Welfare New Delhi for
distribution across the
country.
·
states by providing
sanitising services
using our several large
number of mechanised
spraying machines.
Each machine costs
around 25-30 Lakhs.
The sanitisation work
in the vicinity of public
services like hospitals
and police stations has
been done in
collaboration with
frontline local health
officers.
• UPL Continues to
spend CSR Activities
much beyond the
mandatory
requirements of 2%
annually.
• We request to consider
Lower CER as per
MoEF&CC OM F-22-
65/2017-IA.III dated
1 <sup>st</sup> May 2018.

The EAC noted the project proponent has requested for revision in CER amount as per the Ministry's Office Memorandum dated  $1^{\rm st}$  May, 2018. The EAC during deliberation suggested that the request of project proponent for consideration of CER as per the Ministry's OM dated  $1^{\rm st}$  May, 2018 may be accepted.

The Committee, after detailed deliberations, **recommended** the **amendments in EC**, as proposed by the project proponent, with all other terms and conditions remain unchanged, as below:

Para 11(XI) of EC w.r.t. shall be read as, "Funds Allocation for the Corporate Environment Responsibility (CER) shall be 1.5 % of the total project cost as per slabs mentioned in the Ministry's OM dated 01.05.2018. Item-wise details along with time bound action plan shall be implemented and submitted to Ministry's Regional Office".

### Agenda No.23.18

Setting up a 200000 KLPA capacity Plant for Paint Manufacturing Facilities by M/s JSW Paints Private Limited, located at villages Toranagallu & Musenayakana Halli, District Ballari, Karnataka - Amendment in Environment Clearance regarding.

## [IA/KA/IND2/60157/2016, J-11011/313/2016- IA II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter F.No. J-11011/313/2016-IA II (I) Dated 16<sup>th</sup> August, 2018 for the project setting up a 2,00,000 KLPA capacity water based decorative paint with 40,000 TSRPA emulsion copolymer manufacturing plant located at villages Toranagallu & Musenayakanahalli, District Ballari, Karnataka in favour of M/s JSW Paints Private Limited.

The project proponent has requested for amendment in the Environmental Clearance (EC) with the details are as under:

S.	Para of	Details as per the	To be revised/ read as	Justification/
	EC	EC		reasons
No	issued by			
	MoEF&CC			
1	3	The Proposed Product	The Proposed Product	Amendment is
		and their Capacities	and their Capacities are	proposed to
		are reported to be as	reported to be as under:	cater to
		under:		increased need
			Water Based decorative	for sanitisation
		Water Based	paints - 2,00,000 KLPA	products
		decorative paints -		
		2,00,000 KLPA		
		Water Based	Water Based emulsion	
		emulsion copolymer –	copolymer – 40,000	
		40,000 TSRPA	TSRPA	
			Conitions 1200 KLDA	
			Sanitiser – 1200 KLPA	

	1.4	December 11	December 11	A
2	14	Based on the		Amendment is
		information submitted	information submitted	proposed to
		by the project	by the project proponent	
		proponent and	and recommendation of	increased need
		recommendation of	EAC (Industry -2), the	for sanitisation
		EAC (Industry -2),	MoEF & CC hereby	products
		the MoEF & CC	accords environmental	
		hereby accords	clearance for "Setting up	
		environmental	a 200000 KLPA capacity	
		clearance for "Setting	water based decorative	
		up a 200000 KLPA	paint with 40000 TSRPA	
		capacity water based	emulsion copolymer &	
		decorative paint with	1200 KLPA Sanitiser	
		40000 TSRPA	manufacturing plant" by	
		emulsion copolymer	M/s JSW Paints Private	
		manufacturing plant"	Ltd in a total area of	
		by M/s JSW Paints	271139 m2 located at	
		Private Ltd in a total	Toranagallu &	
		area of 271139 m2	Musenayakanahalli	
		located at	villages, District Ballari	
		Toranagallu &	by M/s JSW Paints Pvt	
		Musenayakanahalli	Ltd under the provisions	
		villages, District	of EIA notification,2006	
		Ballari by M/s JSW		
		Paints Pvt Ltd under		
		the provisions of EIA		
		Notification, 2006.		

The EAC, after detailed deliberation, the Committee accepted the request of PP and **recommended** the proposal for amendment in environmental clearance as the instant proposal is formulation type and for this no EC is required as per provisions of the EIA Notification, 2006. PP has to obtained the Consent to Operate under the provision of the Air and Water Act before start of operation.

## Agenda No. 23.19

Manufacturing of API & API intermediates by M/s Canpex Life Science LLP, located at Survey No.-165/A/1, Ambhora Village, Tal.-Ashti, District Beed, Maharashtra-Consideration of Environmental Clearance

# [IA/MH/IND2/83281/2018, IA-J-11011/355/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Goldfinch Engineering Systems Private Limited, Thane, Maharashtra made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for manufacturing API & API Intermediates at Survey No. 165 A-1, Ambhora Village, Tal- Ashti, Dist- Beed,

Maharashtra by M/s Canpex Life Science LLP.

The project/activities are covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR has been issued by Ministry vide letter No. J-11011/355/2018-IA-II(I); dated 14 Dec 2018.

Land area available for the project is 16388 sqm. Industry will develop green belt in an area of 33.56 %i.e.,5500.75 m<sup>2</sup>out of total area of the project. The estimated project cost is Rs. 24.18 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 612 Lacs and the Recurring cost (operation and maintenance) will be about Rs 1394.5 Lacs per annum. Total Employment will be 128 persons.

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 Athwad lake is flowing at a distance of 1.2 Km is in NW direction.

Ambient air quality monitoring was carried out at 08 locations during January 2018 to March 2018 and the baseline data indicates the ranges of concentrations as:PM10 (20.1 -58.6  $\mu$ g/m3), PM2.5 (10.5 - 38.6  $\mu$ g/m3), SO2 (16.4 - 28.6  $\mu$ g/m3) and N O 2 (10.4 - 18.8  $\mu$ g/m3).AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.42  $\mu$ g/m³, 22.77  $\mu$ g/m³ and17.84  $\mu$ g/m³ with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Additional Ambient air quality monitoring for the one month was started from 1st March but due to COVID -19 pandemic situation monitoring was done for 15 days at 08 locations during 1st March to 15th March 2020 2019 and the base line data indicates the ranges of concentrations as:PM10 (19.9 -58.2  $\mu$ g/m3), PM2.5 (11.8 - 36.5  $\mu$ g/m3), SO2 (20.8 - 29.1  $\mu$ g/m3) and N O 2 (12.6-19.3  $\mu$ g/m3).

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be  $0.4~\mu g/m3$ ,  $5.64~\mu g/m3$ and  $3.9~\mu g/m3$ with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Total water requirement is  $363~m^3/day$  of which fresh water requirement after recycle will be  $148m^3/day$  will be met from ground water.

Total effluent of 191(Trade 185+ Domestic 6) m3/day quantity will be treated through ETP. Effluent will be segregated into two Streams - Low TDS and high TDS stream. High TDS stream will be treated in Multiple Effect Evaporator (MEE). Condensate from MEE will be treated with other low TDS streams in conventional ETP consisting of Primary, Secondary (along with domestic stream 6 CMD), Tertiary Treatment. Tertiary treated will be passed through Reverse Osmosis (RO). RO permeate will be recycled and RO reject will be fed to Multiple Effect Evaporator (MEE) to achieve ZLD. Domestic waste water will be treated in secondary treatment of ETP as combined treatment

Power requirement for the project will be 2000 KVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). 1 no of DG set having capacity 500 KVA will be used as standby during power failure. Stack (height4.5 m above enclosure) will be provided as per CPCB norms to the proposed DG set.

Boiler of capacity 3 TPH x 2 Nos. Coal/Briquette fired boilers will be installed. Multi cyclone separator/ bag filter with a common stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of  $115 \text{ mg/Nm}^3$ for the proposed boilers. Thermopac of capacity 2 lac Kcal/Hr X 1 no LDO fired will be installed with stack height of 30 m as a mitigation measure. Total Emissions of SO2 will be 7.584 kg/hr

# **Details of Process emissions generation and its management.**

## **Process Emission& its Management**

Sr. No.	Source	Emissions	APC	Media	Disposal
1	Process	Acid Mist	Scrubber	Alkali	ETP

# **Emission from utility**

Sr	Equipment	Fuel	Full Load	Concentrati	Emissio	Quantum
No			Operatio	on	n	
			n			
1.	Boiler	Coal/Briq	600/	Ash: 10%	PM10	0.159 g/sec
		uette	868.42	S: 0.5%	PM2.5	0.23 g/sec
			Kg/hr.		SO2	1.867 g/sec
					NOx	1.187 g/sec
2.	Thermopac	LDO	24 Kg/hr	S: 1.8%	S02	0.240 g/sec
3.	D G set	HSD	89.1	S: 1%	S02	1.782 kg/hr
			Kg/hr			

## Management

Sr No	Equipment	Fuel	Mitigation	Stack height
1	Boiler	Coal/Briquette	Multicyclone Dust Collector followed by bag filter	30 m (common Stack for both boiler)
2	Thermopac	LDO	By provision of adequate stack height	30 m
3	D G set	HSD	By provision of adequate stack height	4.5 m (above enclosure)

Details of Solid waste/ Hazardous waste generation and its management is shown below:

## **Hazardous Waste Generation and management**

Category No.	Type of Waste	Quantity in TPA	Disposal/Management
28.1	Process residue	1025	CHWTSDF
28.1	Process waste	385	Sale to Authorized recycler/CHWTSDF
28.3	Spent Carbon from process	13	CHWTSDF
35.3	Spent Carbon from ETP	64	CHWTSDF
35.3	Chemical sludge from waste water treatment	451	CHWTSDF
35.3	MEE salts	4836	Sale to Authorized recycler /CHWTSDF
33.1	Discarded containers/barrels/liners	7200 nos	Collection, decontaminations, storage, reuse/sale to authorized recycler

# **Non-Hazardous Waste Generation and management**

Sr	Type of Waste	Quantit	Disposal/Management
No.		y (TPA)	
1	Coal Ash	520	Sale to Bricks manufacturer
2	Paper, Wood, Plastic and Metals	6	Sale to authorized party
3	Garbage like Paper, Corrugated Boxes, Plastics, Fiber drums, Brooms, Wipers, Floor cleaning mops, Tea cups, disposable approns, head caps & shoe covers etc.	3.6	Sale to authorized party

## Other Waste Generation and management

S No.	Type of Waste	Quantity in TPA	Disposal/Management
1	Used Batteries	0.36	Sale to Authorized recycler
2	E-Wastes	2.4	Sale to authorized party

Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 30<sup>th</sup> October 2019. The main issues raised during the public hearing are related to preference to the local people while recruiting employees for the proposed project, Issue discussed for the disposal of hazardous waste & effluent treatment generating from the proposed project, Issues related to adjacent company such as effluent treatment scheme, emission from the boiler. No litigation pending against the proposal. Declaration for same is attached for the reference.

The details of products and capacity as under:

S. No.	Product	CAS Number	Existing (TPA)	Proposed (TPA)	Total (TPA)
1	Anastrozole	120511-73-1	0	6	6
2	Aripiprazole	129722-12-9	0	72	72
3	Benfotiamine	22457-89-2	0	360	360
4	Bisacodyl	603-50-9	0	180	180
5	Bupropion Hydrochloride	31677-93-7	0	60	60
6	Capecitabine	154361-50-9	0	36	36
7	Clomifene Citrate	50-41-9	0	120	120
8	Dimethyl fumarate	624-49-7	0	60	60
9	Fluconazole	86386-73-4	0	36	36
10	Gemcitabine hydrochloride	95058-81-4	0	18	18
11	Imatinib Mesylat	220127-57-1	0	180	180
12	Letrozole	112809-51-5	0	36	36
13	Pioglitazone Hydrochloride	112529-15-4	0	72	72
14	Sildenafil Citrate	171599-83-0	0	72	72
15	Sodium picosulfate	10040-45-6	0	72	72
16	Tamoxifen Citrate	54965-24-1	0	120	120
17	Tranexamic acid	1197-18-8	0	72	72
18	Valsartan	137862-53-4	0	120	120
19	Zoledronic acid	118072-93-8	0	18	18
20	Tramadol HCL	22204-88-2	0	84	84
21	4-(Aminomethyl) benzoic acid	56-91-7	0	84	84
22	Thiamine monophosphate	532-40-1	0	120	120
23	1-[4-(2- (Dimethylamino)ethoxy)p henyl]-1,2- diphenylbutan-1-ol	748-97-0	0	24	24
24	4-Hydroxybenzophenone	1137-42-4	0	60	60
25	7-Hydroxy-3,4-dihydro- 2(1H)-quinolinone	22246-18-0	0	24	24

32	Imatinib Base  Total	152459-95-5	0	60 <b>2394</b>	60 <b>2394</b>
31	Imidazole-1-acetic acid	22884-10-2	0	24	24
30	5-Fluorocytosine	2022-85-7	0	36	36
29	N-(5-Amino-2- methylphenyl)-4-(3- pyridyl)-2- pyrimidineamine	152460-10-1	0	60	60
28	1-(2,3-dichlorophenyl) piperazine hydrochloride	119532-26-2	0	24	24
27	4-[(4-Methylpiperazin-1-yl)methyl]benzoic acid dihydrochloride	106261-49-8	0	60	60
26	1-[4-(2- (diethylamino)ethoxy)ph enyl)-1,2- diphenylethanol	73404-00-9	0	24	24

The Committee during deliberations noted that the incremental GLC due to the proposed project is at a higher level and the project proponent have to submit a detailed action plant to control the fugitive emissions. The Committee has also that the proposed site is yet to be converted for industrial use. The Committee after detailed deliberations for following additional information/inputs:

- (i) Action plan for reducing the incremental GLC and controlling the emissions from the unit.
- (ii) PP mentioned that the land conversion still not completed. In this regard Committee is of the view that this is basic requirement for setting of Industry and the Consultant has not properly guided the PP in this regard. Without Land conversion document the proposal cannot be considered for further.
- (iii) Detailed plan for ZLD;
- (iv) CER action plan addressing the public hearing issues

The proposal was accordingly DEFERRED for the needful.

## Agenda No. 23.20

Expansion of Chemical Manufacturing unit by M/s Flowtech Chemicals Pvt. Ltd., located PACL Campus, Industrial Area, Naya Nangal, District- Ropar, Punjab-Consideration of Environmental Clearance

## [IA/PB/IND2/145121/2018, J-11011/335/2012-IA II (I)]

The Project Proponent and the accredited Consultant M/s Eco Laboratories & Consultants Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up Chemical Manufacturing unit at PACL campus, Tehsil- Naya Nangal, District- Ropar (Pb.) by M/s Flowtech Chemicals Pvt. Ltd.

The project/activities are covered under category Bof item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to the applicability of general condition i.e location of project site within 5Km of Himachal Pradesh State, the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard TORs were issued vide TOR letter no. - IA-J-11011/335/2012-IA-II (I) on dated 13<sup>th</sup> May, 2018.

The details of products and capacity asunder:

S.	Product	Existing	Proposed	<b>Total Quantity</b>
No.	Details	Quantity	Quantity	
1.	Chlorinated paraffin	19,200 TPA	19,200 TPA	38,400 TPA
2.	Hydrochloric acids	38,400 TPA	38,400 TPA	76,800 TPA

The Ministry had issued EC earlier vide letter no. F.No.-J-11011/335/2012-IA II (I) dated 30<sup>th</sup> January, 2015 to the existing project in favour of M/s Flowtech Chemicals Pvt. Ltd. Certified compliance report from RO, MOEF&CC has been obtained vide File no. - 5-731/2014/RO (NZ)/308 dated 26.06.2020.

Total land area is 12000m<sup>2</sup>. No additional land is required for proposed expansion. Industry will develop greenbelt in an area of 33% i.e 3983.27m<sup>2</sup>(33%) out of total area as per MOEF&CC stipulated norms. The proposed green belt will be developed in two phases such as Phase-I during June, 2020 & Phase-II during June, 2021. A total of 597 trees will be planted. 200 trees have already been planted. Hence, 397 plants have to be planted. Existing tree species are Shisham, Mango, Safeda, Kachnar. Tree species Mulberry, Bungania and false ashok will be planted. Phase I (June, 2020): 200 no. of saplings have already been planted. Phase-II (June, 2021): 197 no. of saplings will be planted. Budgetary allocation: Rs. 17 Lakhs under EMP cost.

The estimated project cost is Rs. 7.60 Crores including existing cost of Rs. 3.46 Crore and proposed cost of Rs. 4.14 Crore. Total capital cost earmarked towards an environmental pollution control measure is Rs. 54.0 Lakh and the Recurring cost (operation and maintenance) will be about Rs. 10 Lakh per annum. For expansion additional 50 persons will be required. Total number of manpower after expansion will be 100. Industry proposes to allocate Rs. 8.00 Lakh @ of 1 % of project cost towards

Corporate Environmental Responsibility.

PP reported that the Palsad PF, Thapal PF, Ramgarh Parla PF, Ramgarh Awarla PF are the protected forests exist within the study area. No national parks, biosphere reserves exist within 5km radius of project site. However, Nangal Wildlife Sanctuary is at a distance of 2.6Km from project site. NBWL application has already been filed vide proposal no. - FP/PB/IND/4959/2020. Satluj river is flowing at a distance of 3.5Km.

Ambient air quality monitoring was carried out at 8 locations during January, 2020 to March, 2020 and the baseline data indicates the ranges of concentrations as: PM10  $(64.5-82.2\mu g/m^3)$ , PM2.5  $(27.1-45.2\mu g/m^3)$ , SO2  $(6.4-8.2\mu g/m^3)$ , NO2  $(19.2-25.7\mu g/m^3)$ , CO  $(0.40-0.67\mu g/m^3)$ . AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be  $0.24\mu g/m^3$  for PM10,  $7.91\mu g/m^3$  for CO and  $3.37\mu g/m^3$  for NO2.

Total fresh water requirement is 180m³/day which will be met through PACL pipeline. The proposed plant is based on Zero Liquid Discharge. No process waste water is/will be generated. The waste water generated from domestic purpose is/will be treated through septic tank and used for plantation within the premises.

Power requirement after expansion will be for the plant will be 350KW including existing 200KW and will be met from PSPCL (Punjab State Power Corporation Limited). The existing unit has no boiler. Further, no boiler is being proposed for expansion.

Process emission details:-The process emission due to HCL vapours will be collected as Dil. HCL through water scrubber and sold as dilute acid. The unreacted  $\text{Cl}_2$  gas will be sent back to M/s PACL for neutralization and recovery as NaOCl. No Solid waste/Hazardous waste is being/ will be generated.

Public Hearing for the proposed project has been conducted by the State Pollution Control Board on dated 19.06.2019. The main issues raised during the public hearing are Benefits to locals, Implementation of pollution control measures and control of water pollution and Occupational health & safety. It has been informed by the project proponent that there is no litigation pending against the proposal.

The EAC during deliberations noted that the incremental GLC due to the proposed project is at a higher level and the PP needs to submit a detailed action plan for controlling the fugitive emissions. The Committee took serious note on non-submission of details of protected/ESZ area within 10 km of the project site. The Committee suggested that considering ambiguity on location of the project from the ESZ of the Nangal Wildlife Sanctuary, the PP shall submit the notified ESZ details of the sanctuary and distance of the project from the sanctuary and ESZ.

The Committee after detailed deliberations has desired for additional information/inputs in respect of the following:

- (i) Detailed action plan for management of emissions from the unit.
- (ii) Incremental GLC due to the proposed project needs to be justified.

- (iii) Details of protected/ESZ area within 10 km of the project site.
- (iv) Copy of notification of ESZ details of the sanctuary and distance of the project from the sanctuary and the ESZ.
- (v) CER plan based on the public hearing issues.
- (vi) Details of fresh water requirement along with source.
- (vii) Detailed effluent management plan along with quantity.
- (viii) Details of conservation plan submitted to the Chief Wildlife Warden
- (ix) Details regarding the operation of Unit without NBWL clearance.

The proposal was accordingly DEFERRED for the needful.

## **Agenda No. 23.21**

Expansion of Pesticide Project increase from 3085 MTPA to 20370 MTPA BY M/s Ambey Laboratories Pvt. Ltd., located at SP 1-5, RIICO industrial area, Sotanala, Behror District Alwar, Rajasthan -for Environmental Clearance

## [IA/RJ/IND2/146355/2005, J-11011/361/2005-IA]

The Project Proponent and their accredited Consultant M/s EQMS India Pvt Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion technical grade pesticides from 3085 TPA to 20370 TPA at SP1-5, RIICO Industrial Area, Sotanala, Behror District Alwar, Rajasthan by M/s Ambey Laboratories Pvt. Ltd.

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal/approval at central level by the sectoral EAC in the Ministry.

The project proposal was submitted for grant of TOR and subsequently Standard Terms of Reference (TOR) was issued by MoEF&CC vide letter no. J-11011/361/2005-IA.II(I) dated 12.01.2020.Public Hearing is exempted as the project is located within notified Industrial Area.

The details of products and capacity as under:

S. No	Product Details	Existing Quantity	tity Quantity Tot	Total Quantity (TPA)
		(TPA)		- (IPA)

1.	2,4-D Sodium Salt	1040	2960	4000
2.	2,4-D Acid	845	1155	2000
3.	2,4-D Ethyl Ester	600	200	800
4.	2,4-D Amine Salt	600	2400	3000
_	Clodinofop Propargyl		F0	F0
5.	Chloride	0	50	50
6.	Hexaconzole	0 250	250	
7.	Atrazine	0	300	300
8.	Buprofezin	0	100	100
9.	Lambda Cyhalothrin	0	50	50
10.	Cypermethrin	0	250	250
11.	Alphamethrin	0	50	50
12.	Deltamethrin	0	50	50
10	Cypermethrin Acid	0	1000	1000
13.	Chloride (CMAC)	0	1000	250 50 50 1000 720 200 200 50 50 150 3600 50 100 100 50
14.	Meta phenoxy	0 720	0 720	720
14.	Benzaldehyde (MPB)	0	720	720 200 200 50 50 150 3600
15.	Fipronil	0	200	200
16.	Glyphosate	0	200	200
17.	Glufosinate Ammonium	0	50	50
18.	Metribuzin	0	50	50
19.	Pendimethalin	0	150	150
20.	Mancozeb	0	3600	3600
21.	Azoxystrobin	0	50	50
22.	Ziram	0	100	100
23.	Thiram	0	100	100
24.	Propineb	0	50	50
25.	Ethion	0	50	50
26.	Ethepon	0	50	50
27.	Propargite	0	50	50
28.	Imazethapyr	0	100	100
29.	Propizonazole	0	100	100
30.	Tebuconazole	0	100	100
31.	Bispyribac Sodium	0	50	50
32.	Metalaxyl	0	50	50
33.	Carbendazim	0	50	50
34.	Diafenaconazole	0	50	50
35.	Quizalofop Ethyl	0	47	47
36.	Acephate	0	98	98
37.	R & D	0	5	5
38.	Pretilachlor	0	2400	2400
	Total	3085	17285	20370

Ministry had issued EC earlier vide letter no. J-1011/361/2005-IA II(I) dated 26.10.2005 to the existing project "Herbicide Unit" in favour of M/s Ambey Laboratories Pvt. Ltd. Certified compliance report was issued by RO, MoEF&CC vide IV/ENV/Raj-

45/373/205/144 dated 10.05.2019. It was also informed by the PP that no litigation is pending against the proposal.

Existing land area is 20135.196 m² (2.0135 ha.) and expansion is proposed within the existing land. Industry has already developed greenbelt in an area of 33.00 % i.e., 6645.07 m² out of total area of the project. After Expansion, the total green area will get increased to 7645.07 m² (38 % of total plot area). The estimated project cost of expansion is Rs 100 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 120 Lakhs and the Recurring cost (operation and maintenance) will be about Rs 14 Lakhs per annum. Total Employment will be 150 persons as direct & indirect after expansion. Industry proposes to allocate Rs 1 Crores @ of 1 % towards Corporate Social Responsibility.

There are no Wildlife sanctuary and no reserve forests within 10 km distance from the project site. No, national parks, Biosphere Reserves, Tiger/Elephant Reserves, etc. is present within 10 km distance from the project site. Sotanala River is flowing at 0.7 km in North-west direction.

Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> March to 31<sup>st</sup> May, 2018 and the baseline data indicates the ranges of concentrations as:  $PM_{10}$  (40-95  $\mu g/m^3$ ),  $PM_{2.5}$  (18-51  $\mu g/m^3$ ),  $SO_2$  (5.5-10.4  $\mu g/m^3$ ) and  $NO_2$  (10.4-24.8  $\mu g/m^3$ ). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.31  $\mu g/m^3$ , 0.19  $\mu g/m^3$ , 3.10  $\mu g/m^3$ , 0.01  $\mu g/m^3$ & 0.002  $\mu g/m^3$  with respect to PM10, PM2.5, Sox, HCl & HBr. All parameter concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement of the project after expansion will be 35 KLD. Out of total water requirement, 20 KLD of fresh water will be supplied by RIICO Water Supply and 8 KLD will be sufficed from CETP treated water supply from Bhiwadi Jal Pradushan Nivaran Association. Rest of the water requirement will be sufficed by reusing in-hosue treated water.

Effluent of 8.5 KLD (Industrial Wastewater-5.5 KLD; Domestic Sewage- 3 KLD) that will be treated through MEE and ETP. The plant is based on Zero Liquid discharge system.

Power requirement after expansion will be 1000 kVA including existing 500 KVA and will be met from Jaipur Vidyut Nigam Ltd (JVVNL). Existing unit has DG sets of 1x500 kVA capacity, additionally 1x200 kVA DG sets will be used as standby during power failure. Stack (height- 8 m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 2.0 TPH imported coal fired boiler. Additionally, 1 x 2 TPH imported coal fired boiler will be installed. Electrostatic precipitator with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of  $115 \, \text{mg/Nm}^3$  for the proposed boilers.

Details of Process emissions generation and its management is mentioned below

Stack Flow Pollutant Concentration Air Poll	ution
---	-------

		NM³/hr	(mg/ NM³)					<b>Control System</b>
No.	Source		PM	HCI	CI	S02	HBr	
1.	Hot Air Generator with Dust Extraction System (Dryer)	1225	<50					Multi Cyclone
2.	2,4-D Sodium Salt Reactor for HCL	1000		<20	<9			Water and Caustic Multistage Scrubber
3.	Lambda Cyhalothrin Reactor for HCL	900		<20				Water and Caustic Multistage Scrubber
4.	Lambda Cyhalothrin Reactor for SO <sub>2</sub>	900				<10		Glass Column Packed Scrubber (Caustic)
5.	Cypermethrin Reactor for HCL	900		<20				Water and Caustic Multistage Scrubber
6.	Cypermethrin Reactor for SO <sub>2</sub>	900				<10		Glass Column Packed Scrubber (Caustic)
7.	Deltamethrin Reactor for HBr	900					<5	Glass Column Packed Scrubber (Caustic)
8.	MPB Reactor for HBr	1000					<5	Glass Column Packed Scrubber (Caustic)
9.	Boiler	1200	75			<200		Adequate Stack Height with ESP

Solid hazardous waste is being sent to TSDF site while other solid wastes will be segregated in saleable and non-saleable waste. Saleable waste will be sold off. Non-saleable waste will be sent to landfill.

Type of Waste	Source of Generati on	Catego ry No. (As per Sch- I&II 2016)	Existing Phase	Expansi on Phase	Total Waste after expansi on	Treatment / Dis posal
Sludge from treatment of wastewater arising	ETP	34.2	0.2 MTA	0.2 MTA	0.4 MTA	CHWTSDF Udaipur

out of		1				
cleaning /						
disposal of						
barrels /						
containers						
Oil and	ETP	35.4	0.15 MTA	0.15 MTA	0.30 MTA	Incineration at
grease						M/s Continental
skimming						petroleum Behror
Waste oil	Process/	5.1	0.2 MTA	0.08 MTA	0.28 MTA	Distt. Alwar
	DG sets					
Spent	Process	20.2	0.37MTA	0.43 MTA	0.80 MTA	
Solvent						
Sludge	ETP	29.2	2.4 MTA	2.6 MTA	5.0 MTA	CHWTSDF
Containing						Udaipur
Residual						
Pesticides						
Discarded	Process	33.3	10.00	10.00	20.00	Authorized
Glue	110000	3313	Nos./Ann	Nos./Ann	Nos./Ann	Recycler
Containers/			um	um	um	Recycles
Barrels/liners			uiii	uiii	uiii	
contaminate						
d						
with						
hazardous						
wastes/chem						
icals						

The EAC during deliberations noted that the project proponent is unable to provide the details of fresh water requirement and its source. The Committee took serious note on the storage of toxic chemicals like Chlorine and Bromine. The Committee has also insisted PP that considering the present of toxic raw material in the unit, community awareness shall be made and nearby hospitals shall be informed on the emergency plan.

The Committee after detailed deliberations, desired for additional inputs/information as under:

- (i) Details of fresh water requirement and source.
- (ii) Details of pollution load due to the project.
- (iii) Detailed management and action plan for controlling the emissions at 99.99%
- (iv) Details of mitigations measures brought out during advanced modelling
- (v) Details of community awareness along with detailed medical and safety plan.

(vi) Details of toxic raw materials/solvents, quantity and its inventory.

The proposal was accordingly DEFERRED for the needful.

#### Agenda No.23.22

Addition of new product & setting Thermal Power Plant by M/s Sumilon Polyester Limited in existing unit located at 6/121, A-1, Paiki, Plot No.8, First floor, Vairaginiwadi, Surat, Gujarat-Re-consideration of Environmental Clearance regarding.

# [IA/GJ/IND2/99226/2019, IA-J-11011/90/2019-IA-II(I)]

The project proponent and their consultant M/s. Earthcare Enviro Solutions Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 13-15 April, 2020. The additional information desired by the Committee and response from the project proponent is as under:

S. No.	Query Raised in earlier EAC meeting	Query Reply Given by PP	Observation of EAC
1.	Consultant is not accredited with QCI/NABET. Consultant has made the court case against the Ministry's Notification on QCI/NABET accreditation. Details of all orders need to be submitted. If Consultant applied for accreditation, details, if any	At present PP do not have NABET accreditation. However, PP submitted the stay order against NABET.	The EAC deliberated the matter and found the reply to be satisfactory.
2.	needs to be uploaded.  Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 1994 and 2006. In this regard PP needs to submit all the old CTE/CTO to verify the	PP submitted old CTE/CTO of Sumilon Polyester limited and Sumilon Industries Limited.	The EAC found the reply to be satisfactory
3.	violation, if any.  PP needs to submit the details of production since inception of the unit to verify	Details of production since inception of the both unit was submitted by PP	The EAC observed no violation in the

	violation if any		production since
	violation, if any.		production since inception of the unit and found the reply to be satisfactory
4.	This is an expansion case and as per TOR PP needs to submit the certified compliance report of CTO from SPCB. However, PP has not submitted the same.	PP submitted the certified copy of CTO Compliance Report of GPCB.  As per the certified compliance report of CC&A received from SPCB, out of 39 total conditions, PP complied total 32 conditions, 5 compliance conditions were not applicable, 1 condition Partly complied related to "discharge of industrial effluent" and 1 condition is not complied at present, "as per provision of Rules 18 of solid waste management rules-2016 you are directed to make an arrangement in utilities to replace at least five percent (5%) of your solid fuel requirement by refused derived fuel", PP committed to comply this condition within one year.	The EAC deliberated non-compliance and accepted that PP should comply the condition within one year.
5.	PP needs to confirm the categorization of the project as per the schedule to the EIA Notification, 2006.	In polyester chips manufacturing process esterification reaction will be take place & this polyester chips will be directly used manufacturing process of Bi Axial Orient Polyester Film. Thus, PP has applied for 5(f) categorization for polyester chips and 5(d) categorization for Bi Axial Orient Polyester Film.	The EAC found the reply to be satisfactory
6.	Adequate Action Plan on the issues raised during PH needs to be submitted along with timeline and budged.	Revised Adequate Action plan on the issues raised during PH has mention in revised EIA report. First Priority will be given to local people for an employment (up to 70 %) and then PP will look forward to	The EAC found the reply to be satisfactory

	T		
		the outsiders. PP committed to	
		allocate 2% fund of project	
		cost towards CSR activities.	
7.	PP needs to relook the water analysis report as the data	<ul> <li>Water analysis report is checked by PP and no any</li> </ul>	The EAC found
	seems wrong. Please verify	deviation in ionic balance	the reply to be satisfactory
	the water analysis and	and TDS observed. The TDS	Satisfactory
	identify the root cause	is more than compared to	
	analysis for the same and	total ionic concentration.	
	resubmit.	(TDS > ionic	
		concentration).	
		• Electrical conductance is	
		more than Total Dissolved	
		Solids (EC > TDS).	
		• COD is more than	
		compared with BOD (COD>	
		BOD).	
8.	Details of water approval	PP will use surface water of	The EAC found
	need to be submitted.	Narmada River conveyed	the reply to be
		to Kutchh District by	satisfactory
		pipeline by Government of	
		Gujarat. Permission letter	
		of M/s. GWIL is submitted.	
		Moreover, by mistake PP	
		submitted wrong water	
		balance at the time of	
		application. Therefore, PP	
		revised water consumption	
		quantity apply from GWIL	
		as 1385 KL/day out of	
		which 905 KL/day fresh	
		water will be taken from	
		GWIL.	

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Addition of new product & setting Thermal Power Plant by M/s Sumilon Polyester Limited in existing unit located at 6/121, A-1, Paiki, Plot No.8, First floor, Vairaginiwadi, Surat, Gujarat

All Manmade fibres manufacturing, Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates and Thermal Power Plants are listed in S.N. 5(d), 5(f) & 1(d) respectively of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

The standard ToR for the project was granted on 20/04/2019. Public Hearing for the

proposed project has been conducted by the State Pollution Control Board on 22/10/2019. The public hearing was presided over by the District Collector. The main issues raised during the public hearing are related to CSR activities and Employment.

The details of existing products and proposed capacity are as under:

S. No.	Product Details	Existing Quantity (MT/Month)	Proposed Quantity (MT/Month)	Total Quantity (MT/Month)
1	Bi Axial Orient Polyester Film	1   2000   1   2000   1		8000
2	Metalized Polyester Film	2050		2050
3	Polyester chips (different grades)		31000	31000
4	Power plant		20 MW	20 MW
5	Mettalized & lacquered Polyester Film	800	-800	NIL
6	Metalized Laminated polyester Film	800	- 800	NIL
7	Metalized & Lacquaered Laminated Polyester Film	800	- 800	NIL
8	Mettalic Yarn	400	- 400	NIL
9	M.F Resin	350	- 350	NIL
10	Epoxy Resin	350	- 350	NIL
11	Lacquers	1000	- 1000	NIL
12	Plastic Bobbins (Reels)	90	- 90	NIL
		By produ	ict	
13	Tetra Hydrogen Furan		250	250

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Creek is flowing at a distance of 5.10 Km in South East. Bhimasar Lake is located at 4.71 Km in West. Sakara River flows at a distance of 4.02 Km in North East. Mithi Rohar lake is located at 9.59 Km in SSW direction.

Existing land area is 1,02,590 sqm. and no additional land will be required for proposed expansion. Industry has already developed 17,070 sqm greenbelt area and will develop additional 16,787 sqm greenbelt area within premises. Total greenbelt area will be 33,857.00 sqm (33 %) out of total area of the project. The estimated project cost is Rs.775.72 Crores including existing investment of Rs.274.72 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.9.0 crores and the Recurring cost (operation and maintenance) will be about Rs.1.56 Crores per annum. Total Employment will be 225 persons. Industry proposes to allocate Rs2.5 crores @ of

Lakhs towards Corporate Environment Responsibility which is 0.5 % of the project cost as per the OM F.No.22-65/2017-IA.III dated  $1^{st}$  May 2018.

Ambient air quality monitoring was carried out at 8 locations during March 2019 to May 2019 and the baseline data indicates the ranges of concentrations as: PM10 (71.28 - 96.84  $\mu$ g/m3), PM2.5 (27.75 - 49.96  $\mu$ g/m3), SO2 (20.29 - 39.56  $\mu$ g/m3) and NO2 (22.73 - 41.80  $\mu$ g/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.46  $\mu$ g/m3, 0.49  $\mu$ g/m3 and 0.47  $\mu$ g/m3 with respect to PM10, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1385.0 m3/day of which fresh water requirement of 905 m3/day will be met from M/s. Gujarat Water Infrastructure Limited. Total domestic and industrial Effluent of 580.0 KLD will be treated through ETP, RO & MEE. 580.0 KLD will be treated through ETP and then it will be pass through RO and 480 KLD RO Permeate water will be use in industrial activity & 100 KLD RO rejected water will be evaporated through MEE. 55 KLD MEE Condensate water will be use in Coal and Fly ash handling. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 20 MW and will be met from own coal based power plant. Existing unit has 3 Nos. DG sets of 3300 KVA (stand by), 750 KVA (stand by) & 750 KVA (stand by) capacities. All existing D.G sets will be removed after proposed expansion. Existing unit has capacity of 4000 U, 1500 U, and 2500 U coal fired Thermic Fuel Heater & capacity of 4 T/Hr coal fired Boiler. All existing Thermic Fuel Heaters & Boiler will be dismantled after proposed expansion. For proposed, 2 nos. of coal fired boilers (capacity of 40 TPH each) and 3 Nos. of coal fired Thermic Fuel Heaters (capacity of 14000 U each) will be installed. ESP with a stack of height of 67 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed Boilers and Thermic Fuel Heaters.

There shall be no process gas emission generation from any existing and proposed process.

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

			Schedul		Quar	ntity (MT/			
Sr N o	N	Waste	e & Categor	Source of Generation	Existin g	Propose d	Total After Expansio n		of &
1	_	Used Oil	Sch-I 5.1	Thermopac k	0.90	1.1	2	Collection, Storage, Transportal n a disposal selling registered refiners,	tio and by to

							approved by GPCB/CPCB or reused as lubricant for
							machinery within the factory.
2	ETP Sludge	Sch-I 35.3	ETP	4	146	150	Collection, storage, Transportatio n, disposal at TSDF site approved by GPCB.
3 .	Discarded Container	Sch-I 33.1	Raw material	8.50	6.50	15.0	Collection, Storage, Transportatio n, disposal by selling to registered facility approved by GPCB.
4	Evaporated salt	Sch-I 35.3	MEE		110	110	Collection, storage, transportatio n, disposal at TSDF approved by GPCB.
5	Waste residue	Sch-I 20.3	process	30	-30	0	Collection, storage, transportatio n, disposal at CHWIF approved by GPCB.
6 .	Waste residue contaminat ed oil		process	2.40	0.6	3.0	Collection, storage, transportatio n, disposal at CHWIF approved by GPCB or sent co-process.
7	Polymer lumps		Process		100	100	Collection, Storage, transportatio

					n and sell to plastic waste recycler.
8 .	Fly Ash	 Thermopac ks & boilers	 900	900	Collection, Storage, Transportatio n and sell to brick manufacturin g.

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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 (EC).

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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (v). 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.
- (vi). 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.
- (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). Total fresh water requirement shall not exceed 905 KL/day, proposed to be met from GWIL. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
  - (ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
  - (x). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
  - (xi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xii). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling

pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 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.
- (xvi). As committed by Project Proponent 0.5 MW solar power plant (green energy) shall be setup for operation of the Unit.
- (xvii). As committed Rs. 2.5 crores shall be allocated for Corporate Environment Responsibility (CER) as per the OM F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 2018 and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project. Preference shall be given to local villagers for employment in the unit.
- (xviii). 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.23.23

Setting up of technical grade pesticides manufacturing unit by M/s Sandhya Organic Chemical Pvt. Ltd. (Unit-2) located at plot No. 1249/1250, G.I.D.C. Area, G.I.D.C. Sarigam, Taluka Umbergaon, District Valsad (Gujarat) - Reconsideration of Environment Clearance

[IA/GJ/IND2/125353/2019, IA-J-11011/342/2019-IA-II(I)]

The project proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 15-17 June, 2020. The additional information desired by the Committee and response from the project proponent is as under:

Sr. No.	Query Raised in earlier EAC meeting	Query Reply Given by PP	Observation of EAC
1.	Submit revised water balance by reducing fresh water requirement and Effluent treatment mechanism with plan for Zero Liquid Discharge.		The EAC deliberated the matter and found the reply to be satisfactory

		10.0 KL/Day of Domestic wastewater	
		will be disposed through Septic Tank &	
		Soak Pit.	
2.	Solvent recovery plan		The FAC
2.	Solvent recovery plan needs to be submitted	Thus, Industry shall be treated as ZLD (Zero Liquid Discharge) unit.  Solvent recovery plan  All the solvents shall be directly distilled from product mixes and; if required shall be purified in packed column with the help of reflux.  The solvent distillation system shall be designed so as to achieve minimum 99.95 % recovery of solvent.  All the pumps shall be mechanical seal type to avoid any leakage of solvent.  All necessary fire-fighting systems shall be provided with alarm system. Flame proof wiring and flame proof electrical accessories shall be provided to avoid any mishap.  All the distillation column vents are also connected to cooling water/chilled brine condensers for maximum possible recovery of the solvents.  All the vents will be connected to a common carbon Adsorber for removing traces of solvent from vent gases.  Residue generated from the distillation will be sent to BEIL incinerator site.  Two condenser will install with cooling water and chilled brine to recover the solvent.  Primary Condenser HE-01: Cooling water or Chilled water (at 10°C) will be used to condense the solvents depend on the vapour pressure at its operating conditions and the non condensed vapours will be condensed in a Secondary Condenser  VOC Trap Condenser HE-02:	The EAC deliberated the matter and found the reply to be satisfactory
		Chilled Brine at -05°C will be used to trap any traces of Solvent which is	
		and any crosses of convenie which is	

	1	alternal from Canadana and an a	
		slipped from Secondary condense.	
		Maximum solvent Recovery	
		99.95%.	
3.	PP needs to submit the	PP carried out study of 3D Risk, CFD	The EAC
	following details on the	Modelling & Consequence Analysis and	found the
	Risk associated with the	the same is submitted to the Ministry.	reply to be
	hazardous chemicals		satisfactory
	proposed to be used as		
	a raw material;		
	risk need to be carried		
	out for medium and		
	Catastrophic		
	ruptures/leak even for		
	Methanol, Bromine		
	including Hydrochloric		
	acid, Sulphuric acid		
	and Benzoyl Chloride		
	etc.		
	•		
	frequency/Probability		
	of leak per year as		
	done for any risk		
	analysis.		
	•		
	individual risk contours		
	and societal risk F-N		
	curves to assess		
	against risk acceptance		
	criteria using		
	advanced 3D modeling.		
	advanced 3D iniodening.		
	disaster management		
	plan		
4.	Status of TSDF	Membership of TSDF of M/s. Detox	The EAC
	membership needs to	India Pvt. Lts has been submitted to	found the
	be submitted.	the Ministry.	reply to be
			satisfactory
	1		Jacistactor y

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Setting up of technical grade pesticides manufacturing unit by M/s Sandhya Organic Chemical Pvt. Ltd. (Unit-2) located at plot No. 1249/1250, G.I.D.C. Area, G.I.D.C. Sarigam, Taluka Umbergaon, District Valsad, Gujarat

The project/activities are covered under category A of item 5(b) 'Pesticides industry and

Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The standard ToR for the project was granted on 20 December, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area. No litigation is pending against the proposal.

The details of existing products and proposed capacity are as under:

			QAUNTIT	End Use	LD50
S.	NAME OF	CAS NO.	Y		(mg/kg)
No	PRODUCTS	CAS NO.	(MT/MON		
			TH)		
	PESTICIDE IN	TERMEDIATES	5		
1.	Cypermethric Acid	52314-67-7	200	Mfg of various	1383
	Chloride (CMAC)			Synthetic	
				Pyrethroid	
				Insecticides	
2.	Meta Phenoxy	39515-51-0	200	Mfg of various	
	Benzaldehyde			Synthetic	
	(MPBAD)			Pyrethroid	
				Insecticides	
3.	4-4' Thio Di Phenol	2664-63-3		Raw Material of	3362
	(TDP)			Temephose	
				Insecticide	
4.	2-Chloro 5-	70258-18-3		Intermediate for	N.A
	Chloromethyl		400	Imidacloprid	
	Pyridine ( CCMP)			Insecticide	
5.	2-Chloro-5-	70258-18-3		Intermediate for	N.A
	Chloromethyl			Thiamethoxam	
	Thiazole (CCMT)			Insecticide	
6.	3- Methyl 4-	70124-77-5		Intermediate for	3914
	Nitroimino 1,3,5			Thiamethoxam	
	Oxidiazine (MNIO)			Insecticide	
7.	N- Nitro Imino	5465-96-3		Intermediate for	N.A
	Imidazolidine (NII)			Imidacloprid	
				Insecticide	
8.	Bromo Benzene	924-44-7		Speciality	2700
				Chemicals	
P	Pesticide Technical (Finished Products) Group -1			-1 ( Synthetic Pyret	hroids )
9.	Cypermethrin (T) &	52315-07-8		Crop Protection	> 2,000
	Beta, Zeta, etc.				
	Isomèrs (T)				
10.	ThetaCypermethrin	71697-59-1	500	Crop Protection	>1500
	(T)				
11.	Permethrin (T)	52645-53-1		Crop Protection	>4,000

12.	Alpha Cypermethrin	67375-30-8		Crop Protection	7000
	(T)				
13.	Lambda Cyhalothrin	91465-08-6		Crop Protection	>2000
	(T) 84% & 98%				
14.	Deltamethrin (T)	52918-63-5		Crop Protection	>2000
15.	Fenvalerate ( T)	51630-58-1		Crop Protection	451
Pesticide Technical (Finished Products) Group -2					
16.	Temephose ( T)	3383-96-8	300	Crop Protection	>13000
17.	Imidacloprid(T)	138261-41-		Crop Protection	>5,000
		3			
18.	Acetamiprid ( T)	135410-20-		Crop Protection	>2000
		7			
19.	Thiamethoxam(T)	153719-23-		Crop Protection	1,563
		4			
	TOTAL		1600 MT /		
			Month		

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

Total land area for the proposed project is 8,640 sqm. Industry will develop 2850 sqm. greenbelt area within premises. Total greenbelt area will be 33 % out of total area of the project. The estimated project cost is Rs.100 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.9 crores and the Recurring cost (operation and maintenance) will be about Rs.1.50 Crores per annum. Total Employment will be 200 persons. Industry proposes to allocate Rs.100 Lakhs towards Corporate Environment Responsibility which is 1 % of the project cost as per the OM F.No.22-65/2017-IA.III dated 1st May 2018.

Ambient air quality monitoring was carried out at 10 locations during October, 2019 to December, 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (70.63-82.15  $\mu$ g/m3), PM2.5 (40.27-44.38  $\mu$ g/m3), SO2 (11.15-15.12  $\mu$ g/m3) and NO2 (13.38 - 17.71  $\mu$ g/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.03875  $\mu$ g/m3, 0.06784  $\mu$ g/m3, and 0.02426  $\mu$ g/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 413.0 KL/Day (Fresh: 210.8 KL/Day + Reuse: 202.2 KL/Day) of which fresh water requirement of 210.8 m3/day and will be met from GIDC Sarigam.

Total wastewater generation will be 227.2 KL/day (Industrial: 217.2 KL/day + Domestic: 10.0 KL/day). Concentrated Wastewater Steam 199.0 KL/Day will be treated at Fenton treatment System & through candle filter it is forwarded to Solvent Stripper System, then, 189.0 KL/ Day effluent from Stripper Column shall be forwarded to MEE. Dilute Steam 13.2 KL/ Day (From Washing, Blow-down of Boiler & Cooling Tower): This is rich in TDS & low of COD so this effluent will be treated in ETP (Primary treatment) and sent to RO. 9.0 KL / Day RO Permeate will be recycled into Boiler & Cooling Tower. 4.2 KL /

Day RO Reject will be forwarded to MEE for further treatment. Total 193.2 KI/ Day (189.0 KL/ Day from Process + 4.2 KL / Day from RO Reject) treated in MEE where MEE Condensate 193.2 KL/ Day will be sent to SBT based Bio Reactors Treatment System & then recycled into industrial purposes. Scrubbing media- 5.0 KL / Day is mainly in Solution form from respective gases i.e. 30% HCl, 20% Sodium Sulphite, 35% HBr Solution etc. which shall be Sale to registered End Users under Rule- 9. 10.0 KL/Day of Domestic wastewater will be disposed through Septic Tank & Soak Pit. Industry will be based on ZLD (Zero Liquid Discharge) unit.

Power requirement for proposed project will be 1000 KVA and will be met from DGVCL. DG set of 500 \* 2 Nos. KVA capacity shall be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets of 500 \* 2 Nos. which will be used as standby during power failure. Unit shall have 1 Nos. of 6.0 MT/hr, Natural gas= 10,000 SCM/Day fired Steam Boiler, 1 Nos. of 1000 U, Natural gas = 1000 SCM /Day fired Thermo Pack will be installed. Adequate stack height of 18 m or 11 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm3) respectively.

Details of Process emissions generation and its management.

## 1) Flue Gas Stack

S. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel	Type of emissions	Air Pollution Control Measures (APCM)
1	Steam Boiler (Capacity: 6.0 MT/hr)	18	Natural gas	10,000 SCM/Day	PM <u>&lt;</u> 150	Adequate stack height
2	Thermo Pack(Capacity:1000 U)	11	Natural gas	1000 SCM /Day	ppm NOx <u>&lt;</u> 50	Adequate stack height
3	D. G. Set -2 Stand By (Capacity : 2X(500 KVA)	11	HSD	400 Liters/day		Adequate stack height

### 2) Process Stack

Sr. No.	Stack Attached To	Stack Height	Air Pollution Control System	Parameter	Permissible Limit
1	Reaction Vessel-1	From The rooftop of the plant 11 m	Two Stage Water Scrubber	HCL	20 mg/Nm <sup>3</sup>
2.	Reaction Vessel-2	From The rooftop of the plant 11 m	Two Stage Water Scrubber	HBr	30 mg/Nm <sup>3</sup>

3.	Reaction Vessel -3	•	Two Stage Alkali Scrubber with 1st Water & 2nd Alkali	HCI & SO <sub>2</sub>	20 & 40 mg/Nm <sup>3</sup>
4.	Reaction Vessel-4	•	Two Stage Alkali Scrubber with 1st Water & 2nd Alkali	HCL & Cl2	20 & 9 mg/Nm <sup>3</sup>

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

17 Categories of Hazardous/Solid Wastes shall be generated from this Unit. Used/Spent oil will be Collected, stored, Transported & Disposal by selling to registered recycler. Discarded Containers/Bags/Liners will be Collected, Stored, Transported & and Sent Decontamination & Disposal by selling to registered recycler.

ETP Sludge and MEE Salt will be Collected, Stored, Transported & Sent to TSDF site for secured land filling. Distillation Residue will be Collected, Stored, Transported & sent for co-processing in cement industries or nearest incineration site.

Spent Solvent will be Collected, Stored, management & recovery within the premises and will reuse in plant premises. Spent Catalyst will be Collected, Stored, Transported & sent for co-processing or nearest incineration site. HCL Solution (30 %) Will be Collected, Stored, & reuse in plant for manufacturing of MPBAD & excess quantity will be sold to end users having Rule 9 Permission. Spent Sulphuric Acid, KCl(Inorganic Salt), Sodium Sulphite Solution (20%)(Na2SO3), Sodium Sulphate Solution (Na2SO4), Aluminium Chloride 28 – 30 %, NaCl Salt, Phosphoric Acid(H3PO4), Benzoyl Chloride, Cypermethrin Isomer will be collected, stored, transported and by selling to authorized end user registered under rule -9 permission.

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on action plan and CER plan and found to be addressing the issues in the study area. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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 (EC).

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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). 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.
- (iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (v). 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.

- (vi). 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.
- (vii). 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.
- (viii). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
  - (ix). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
  - (x). Total fresh water requirement shall not exceed 210.8 KL/Day to be met from GIDC. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
  - (xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiii). 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.
- (xiv). As committed Rs. 100 Lakhs shall be allocated for Corporate Environment Responsibility (CER) as per OM F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 2018, and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project

- (xv). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (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.23.24

Expansion of Specialty Chemicals & Agrochemical Intermediates manufacturing unit from 19283 MTA to 25113 MTA by M/s Sajjan India Ltd located at GIDC Estate Ankleshwar, District Bharuch, Gujarat- Re-consideration of Environmental Clearance regarding.

[IA/GJ/IND2/152708/2019, IA-J-11011/130/2020-IA II (I)]

The project proponent and their consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd. made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 15-17 June, 2020. The additional information desired by the Committee and response from the project proponent is as under:

S. No.	Query Raised in earlier EAC meeting	Query Reply Given by PP	Observation of EAC
1.	As project is located at	PP have been granted	The EAC
	CPA, PP needs to submit	permission for discharge of	deliberated the
	the Zero	existing treated effluent 176	issues and found
	Liquid Discharge plan as	KLD at FETP of M/s Narmada	the reply to be
	per Ministry's OM dated	Clean Tech +50 KLD at CMEE	satisfactory.
	31.10.2019 (CPA).	of ACPTCL = Total 226 KLD.	
		PP requested to continue its	
		existing discharge at FETP of	
		NCT & rest of the Treated	
		effluent will be reused within	
		the premises.	

	DD woods to submit the	DD coming out about of 2D Diels	The FAC
2.		,	The EAC
	following details on the	CFD Modelling & Consequence	deliberated the
	Risk associated with the	Analysis and the same is	issues and found
	hazardous chemicals	submitted to the Ministry.	the reply to be
	proposed to be used as		satisfactory
	a raw material; Risk		
	need to be carried out		
	for medium and		
	catastrophic		
	ruptures/leak even for		
	Methanol, Bromine		
	including Hydrochloric		
	acid, Sulphuric acid and		
	Benzoyl Chlorideetc.		
	Frequency/Probability of		
	leak per year as done		
	for any risk analysis.		
	Individual risk contours		
	and societal risk F-N		
	curves to assess against		
	risk acceptance criteria		
	using advanced 3D		
	Modeling.		
3.		DD has made arrangement for	The EAC found the
٥.	•	PP has made arrangement for	
	storage of rain water.	rain water harvesting.	reply to be
		Collected rain water will be	satisfactory
		used for various activities.	
		Water Reservoir capacity of	
	DD	Tank will be of 500 KL – 2 Nos.	The FAC
4.	PP needs to submit	Manufacturing unit is of	The EAC
	copy of all CTOs since	Specialty chemicals and	deliberated the
	inception of the project	Agrochemicals which is not fall	matter and found
	and the production	under EIA Notification-1994.	the reply to be
	details to verify the	PP has obtained necessary	satisfactory
	Violation case, if any.	permissions from Gujarat	
		Pollution Control Board,	
		Gandhinagar (CTE & CTO).	
		After EIA-Notification-2006	
		there is no increase in	
		production quantity, this is a	
		first expansion project.	
5.	The Committee noted		The EAC found the
	LI . C DM40 0 DM0 F	•	reply to be
	that for PM10 & PM2.5	l and rectined data is submitted	lichia ro ne i
	value, the incremental		satisfactory
	value, the incremental value w.r.t. GLC is		
	value, the incremental value w.r.t. GLC is reported as 0.01-0.02		
	value, the incremental value w.r.t. GLC is		

i	incremental	values
١,	w.r.t. GLC and	revised
(	data needs t	to be
	submitted.	

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Expansion of Specialty Chemicals & Agrochemical Intermediates manufacturing unit from 19283 MTA to 25113 MTA by M/s Sajjan India Ltd., located at Plot No. 6102-6103, 6117-6119, 5809-5810 GIDC Estate Ankleshwar, District Bharuch, Gujarat

All Pesticides industry and pesticide specific intermediates (excluding formulations), Synthetic Organic Chemicals Industry (Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates and Thermal Power Plants are listed in S.N. 5(b), & 5(f) respectively of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' to be appraised at Central level in the Ministry.

The standard ToR for the project was granted on 24th February, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

It was informed that the project was started before the EIA Notification, 1994. The unit was involved in Specialty Chemicals & Agrochemical Intermediates manufacturing which did not attract prior EC as per the EIA Notification, 1994. It was informed that the total production remained same. The Committee deliberated the issues and noted that there is no violation of the Unit.

The details of products and capacity as under:

S. No.	Chemical Name of Product	CAS No.	Exist ing Qty.	Propo sed Qty.	of Gro up	End Use of Each Product s	LD-50/LC-50
	Benzene Derivatives						
1	2,4,6-Trimethy Benzoyl Chloride	[938-18- 1]				Photoiniti ator	2 300 mg/kg bw (rat)
2	4-Nitro-2-sulphobenzoic Acid Potassium salt	[5344- 48-9]	4696	0	5896	Herbicide	>1000 mg/kg
3	2-Bromo-4-fluoro acetanilide	[1009- 22-9]				Fungicide	LC50 5.9 mg/lit (Invertebrates)

4	4[[(2Methoxybenzoyl)a mino]sulfonyl] benzoylchloride	[816431- 72-8]
5	Tris (4-Aminophenyl) methane	[548-61- 8]
6	2,4,6 Trimethyl Pheneyl Acetyl Chloride	[52629- 46-6]
7	2,5-Dimethyl phenyl acetyl chloride	[55312- 97-5]
8	Ortho chloroaniline-5- Carboxylic Acid	2840-28- 0
9	3-(trifluoromethyl) acetophenone	[349-76- 8]
10	3- chlorobenzotriflouried/B enzo triflouried	[98-15- 7]
11	2-Methoxyethyl a- cyano-a-[4-(1,1- dimethylethyl)phenyl]- B-oxo-2- (trifluoromethyl)benzen e propanoate	[400882- 07-7]
12	4-Chloro-2,6-dimethyl bromobenzene	[103724- 99-8]
13	1,2- bis (2- Aminophenoxy) ethane	[52411- 34-4]
14	2-Trilfuoromethyl benzamide	[360-64- 5]
15	5-Amino-2,4-di-tert- butylphenol	873055- 58-4
16	Polymeric Yellow 2012	Not Available
17	3,4,5-Trimethoxy- toluene	6443-69-
18	AOX-D	Not Available
19	4-Acetyl-2- methylbenzamide	[109527 5-06-1]
20	2-amino benzonitrile	[1885- 29-6]
21	2,3-Dichloro-4-hydroxy Aniline	[39183- 17-0]
22	4- (Trifluoromethylbenzyl) alcohol	[349-95- 1]

Herbicide safener	>= 5000 mg/kg bw
Colorant	> 2000 mg/kg bw
Insecticid	>= 5
e To a a abi ai d	000 mg/kg bw
Insecticid e	>= 5 000 mg/kg bw
Colorant	> 8 000 mg/kg bw
Fungicide	> 2 000 mg/kg bw
Colorant	> 5000 mg/kg bw
Acaricide s	>1000 mg/kg/day
Herbicide	N/A
Colorant	> 2 000 mg/kg bw
Fungicide	LC50 (calculated) > 100 mg/l @ 96 hr
Pharma	<1100 mg/Kg
Polymer	<1200 mg/Kg
Fungicide	2664.35 mg/kg bw
Polymer	>1000 mg/kg
Insecticid	>1200 mg/Vg
е	>1200 mg/Kg LD50 Mouse
Fungicide	Intravenous -
1 19.2.00	180 mg/kg
Fungicide	>1000 mg/kg
Insecticid e	>1200 mg/Kg
1	9

23	2-Chloro-5-methoxy benzenesulfonamide	[349-95- 1]				Nematici des, Insecticid e	>1100 mg/kg
24	2- Iodobenzenesulfonamid e	[53730- 99-7]				Herbicide	>1200 mg/Kg
25	4-Amino-2,5- dimethylphenol	[3096- 71-7]				Fungicide	>1100 mg/kg
26	3-Aminobenzotrifluoride	[98-16- 8]				Fungicide	>300 mg/kg bodyweight
27	p-Xylene dimethyl ether	[6770- 38-3]	0	1200		Applicati on is circuit board	> 2 000 mg/kg bw
28	2,4,6-Trimethylaniline (Mesidine)	[88-05- 1]				Colorant	>743mg/kg
29	p-Xylene glycol	[589-29- 7]				applicati on is circuit board	LC50: 477.05 predicted
	Benzene Nitro	Derivati	ives				
30	2 – Hydroxy – 4 – nitro Benzene Amine	[121-88- 0]				Colorant	MOUSE LD50 >2500 mg/kg
31	2-Hydroxy-5-Nitro Benzene Amine	[99-57- 0]	184	0	184	Colorant	2400 mg/kg bw
32	Isopropyl-3-chloro-4- methyl-6-nitribenzoate	[120451 8-43-3]				Insecticid e	Rat (oral)LD50 > 2500 mg/kg
	Benzidines and A	Alkyl Aro	matics				
33	N Propyl Benzene	[103-65- 1]	130	0	130	Colorant	LD50 Rat (Oral) 6040 mg/kg
	CPV	V					
34	Chlorinated Paraffin Wax	85535- 85-9	1870	0	1870	used as a flame retardant and plasticize r in rubber, paints, adhesive s, caulks, sealants and plastics	10 ml/kg bw
	Heterocyclic	Derivativ	res .				

35	3-[1-(3,5- dichlorophenyl)-1- methylethyl]-2,3- dihydro-6-methyl-5- phenyl-4H-1,3-oxazin- 4-one and its intermediates	[153197- 14-9]				Herbicide	RAT (Oral) LD50 >500 mg/kg
36	2-Benzyl-2- (Dimethylamino)-4- Morpholino- Butyrophenone and its intermediates	[119313- 12-1] & [199109- 88-1]				Photoiniti ator	> 5000 mg/kg bw
37	1,3-Dimethyl-5- pyrazolone	[2749- 59-9]				Fungicide	<2000 mg/kg bw
38	1,3-Dimethyl-5- chloropyrazol carbonyl chloride	[27006- 83-3]	3460			Fungicide	>25 - < 50 mg/kg
39	1,3-Dimethyl-5- fluoropyrazol carbonyl fluoride	[191614- 02-5]				Fungicide	> 2.000 mg/kg
40	2-(4-methylbenzyl)-2- (dimethylamino) -1-(4- morpholinophenyl)buta n-1-one	[119344- 86-4]		0	4735	Photoiniti ator	>5000 mglkg bw
41	2,6-Dimethyl-,2,3- dihydro-1h-inden-1-one	[66309- 83-9]				Herbicide	2000 mg/kg
42	N-[1,1-dimethyl-2-(4- isopropoxy-o-tolyl)-2- oxoethyl]-3- methylthiophene-2- carboxamide	[875915- 78-9]				Fungicide	2000 mg/kg
43	3-Amino-2-(1,3- dimethylbutyl)thiophen e	[183677- 34-1]				Fungicide	>1100 mg/kg
44	1-{1-ethyl-4-{4-mesyl- 3-(2-methoxy ethoxy)- o-toluoyl}-1H-pyrazol- 5-yloxy}ethyl methyl carbonate	[110113 2-67-5]				Herbicide	Rat (Oral)LD50 2031 mg/kg
45	S-sec-Butyl O-ethyl 2- oxo-3-thiazolidinyl phosphonothioate	[98886- 44-3]				Nematici des	Rat (Oral) LD50 57 mg/kg
46	(E)-1,1-dimethylethyl 4-[[[(1,3dimethyl-5- phenoxy-1H pyrazol-4- yl)methylene]amino]ox y]methyl]benzoate and	[134098- 61-6]				Acaricide , Insecticid e	Oral 440mg/kg

	its intermediates.						
47	Mepanipyrim	[110235- 47-7]				Fungicide	> 5 000 mg/kg bw
48	Methyl 3-amino-2- thiophenecarboxylate	[22288- 78-4]				Fungicide	RAT (Oral) LDLo 150mg/kg
49	2-Benzyl-2- dimethylamino-1-(4- piperidinylphenyl)-1- butanone(IR 389)	[119312- 76-4]				Photoiniti ator	>1200 mg/Kg
50	1-(4-Fluorophenyl)-2- dimethylamino-2- benzyl-butan1-one (Precursor of IR- 389)	[119312- 61-7]				Photoiniti ator	>1100 mg/kg
51	2-chloro-N- [cyano(thiophen-2-yl) methyl]acetamide	[263137- 41-3]				Fungicide	>1300 mg/kg
52	8-(2,6-Diethyl-4- methylphenyl) tetrahydro-7H- pyrazolo[1,2-d][1,4,5] oxadiazepine-7,9(8H)- dione	[314020- 44-5]				Herbicide	>1000 mg/kg
53	6-Fluoro-2-methyl indole	[40311- 13-5]				Fungicide	>1100 mg/kg
54	Bis[1-(N,N- dimethylsulfamoyl)- 1,2,4-triazole-3- yl]disulfide	[247236- 09-5]	0	1275		Fungicide	>1500 mg/kg
55	1,3-Thiazolan-2-one	[2682- 49-7]				Nematici des	500 mg/kg bw
56	2',6'-dibromo-2-methyl- 4'-trifluoromethoxy-4- trifluoromethyl-1,3- thiazole-5-carboxanilide	[130000- 40-7]				Fungicide	>5000 mg/kg
57	2-Carbethoxy-3-(2- thienyl)propanoic acid	[143468- 96-6]				Pharma	> 2 000 mg/kg bw
58	Bis(fluorosulfonyl)amide	14984- 76-0]	30	0	30	Electrolyt e	> 2 100 mg/kg bw
	Napthelene Based D		mediat	es	<u> </u>		
59	4 - Benzoylamino - 5 - Napthol - 2 - 7 Disulphonic Acid	[117-46- 4]	115	0	115	Colorant	> 2500 mg/kg bw

60	4 – Hydoxy N – (3 – Sulfophenyl – 2 – Napthylamine – 6- Sulphonic Acid	[25251- 42-7]				Reactive Dyes	LD50 4440 mg/kg b/w
	Para quinone	Derivativ	/es				
61	Ethyl Trichloro Benzoquinone	[65824- 98-8]	30	0	30	Colorant	>2000 mg/kg
	Pyridine De	erivatives	3				
62	(3-Ethylsulfonyl)-2- pyridinesulfonamide and its intermediates	[111812- 58-9]				Herbicide	7500mg/kg
63	3-Chloro-5- trifluormethyl-pyridine- 2-acetonitrile	[157764- 10-8]				Fungicide	> 300 - < 2.000 mg/kg
64	5-chloro-2-methoxy-4- methylpyridine-3- carboxylic acid	[851607- 38-0]				Fungicide	> 2000 mg/kg
65	(5-chloro-2-methoxy-4-methylpyridin-3-yl) (2,3,4-trimethoxy-6-methylphenyl)methano	[688004 6-61-9]	1140	0		Fungicide	> 2000 mg/kg
66	2-Sulfonamide-3- trifluoromethylpyridine	[104040- 76-8]				Herbicide	>1000 mg/Kg
67	3-Chloro-2- hydrazinopyridine	22841- 92-5.				Insecticid e	
68	3-Chloro-N-(3-chloro-5- tri uoromethyl-2- pyridyl)-a,a,a-tri uoro- 2,6-dinitro-p-toluidine	[ 79622- 59-6 ]			2930	Fungicide	>5,000 mg/kg
69	3-Chloro-N-[3-chloro- 2,6-dinitro-4- (trifluoromethyl) phenyl]-5- (trifluoromethyl)-2- pyridinamine	[79622- 59-6]				Fungicide	>5,000 mg/kg
70	2-Thiobenzyl nicotinic acid	[112811- 90-2]				Herbicide	>1100 mg/kg
71	2,3-Dichloropyridine	[2402- 77-9]	0	1790		Insecticid e	135mg/kg
72	2,3-Dichloro-5- trifluoromethylpyridine & 2-chloro-3- (trifluoromethyl)pyridin e & 3- (trifluoromethyl)pyridin e	[69045- 84-7] & [65753- 47-1] & [3796- 23-4]				Agroche micals	LD50 1190 mg/kg (Mouse) for DCTF

	Pyrimidine Chlo	ro Deriva	tives				
73	Trichloro 1,3- Diazabenzene	[3764- 01-0]				Hair Regrowt h Treatme nt	LC50 39.39144 predicted by PNN
74	Tetrachloro 1,3- Diazabenzene	[1780- 40-1]	1640	0		Colorant	LD50 (Mouse) 32mg/kg
75	Dichloro-1,3 diazabenzene	[1193- 21-1]				Fungicide	LD50 >200 mg/kg bw
76	Diamino Chloro 1,3- diazabenzene	[156-83- 2]			1840	Hair Regrowt h Treatme nt	LC50 956.5 mg/liter (96 hrs)
77	4,6-Dimethoxy-2- chloropyrimidine	[13223- 25-1]	0 200		Herbicide	>1000 mg/kg	
78	N-(2-Amino-4,6- dichloropyrimidin-5-yl) formamide	[171887- 03-9]			Pharma	500 mg/kg bw	
	Pyrimidine D	erivative	es				
79	Amino-Dimethoxy-1,3 Diazabenzene	[36315- 01-2]				Herbicide	Mice (Oral) LD50 737 mg/kg bw
80	Dimethoxy-(Phenoxy Carbonyl) Amino)-1,3 diazabenzene	[89392- 03-0]				Herbicide	Rat (Oral) LD50 >500 mg/kg
81	2-Amino-4,6- dimethylpyrimidine	[767-15- 7]				Herbicide	> 735 mg/kg
82	2-Amino-5,8- dimethoxy(1,2,4)triazol o(1,5-C) pyrimidine	[219715- 62-5]				Herbicide	>1000 mg/kg
83	5-(1,3-Dioxan-2-yl)-4- (4- trilfuoromethylbenzylox y)pyrimidine	[144902 1-97-9]	1514	0	2089	Insecticid e	Mice (Female) LD50 >300 mg/kg
84	3-(4-Chloro-2-fluoro-5- mercapto-phenyl)-1- methyl-6- trifluoromethyl-1H- pyrimidine-2,4-dione	[353292- 92-9]				Herbicide	>1100 mg/kg
85	1-[(4,6-dimethyl pyrimidin-2-yl)-3-(3- ethyl sulfonyl pyridin-2- yl)] sulfonyl urea	[122931- 48-0]				Herbicide	LD50 = > 5000 mg/kg Acute oral Rat
86	M-[(5- pyrimidinyl)methyl]-2- pyridinamine	[138391 6-51-5]				Insecticid e	Rat (Oral) MOAEL 57.6 mg/kg

87	2,4,6- Trihydroxypyrimidine	[67-52- 7]				Hair Regrowt h Treatme nt	13400 mg/kg bw
88	4,6-Difluoro-2-ethoxy pyrimidine	[166524- 65-8]	0	575		Herbicide	< 500 mg/kg bw
89	5-Bromopyrimidine	[4595- 59-5]	O	3/3		plant growth regulator	LC50: 35.53 predicted
90	1-(4,6-Dimethoxy Pyrimidine-2-yl)propan- 2-one	[414909- 25-4]				Herbicide	>1200 mg/Kg
						Fungicide	1879 mg/kg
	Pyrimidine-Pyrid	line Deriv	atives				
91	1-(4,6- dimethoxypyrimidin-2- yl)-3-(3- trifluoromethyl-2- pyridylsulfonyl)urea and its intermediates.	[104040- 78-0]				Herbicide	LD50 = > 5000 mg/kg rats and rabbits
92	aryl fused pyrimidinedione	[126313 3-33-0]				Insecticid e	Marine water fish LC50 116 mg/kg
93	Benzoic acid ,  2[[[(4,6-dimethyl-2- pyrimidinyl) amino] carbonyl] amino ]sulfonyl]-,methylester ;Sulfometuron Methyl (DPX-T5648) (SMM)	[74222- 97-2]	640	0	640	Herbicide	Oral LD50 in rats is > 5 g/kg
94	Benzoic acid,2[[[[(4- chloro-6-methoxy-2- pyrimi dinyl)amino]carbonyl]a mino]sulfonyl]- ,ethylester; Chlorimuron Ethyl (DPX-F6025)	[90982- 32-4]				Herbicide	Oral LD50 in Rats is 4102mg/kg
	Quinoxaline		es				
95	2,6-Dichloroquinoxaline	[18671- 97-1]	0	50	50	Herbicide	195 mg/kg
	Triazine De	rivatives	<b>;</b>				
96	2-(2,4- dihydroxyphenyl)-4,6- bis(4-biphenyl)-1,3,5- triazine	[182918- 16-7]	280	0	280	Plastics	>1000 mg/kg
97	2-Chloro-4,6-	[3140-				Herbicide	LD50 870

	dimethoxy-1,3,5- triazine	73-6]					mg/kg bw
98	2-(2,4- dihydroxyphenyl)-4,6- bis(2,4- dimethylphenyl)-1,3,5- triazine	[1668- 53-7]				Plastics	>1200 mg/Kg
	Other Agro and Pha	ma Inter	media	tes			
99	2,5- Dimethoxypyrimidin-4- amine	[6960- 17-4]				Herbicide	>1000 mg/kg
100	(1E)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl] oxy]phenyl] and its intermediates.	[361377- 29-9]				Fungicide	>2000 mg/kg
101	3',4'-difluoro-2- aminobiphenyl	[873056- 62-3]				Fungicide	>1200 mg/Kg
102	isopropyl 2-(4- methoxybiphenyl-3- yl)hydrazinoformate 1- methylethyl 2-(4- methoxy[1,1'- biphenyl]-3- yl)hydrazinecarboxylate and its intermediates	[149877- 41-8]				Insecticid e	Ratte LD50 >5000 mg/kg
	Napthols & Bases		2944				
103	O-(2,4- dichlorophenyl)o-ethyl 5-propyl phosphoro dithioate	[34643- 46-4]	2344	0	3444	Insecticid e	Oral (Rabbit)750mg /kg
104	POCL3	[10025- 87-3]				Pharmac eutical Industry	Oral (RAT) 36mg/kg
105	2,3-dimethyl-1- nitroisourea	[255708- 80-6]				Insecticid e	
106	Diethyl Disulfide	[110-81- 6]				Insecticid e, Fungicide	Oral (RAT) 2030mg/kg
107	4- Methoxycyclohexanone	[13482- 23-0]				Insecticid e	> 2 000 mg/kg bw
108	1,1 -Carbonyl diazepan -2-One Code: (CBC)	[19494- 73-6]				Polymer	>1500 mg/kg
109	1,4- Dihydroxyanthraquinon e	81-64-1				Colorant	Oral (RAT) 5000mg/kg
110	2,6-difluoro phenyl hydrazine HCl	[502496- 26-6]				Pesticide	>1100 mg/kg

	4,4-Dimethoxy-2-	[5436-			]	11	6300 //
111	butanone	21-5]				Herbicide	6200mg/kg
112	Dimethyl 1,3-	[1830-				Fungicide	> 2 000 mg/kg
112	acetonedicarboxylate	54-2]				i ungicide	bw
113	Methyl 4-Methyl-3-	[42558-				Pharma	> 2 000 mg/kg
113	oxopentanoate	54-3]				THAITHA	bw
114	N-Methylmethane	[1184-				Herbicide	> 2 000 mg/kg
	sulfonamide	85-6]					bw
115	Nitroguanidine	[556-88- 7]				Insecticid e	4640 mg/kg
116	2,2'-Oxybis[5,5- dimethyl-1,3,2-dioxa phosphorinane]2,2'disul phide	[4090- 51-1]	0	500		Polymer	> 5000 mg/kg
117	4-Methyl-3- oxopentanoate	[30414- 53-0]				plant growth regulator s	>1200 mg/Kg
118	2-(butan-2- yldisulfanyl)butane	[5943- 30-6]				Fosthiaza te (Agro chemical )	>1000 mg/kg
	Thiol Deri	ivatives					
119	N,N-Dimethyl-1,2,3- trithian-5-amine hydrochloride	[424827- 89-4]				Insecticid e	>1100 mg/kg
120	2-isopropylthioxanthone	[5495- 84-1]	490	0	490	Photoiniti ator	LD50 >2000 mg/kg bw
121	[(9-oxo-9H- thioxanthen-2- yl)oxy]acetic acid	[84434- 05-9]				Photoiniti ator	>2000 mg/kg bw
	R&I	)		1	ı		
122	R & D Products		120	240	360	R & D Products For Develop ment & above End Usage	>1000 mg/kg
			192	-000	251		
	Total		83	5830	13		

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Total land area for the proposed project is 102746 sqm. Industry will develop 41100 sqm. greenbelt area within premises. Total greenbelt area will be 40% of total area of the project. The estimated total project cost is Rs. 469.03 Crores (Existing: 349.03 Crore +

Proposed: 120.0 Crore). Total capital cost earmarked towards environmental pollution control measures is Rs.11.16 crores and the Recurring cost (operation and maintenance) will be about Rs.20.02 Crores per annum. Total Employment will be 1080 persons after the proposed expansion.

Ambient air quality monitoring was carried out at 9 locations during March, 2019 to May, 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (49.25 – 96.12  $\mu$ g/m3), PM2.5 (26.65 – 58.10  $\mu$ g/m3), SO2 (16.92 – 26.72  $\mu$ g/m3) and NOx (17.52 – 28.53  $\mu$ g/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the propose expansion project would be 0.014  $\mu$ g/m3, 0.026  $\mu$ g/m3, and 0.009  $\mu$ g/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 2290 KL/Day (Fresh Water: 1622 m3/day + Reuse: 668 KL/Day) will be met from GIDC water supply. Industrial wastewater Process & washing (779 KL/day), out of this 50 KLD send to CMEE of ACPTCL & 26 MT converted in to sludge so remaining 703 KLD + RO Reject (114 KL/Day) - Total 817KL/Day) will be treated in in-house MEE. Concentrated waste water (241 KL/Day) from in-house MEE will be sent to ATFD for further treatment. MEE Condensate (576 KLD) + ATFD Condensate (215 KLD) along with cooling blow down (36 KLD) + Boiler blow down (40 KLD) - Total (867 KLD) will be treated in ETP within premises and treated waste water will be treated in PTRO. PTRO reject 229 KLD sent to HPRO. HPRO reject (114 KLD) sent to MEE. PTRO permeate (638 KLD) + HPRO permeate (115 KLD) - Total (753 KLD), out of this 176 KLD existing discharge will be sent to NCT (M/s. Narmada Clean Tech), Ankleshwar pipeline for deep sea disposal via FETP (Polishing CETP), and remaining 577 KLD permeate water feed to Polishing RO. Permeate water from Polishing RO reuse in cooling tower & Boiler. Rest 26 MT is converted to ETP sludge & 26 MT will be converted to ATFD salt. Domestic waste water (91 KLD) will be treated in STP and treated waste water will be reused in gardening purposes.

Power requirement for propose expansion project will be 14000 KVA (Existing: 6000 KVA + 8000 KVA) and will be met from DGVCL. 2 Nos. DG set of 500 KVA capacities (Existing) & 3 Nos. of 2000 KVA (Propose) shall be used as standby during power failure. Stack (height 44 m) is provide as per CPCB norms to the DG sets of 2000 KVA which will be used as standby during power failure. Existing unit has (25 TPH) IBR Boiler –I Natural Gas, (6 TPH) Boiler–II Natural Gas, (16.5 TPH) Boiler–III Coal Based, Incinerator Natural Gas. Adequate Stack Height, E.S.P with Bag Filter + Water Scrubber & Venturi Scrubber, Droplet Separator, Demister pad is provided. Additionally, 25 TPH Coal Based Boiler – IV, 25 TPH Coal Based Boiler – V (Stand by) Steam boiler will be installed. E.S.P with Bag Filter + Water Scrubber Adequate stack height of 44 m is installing for controlling the Particulate emissions (within statutory limit of 150 mg/Nm3) respectively.

### **Details of Process emissions generation and its management.**

1) Flue Gas Stack

S. No.	Stack Attached To	Stack Height (Meter)	АРСМ	Fuel Name & Qty.	Pollutant	Permissible Limit
1.	IBR Boiler-1	42		NG: 17050	PM	150 mg/Nm <sup>3</sup>
	(Capacity - 25			Sm³/day	$SO_2$	100 ppm
	TPH) - Stand By				NO <sub>x</sub>	50 ppm
2.	Boiler- II	44		NG: 17050	PM	150 mg/Nm <sup>3</sup>
	(Capacity- 6			Sm <sup>3</sup> /day OR	$SO_2$	100 ppm
	TPH) &			FO/LDO: 3600	$NO_x$	50 ppm
	TURBINE- 2184			liter/day		
	KWA(Stand By)			,		
3.	Boiler-III	44	E.S.P, Bag	Coal:135	PM	150 mg/Nm <sup>3</sup>
	(Capacity- 16.5		Filter, Water	MT/day	SO <sub>2</sub>	100 ppm
4	TPH)	42	Scrubber	. ,	NO <sub>x</sub>	50 ppm
4.	Incinerator No-	42	Venturi		PM	150 mg/Nm <sup>3</sup>
	1		Scrubber,		$SO_2$	100 ppm
			Droplet Separator,	NG: 17050	$NO_x$	50 ppm
			Demister			
			pad			
5.	D G Set (500	11	High Stack		PM	150 mg/Nm <sup>3</sup>
	KVA) - 02 Nos.		provided for	Diesel-240	SO <sub>2</sub>	100 ppm
	(stand by)		more	Liter/Hrs.	$NO_x$	50 ppm
			dispersion	,		
			Proposed			
1.	Boiler - IV	44	E.S.P, Bag	Coal: 210	SPM	150 mg/Nm <sup>3</sup>
	(Capacity: 25		Filter,	MT/Day	$SO_2$	100 ppm
	TPH)		Water		$NO_x$	50 ppm
	,		Scrubber			
2.	Boiler - V	44	E.S.P, Bag	Coal: 210	SPM	150 mg/Nm <sup>3</sup>
	(Capacity: 25		Filter,	MT/Day	$SO_2$	100 ppm
	TPH) (		Water		$NO_x$	50 ppm
	Standby)		Scrubber			
3.	D G Set (2000	44	High Stack	Diesel-1120	SPM	150 mg/Nm <sup>3</sup>
	KVA) - 03 Nos.		provided for	Liter/Hrs.	SO <sub>2</sub>	100 ppm
	(stand by)		more		$NO_x$	50 ppm
			dispersion			

# **Process Stack**

Sr. No.	Stack Id /Stack Attached To	Name Of Process Plant	Air Pollution Control Measure (APCM)	Stack Height In Meter (From G.L.)	Parameter 8 Permissible Limit	&
1	39364- Coa	coal crusher stack	Bag Filter	30	PM- 15	0
	Mill	for Boiler			mg/Nm³	

2	43881 - Chloro- Sulphonation	Chlorosulphonator (Unit-II)	Alkali Scrubber,Water Scrubber	30	S0 <sub>2</sub> - 40 mg/Nm <sup>3</sup> HCl- 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
3	43882- Ammoniation	Ammonia Recovery (Unit-I)	Water Scrubber	30	NH <sub>3</sub> - 175 mg/Nm <sup>3</sup>
4	43883- Chlorination	HCl Scrubber(2) (Unit - III)	Alkali Scrubber,Water Scrubber	30	S0 <sub>2</sub> -40 mg/Nm <sup>3</sup> HCl-20 mg/Nm <sup>3</sup>
5	43884- Ammoniation	Amine Scrubber (Water+ HCl Scrubber)	Scrubber, Water Scrubber	30	NH <sub>3</sub> - 175 mg/Nm <sup>3</sup>
6	43885- Chlorination	COMMON JUMBO SCRUBBER-2NO (Unit- III)	Alkali Scrubber, Water Scrubber	30	HCI-20 mg/Nm <sup>3</sup>
7	43876- Chloro- Sulphonation	Chlorinator (unit- III)	Alkali Scrubber, Water Scrubber	30	HCl-20 mg/Nm <sup>3</sup> Cl <sub>2</sub> -9 mg/Nm <sup>3</sup>
8	43877- Ammoniation	AMMONIA RECO unit- 1&111	Scrubber, Water Scrubber	30	NH <sub>3</sub> - 175 mg/Nm <sup>3</sup>
9	43878- Chlorination	Chlorinator (unit-11)	Alkali Scrubber, Water Scrubber	30	HCl-20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
10	43879- Chlorination	Chlorination/ Bromination (Unit-H)	Alkali Scrubber, Water Scrubber	30	HCl-20 mg/Nm <sup>3</sup> HBr-30 mg/Nm <sup>3</sup>

# **PROPOSED**

S. No	Stack No	Pollutants	Air Pollution Control	Stack Height In	Parameter & Permissible Limit	
			Measure	Mt.		
			(Apcm)	(From G.L.)		
1	Process	HCI + CO2	Alkali + Water	30	HCI - 20 mg/Nm <sup>3</sup>	
	Stack -1		Scrubber			
2	Process	HCl + Cl2 +	Alkali + Water	30	HCI - 20 mg/Nm <sup>3</sup>	
	Stack -2	Mercaptant	+ Hypo		Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>	
			Scrubber		Mercaptant - 0.1 (by	
					volume) Ng/Nm³	
3	Process	Bromination	Alkali Scrubber	30	Bromine - 2 mg/Nm3	
	Stack -3					
4	Process	Ammonia	Water Scrubber	30	NH <sub>3</sub> - 175 mg/Nm <sup>3</sup>	
	Stack -4					
5	Process	Bromine	Alkali Scrubber	30	Bromine - 2 mg/Nm3	
	Stack -5					
6	Process	Mercaptant	Hypo Scrubber	30	Mercaptant - 0.1 (by	

	Stack -6				volume) Ng/Nm <sup>3</sup>
7	Process	HCl + Cl2	Alkali + Water	30	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
	Stack -7		Scrubber		HCl - 20 mg/Nm <sup>3</sup>
8	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -8		Scrubber		
9	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -9		Scrubber		
10	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -10		Scrubber		
11	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -11		Scrubber		
12	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -12		Scrubber		
13	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -13		Scrubber		
14	Process	HCI + CO2	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -14		Scrubber		
15	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -15		Scrubber		
16	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -16		Scrubber		
17	Process	Ammonia	Alkali + Water	30	NH <sub>3</sub> - 175 mg/Nm <sup>3</sup>
10	Stack -17	Scrubber	Scrubber		1101 20 (1) 3
18	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
10	Stack -18	LICI	Scrubber	20	11Cl 20 == 7/N==3
19	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
20	Stack -19	Chloring	Scrubber	20	Cl. Oma/Nm³
20	Process Stack -20	Chlorine	Alkali + Water Scrubber	30	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
21	Process	Vent gases	Alkali + Water	30	HCI - 20 mg/Nm <sup>3</sup>
21	Stack -21	Vent gases	Scrubber	30	HCI - 20 Hig/Nill
22	Process	HCl + CO2	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -22	1101 + 002	Scrubber	50	TICE 20 HIG/IVIII
23	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
23	Stack -23		Scrubber	30	1101 20 mg/ mm
24	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
'	Stack -24		Scrubber	30	20 1119/11111
25	Process	Ammonia	Water Scrubber	30	NH <sub>3</sub> - 175 mg/Nm <sup>3</sup>
	Stack -25				J
26	Process	HCI	Alkali + Water	30	HCl - 20 mg/Nm <sup>3</sup>
	Stack -26		Scrubber		<i>J,</i>
27	Process	Chlorine	Alkali + Water	30	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
	Stack -27		Scrubber		
<u> </u>	<u> </u>	<u>I</u>	1		1

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

16 Categories of Hazardous/Solid Wastes shall be generated from this Unit. Spent Solvent @ 1456 MT/Annum will be Collected, Stored, Transported and Sent to under

Rule – 9. Distillation Residue @ 1220 MT/Annum will be Collected, Stored, and Transported and disposed to CHWIF site or sell to cement industry.

Process waste/Residue containing acid, toxic metals, organic compound @ 1240 MT/Annum will be Collected, Stored and Transported and disposed to TSDF site/ Cement Industry. Spent Acid @ 5492.45 will be Collected, Stored, Transported and sent to under Rule – 9.

Spent Catalyst @ 85.6 will be Collected, Stored and Transported and sent to under Rule -9. Spent Solvent @ 5209 MT/Annum (Butyl acetate) Captive consumption within unit/Disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste.

Spent Solvent (Xylene, Dichloromethane, Hexane, Methanol, Toluene, Isoprene, DMF, EDC, Proponic Toluene, Picolin, Acetic acid) @ 52785 MT/Annum will be collected, stored and captive consumption or sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste. Spent Solvent (Isopropyl Alcohol) @ 9690.36 MT/Annum will be collected, stored and captive consumption or sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste.

Spent Solvent (Formic Acid) @ 1726 MT/Annum will be collected, stored and captive consumption or sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste. Empty Barrels/Containers /Bags/Liners contaminated with hazardous chemicals/waste @ 315 MT/Annum will be collected, stored & Transported to Disposal by send it to authorized decontamination facility/recycler or reuse or send back to supplier.

Chemical sludge from wastewater treatment (ETP Chemical Sludge) @ 9800 MT/Annum will be collected, stored & transported and disposed to nearest TSDF site. Chemical sludge from wastewater treatment (MEE Salt) @ 10000 MT/Annum will be collected, stored & transported and disposed to nearest TSDF site.

Incinerator Ash and flue gas cleaning residue @ 320 MT/Annum will be collected, stored & transported and disposed to nearest TSDF site. Used Oil @ 70 MT/Annum will be collected, stored and reuse in plant & machinery as lubricant or sell to authorized rerefiners/recyclers. Ammonia @ 5768 MT/Annum will be collected, stored, transported and Disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste.

Inorganic Acids (HBr in acetic acid, HBr Solution) @ 6852 MT/Annum will be collected, stored, transported and disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste. Inorganic Acids (NaBr Solution, Proponic Acid Solution) @ 4620 MT/Annum will be collected, stored, transported and disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste.

Inorganic Acids (AICL3 Solution (20 % to 22 %)) @ 8764 MT/Annum will be collected, stored, transported and Disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste. Metal Hydrogen Sulphates (NaHSO3) @ 2153 MT/Annum will be collected, stored, transported and disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste. Metal Hydrogen Sulphates (Inorganic Salt) @ 2121 MT/Annum will be collected, stored, transported and Disposal by sell out to authorized users who are having authorization with valid CCA and Rule-9 permission to receive this waste. Fly Ash @ 360 MT/Annum will be collected, stored & transported and send to brick manufacturer.

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the action plan and CER plan and found to be addressing the issues in the study area. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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 (EC).

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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (iii). PP have been granted permission for discharge of existing treated effluent of 176 KLD at FETP of M/s Narmada Clean Tech +50 KLD at CMEE of ACPTCL = Total 226 KLD and rest of the Treated effluent will be reused within the premises. The existing discharge will be sent to NCT (M/s. Narmada Clean Tech), Ankleshwar pipeline for deep sea disposal via FETP (Polishing CETP). Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture. Zero Liquid Discharge shall be ensured for expansion project within 3 years and no waste/treated water shall be discharged outside the premises.
- (iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (v). 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.
- (vi). 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.
- (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). Total fresh water requirement shall not exceed 1622 cum/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
  - (ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
  - (x). 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 ZLD, the unit shall

- install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xi). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xii). 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.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% 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.
- (xv). As committed by Project Proponent 0.5 MW solar power plant (green energy) shall be setup for operation of the Unit.
- (xvi). As committed by PP, Rs. 90 Lakhs shall be allocated for Corporate Environment Responsibility (CER) as per Ministry's OM dated 1st May 2018 & CPA OM dated 31.10.2019 and shall be utilized for meeting the commitment of public/local area issue. The CER plan shall be completed before expansion of the project. Preference shall be given to local villagers for employment in the unit.
- (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. 23.25**

Expansion in Manufacturing Capacity in Existing Chemical Intermediates at Plot No. 26/28 A, Cawasji Patel Street, Fort, Mumbai by M/s Benzo Chem Industries Pvt. Ltd- Reconsideration of Environment Clearance

### [IA/MH/IND2/103300/2019, IA-J-11011/175/2019-IA-II(I)]

The proposal was earlier considered by the EAC in its meeting held on 14-16 July, 2020. The EAC, during deliberations noted that the project proponent has not provided adequate information as desired by the EAC in its earlier meeting. The Committee is of the opinion that the strict action shall be taken against the Consultant for not providing correct information in the EIA report. The Ministry may take necessary action against the Consultant. The EAC, after detailed has asked first comply with the suggestions/observations of its decision, and for clarification/inputs, as under:-

S. No.	Clarifications / Inputs desired by EAC	Response by PP
i.	Detailed reply on EAC's comments, response and action plan.	Detailed reply on EACs observation has been submitted and presented before the Committee.
ii.	Opinion of the regulatory authority (ICMR, CDSCO, etc.) regarding manufacture of Pharmaceutical products and agrochemicals in the same premises shall be	As per the deliberations communication has been made with ICMR, CDSCO, FDA & ICT (UDCT) for their opinion.ICMR-NIOH has informed that this technical opinion is not in ICMR-NIOH purview.  Institute of Chemical Technology, Mumbai have opined that "The intermediates produced by Benzo Chem Industries Pvt. Ltd. can be produced at one site, as the
	submitted within 3 months.	same do not have any specific activity like an API or Agrochemical, as they are devoid of all active functional groups. The intermediates have insignificant structural elements compared with active molecule".
iii.	Detailed layout plan.	Detailed layout plan has been submitted complying TORs, Green belt of 33% of the total area, demarcated Storage of Finished goods, Raw Materials, Hazardous chemicals and Hazardous waste etc., location of APC, Parking, Internal roads of adequate width, Emergency gates, Storm water drainage requirements, Safety aspects etc.
iv.	Safety and Risk assessment study.	The Quantitative Risk Assessment is carried out for the storage of flammable and toxic chemicals; suitable recommendations are addressed in the EIA report accordingly; The HAZOP study has been carried out, the recommendations of which are also addressed and followed in the manufacturing operations. Also, Onsite & Offsite Emergency Management Plan is prepared

	complying the requirements of Factories Act & MSIHC
	Rules, 1989.

The Project Proponent and the accredited Consultant M/s Sadekar Enviro Engineers Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of Pharmaceuticals, Speciality and Agrochemical intermediates manufacturing from 58 TPM to 230 TPM at Plot No. B-26,27 & B-14,15, Malkapur MIDC, Dasarkhed, Taluka: Malkapur, District: Buldhana, Maharashtra by M/s Benzo Chem Industries Pvt Ltd.

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' and item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR has been issued by Ministry vide letter dated 18 June 2019. Public hearing is exempted as the project site is located in the notified Industrial area. It is reported that no Litigation is Pending against the proposal.

The details of products and capacity as under:

S.	Product	Existing	Proposed	Total
No.		(TPM)	(TPM)	(TPM)
1	Agrochemical Intermediate:	35	102	137
	Existing:			
	2,5 Di Methyl Phenyl Acetyl Chloride,			
	2,4 Di Chloro Benzaldehyde,			
	Ortho Chloro Phenyl Acetic Acid,			
	• 2,4,6 Tri Methyl Phenyl Acetyl			
	Chloride,			
	Para Chloro Phenyl Acetic Acid,			
	2,4 Di Chloro Phenyl Acetic Acid,			
	Para Chloro Benzyl Cyanide,			
	2,4 Di Chloro Phenyl Acetyl Chloride,			
	Para Chloro Benzo Tri Chloride,			
	Para Chloro Benzyl Chloride,			
	Ortho Methyl Benzyl Chloride,			
	2,5 Di Methyl Phenyl Acetic Acid,			
	Proposed:			
	• Isopropyl (4-Chlorophenyl) acetyl			
	chloride (CPIC),			
	1-Napthyl Acetonitrile,			
	• a,a,a',a' Tetra Chloro Ortho Xylene			
	• Para Chloro a-isopropyl Phenyl Acetic			
	Acid (CPIA)			
	• Para Chloro Benzyl Cyanide 75%			

	Solution in N-Butyl Acetate,			
2	Pharmaceutical Intermediates:	20	60	80
	Existing:			
	Para Chloro Benzaldehyde,			
	<ul> <li>Meta Chloro Benzyl Chloride;</li> </ul>			
	Meta Chloro Benzyl Cyanide,			
	Meta Chloro Phenyl Acetic Acid,			
	Meta Chloro Benzaldehyde,			
	• 2,4 Di Chloro Benzyl Cyanide;			
	• 2,4 Di Chloro Benzyl Chloride,			
	Ortho Methyl Benzyl Cyanide,			
	Ortho Methyl Phenyl Acetic Acid,			
	Ortho Chloro Benzyl Chloride,			
	Ortho Chloro Benzyl Cyanide,			
	Ortho Chloro Benzaldehyde,			
	Methyl 2-Chloro Phenyl Acetate,			
	Proposed:			
	2-Phenyl Acetyl Chloride,			
	2-Bromo Benzyl Cyanide,			
	4-Bromo Benzyl Cyanide			
	3,4 Di Chloro Benzyl Cyanide			
	Para Methyl Benzyl Chloride			
	Para Methyl Benzyl Cyanide			
	Para Methyl Phenyl Acetic Acid			
3	<b>Speciality Chemical Intermediate:</b>	3	10	13
	Existing:			
	Benzaldehyde 2,4 Di Sulphonic Acid			
	Di Sodium Salt (Powder),			
	Benzaldehyde 2,4 Di Sulphonic Acid			
	Di Sodium Salt (Liquid),			
	Benzaldehyde Ortho Sulphonic Acid			
	Sodium Salt			
	Proposed:			
	Ortho Anisoyl Chloride 75% Solution			
	in Ethylene Dichloride,			
	aa Di Chloro Para Xylene,			
	Para Hydroxy Benzaldehyde			
	Total	58	172	230

Existing land area is 33350 m², no additional land will be required for proposed expansion. Industry has already developed 3340 m²and will develop remaining greenbelt area of 7679 m²To make 33% i.e., 11019 m² out of total area of the project. The estimated project cost is Rs. 28.22 Crore including existing investment of Rs. 16.22 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 5.35 Crore and the Recurring cost (operation and maintenance) will be about Rs. 1.09 Crore per annum. Total Employment will be 242 Nos. persons after expansion. Industry proposes to allocate Rs. 12 Lakhs @ 1 % of the project cost towards Corporate Environmental 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/water body Purna River is flowing at a distance of 4.24 km in North direction.

Additional Ambient air quality monitoring was carried out at 8 locations during  $1^{st}$  February 2020 to  $15^{th}$  March 2020 and the baseline data indicates the ranges of concentrations as: PM10 (55.7 to89.0 µg/m³), PM2.5 (20.0 to 55.0 µg/m³), SO2 (14.3 to  $38.0\mu g/m³$ ) and NO2 (17.3 to  $52.7\mu g/m³$ ). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be  $5.67\mu g/m³$ ,  $4.6 \mu g/m³$  and  $1.074\mu g/m³$  with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 424.9 m³/day of which fresh water requirement of 220.9 m³/day will be met from Malkapur M.I.D.C. water supply. Effluent of 69.7 CMD quantity will be treated through ETP, MEE, Stripper & RO; 64 CMD will be reused. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 1000 KVA including existing 800 KVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Existing unit has 1 DG set of 380 KVA capacity which will be replaced & DG set of 1000 KVA will be set up and to be used as standby during power failure after expansion. Stack of height 7.0 m will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 6 TPH Coal/Agro waste fired boiler&6.0 Lakh Kilo Calorie/Hr Thermic Fluid Heater. Additionally,10 TPH Coal/Agro waste fired boiler & 6.0 Lakh Kilo Calorie/Hr Coal/Agro wastefired&2 Lakh Kilo Calorie/Hr LSHS fired Thermic Fluid Heaters will be installed. Multi cyclone separator& bag filter with a stack of height of 30.5 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers & Stack of 11 m height will be provided along with Bag filter& Oil/air pre heater to maintain emission concentrations within the statutory limit of 150 mg/Nm3 for the proposed thermic fluid heaters.

Gases and vapors from manufacturing process are identified source of emission, which will be passed through 2 Nos. of existing scrubbers (HCL/Cl2& Ammonia). Additional 1 No. of scrubber (HBr) will be installed to mitigate the process emissions from expansion activity. The scrubbed gases from manufacturing process will be released through 3 stacks each with a 12 meter height.

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

#### **Details of Hazardous waste:**

Type of waste	Category	UOM	Qua	Quantity (MT/A)		
	of HW		Existing	Proposed	Total	Disposal
Distillation Residue	20.3	MT/A	6	210	216	CHWTSDF
Chemical Sludge	35.3	MT/A	6	30	36	CHWTSDF
From Waste Water						
Treatment						

Evaporation	37.3	MT/A	-	840	840	CHWTSDF
Residue						
Waste Oil	5.1	MT/A	-	0.24	0.24	Authorised
						recycler
						/CHWTSDF
Empty Containers/	33.1	MT/A	-	11.52	11.52	Authorised
Barrels						recycler
						/CHWTSDF
Spent Solvent	20.2	MT/A	-	36	36	CHWTSDF
Contaminated	33.2	MT/A	-	0.12	0.12	CHWTSDF
Cotton Rags or						
Other Cleaning						
Material						

## **Details of E Waste:**

Particulars	E Waste	Existin	Propose	Total	Method of
	Categor	g	d		Disposal
	У		Kg/A		
Personal Computers (Central	ITEW2		40	40	Sale to
Processing Unit with input and					MPCB
output devices)					authorised
Personal Computing: Laptop	ITEW3		20	20	recycler /
Computers					returned
(Central Processing Unit with input					to
and output devices)					manufactu
Printers including cartridges	ITEW6		20	20	rer /
Telephones	ITEW12		10	10	supplier

## **Details of Battery Waste:**

Particulars	Battery waste Category	Existin g	Proposed Kg/A	Total	Method of Disposal			
Lead batteries from D.G. Sets, UPS			30 Nos./A	30 Nos./A	Returned to supplier			
system					Supplier			

# **Details of Bio Medical Waste:**

Particulars	BMW	Existing	Proposed	Total	Disposal
	Category				Method
Soiled waste – Used masks.	Yellow		1.0 T/A	1.0	Disposal to
(Items contaminated with				T/A	CBMWTF/MPCB
blood, body fluids like					authorized
dressings, plaster casts,					processor
cotton swabs and bags					
containing residual or					
discarded blood and blood					
components)					

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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has considered the opinion of Institute of Chemical Technology, Mumbai that the intermediates of API and agrochemical can be produced at the same site. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

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) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.

- Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii) 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.
- (iv) The storage of toxic/explosive raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (v) Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (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) Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xi) Total fresh water requirement shall not exceed 220.9 cum/day proposed to be met from Malkapur MIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority.

- (xii) Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xiii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of byproducts 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.
- (xiv) 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.
- (xv) As committed, project proponent allocated Rs. 12 Lakhs for Corporate Environment Responsibility (CER) as per the Ministry's OM dated 01.05.2018, and shall be utilized properly to address the socio-economic and environmental issues in the study area. The CER plan shall be completed within three year of commissioning of expansion project.
- (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. 23.26

Setting up of 3 KLPD (10 %) Cellulosic non-food biomass (Agri waste) based modular Demo Pilot Plant for R&D purpose within premises of existing Molasses Distillery by M/s Shreenath Mhaskoba Sakhar Karkhana Ltd., located at Meghdoot Building 2nd Floor, Behind Bharat Petrol Pump, Opp Akashwani Centre Hadapsar, Pune, Maharashtra

#### [IA/MH/IND2/166938/2020, J- 11011/189/2016- IA II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter J- 11011/189/2016- IA II(I) dated 11 May 2017 for the project 3 KLPD (10 %) Cellulosic non food biomass (Agri waste) based modular Demo Pilot Plant" for R&D purpose within premises of existing molasses distillery located at Patethan Post- Rahu, Tal. Daund, Dist. Pune, Maharashtra in favor of M/s Shreenath Mhaskoba Sakhar Karkhana Ltd.

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

S.	Para of EC	Details as per	To be revised/	Justification/	
No.	issued by	the EC	read as	reasons	
	MoEF&CC				
1	On Page 3	No additional	Biomass/biogas	The required steam	
	A Specific	boiler shall be	based 2 TPH	for the said plant is	
	condition: Point	used for the	boiler will be	fulfilled from sugar	
	No. i	proposed	installed with	unit, which is a	
		demonstration	adequate air	seasonal operating	
		plant	pollution control	industry. Hence. to	
			equipment	fulfill the	
				requirement of	
				steam during off	
				season of sugar	
				crushing, a 2 TPH	
				biomass/biogas	
				based boiler is	
				proposed	

The EAC during deliberations noted that the proposal submitted by the project proponent for installation of biomass/biogas fired boiler of 2 TPH capacity is necessitated due to the non-availability of steam during the off season of sugar crushing and is justified.

The Committee after detailed deliberations has **recommended** for amendment in the EC to install biomass/biogas fired bailer of 2 TPH capacity along with adequate air pollution control equipment, all others terms and conditions remain unchanged.

## Agenda No.23.27

Consideration of Environmental Clearance 23.27 Proposed Expansion of Dyes and Dyes Intermediates (12917.5 MT/Month to 20708 MT/Month) in Existing Manufacturing Unit at GIDC ESTATE, SACHIN, DIST: SURAT (Gujarat) by M/s COLOURTEX INDUSTRIES PRIVATE LIMITED - Consideration of Environment Clearance-reg.

## [IA/GJ/IND2/166971/2017,]

PP informed EAC that there is some error in application. PP will revise and resubmit the application. The Committee, after deliberations, decided to **RETURN** the proposal in its present form based on the request of PP.

#### 23.28: Any other Items with permission of the Chair

#### Agenda No. 23.28.1:

Enhancement of production of Stable Bleaching Powder by M/s Siel Chemical Complex (Unit of Mawana Sugar Ltd) located at Village Khadaui, Sardagarh, Rajpura Tehsil, District Patiala (Punjab).

The project proponent made a detailed presentation of the project and informed that:

The Siel Chemical Complex, a Unit of Mawana Sugars Ltd (Formerly known as Siel Limited) has been operating a Chlor-Alkali Plant at village Khadauli, Sardargarh, Tehsil Rajpura District Patiala, Punjab since 1999. The Environmental Clearance was obtained from MoEF&CC vide letter no. 11011/62/96-IA-II dated 17.01.1997, under EIA Notification 1994 for manufacturing of the following products:

S.No.	Product	Capacity
1	Caustic Soda (Flakes+ Lye-100%)	82,500 TPA
2	Chlorine	73,095 TPA
3	Stable Bleaching Powder	18,000 TPA
4	Hydrogen	2,062.5 TPA
5	Hydrochloric Acid (32%)	66,000 TPA
6	Sodium Hypochlorite ( By-Product)	8,250 TPA

The plant was setup after obtaining Environment Clearance and this Unit is under operation since 1<sup>st</sup> February 1999. The year wise production of all products since starting of Siel Chemical Complex to till date is within permitted limit as stipulated in Environment clearance.

In view of COVID-19 Pandemic situation, there is a high demand of Stable Bleaching Powder (SBP), for which currently the production limitation is 18,000 TPA. SBP manufacturing involves chlorination of hydrated lime, which is a basic inorganic chemical product and is not covered in the EIA Notification, 2006 as a standalone product.

The raw materials for the production of Stable Bleaching Powder are hydrated lime and Chlorine. The hydrated lime is procured from Rajasthan & Himachal Pradesh. The chlorine will be utilised from existing cholor-alkali plant chlorine, the chlorine utilisation is always a constraint in achieving licence capacity of plant.

To meet the current market demand in view of COVID Pandemic situation, Siel Chemical Complex is intend to enhance SBP production from existing 18,000 TPA to 24,000 TPA. The enhancement of production of SBP will help in gainful utilization of chlorine as well as help in curbing the prevailing COVID-19 Pandemic situation.

The production of SBP as a standalone activity is not covered under the EIA Notification, 2006; however, the Environmental Clearance obtained included SBP as one of the products by gainful utilization of by-product chlorine of Chlor-Alkali Plant. M/s Siel Chemical Complex has requested for clarification on the requirement and applicability of prior environmental clearance for enhancement of production of Stable Bleaching Powder.

The EAC during deliberations noted that the Ministry has granted environmental clearance vide letter dated 17<sup>th</sup> January, 1997 to the existing unit of M/s Seil Ltd to the project for production of Chlor-Alkali of capacity 250 TPD, with the products as detailed above including Stable Bleaching Powder. It was informed that Stable Bleaching Powder, as a standalone product being an inorganic chemical is not covered under the ambit of the EIA Notification, 2006 requiring prior environmental clearance for its operations. The Committee noted that there is no increase in production of Chlor-Alkali production.

The Committee after detailed deliberations has recommended that increase of production of Stable Bleaching Powder from 18,000 TPA to 24,000 TPA does not require prior environmental clearance for its operations as per the provisions contained in the EIA Notification, 2006. The Committee has suggested that the PP shall obtain CTE/CTO from the State Pollution Control Board for the proposed project, as applicable.

#### Agenda No.23.28.2

Clarification for applicability of Environment Clearance in continuation of CTE Amendment for regularization of pilot plant, change in boiler capacities & additional Process Vents in respect of M/s Firmenich Aromatics Production (India) Pvt Ltd located at Plot No.Z-10, Dahej SEZ, Dahej, Taluka Vagra, District Bharuch, Gujarat – regarding.

The project proponent made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for clarification on applicability of Environment Clearance in continuation of CTE Amendment for regularization of pilot plant, change in boiler capacities & additional Process Vents in respect of M/s Firmenich Aromatics Production (India) Pvt Ltd located at Plot No.Z-10, Dahej SEZ, Dahej, Taluka Vagra, District Bharuch, Gujarat.

The project proponent has requested for clarification with the details as under:

S.	Purpose of	Technical details for	Justification/ Reasons by PP
No.	Application	non-applicability of EC	
1	Regarding	PP have applied for	Proposal Details/Amendments is
	Non –	Consent to Establish (CTE)	given below;
	Applicability	Amendment Application at	
	of EC for	Gujarat Pollution Control	Pilot Plant:
	Regularization	Board (GPCB) for	Pilot plant is being /shall be used for
	of Pilot Plant,	Regularization of Pilot	process improvement, improve
	Change in	Plant, Change in Boiler	quality of yield, reduce waste,
	Boiler	Capacities, Additional	reduce process time & reduce carbon
	Capacities &	Process Vents (9 Nos.)	foot print of products for which we
	Additional		have approval. With this application
	Process Vents	And	we would like to regularize pilot
			plant for production without change

Also, as per MoEF&CC, New Delhi letter F. No. J-11012/22/1996-IA-II(I) dated 5<sup>th</sup> November, 2019 for manufacturing 60 KLPD of Alcohol at Kotputli, Jaipur, Rajasthan,

EC is Not Applicable for afore-said proposal/amendments.

in total production volume.

## **Change in Boiler Capacities**

In existing scenario, 30 TPH steam is generated with existing three boilers of capacity 10 TPH F&A 30°C, now PP want to change capacity of existing boilers and new capacities will be 12 TPH F&A 100 °Cx 2 Nos. and 7.5 TPH x 1 No. With this changed boiler capacities, total steam generation quantity will not exceed and will remain same as existing i.e. 30 TPH as per permitted in Environmental Clearance (EC) as well as in CC&A and subsequent Amendments.

Additional Process Vents (09 Nos.)

The EAC noted that the project proponent indent to seek clarification on Pilot Plant for production without any change in total production capacity. The Committee noted that the PP after detailed engineering found that the boiler capacities need to be changed and also additional process vents need to be added.

The Committee, after detailed deliberations, is of the view that such changes does not require prior environmental clearance or amendment in the EC. The Committee has also **recommended** that the PP shall obtain CTE/CTO from the State Pollution Control Board for the proposed project, as applicable.

#### **Agenda No.23.28.3**

Clarification for applicability of Environment Clearance under EIA Notification, 2006 for manufacturing of Nano fertilizers in respect of M/s Indian Farmers Fertiliser Cooperative Limited, Kalol Gujarat - regarding.

The project proponent made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for seeking clarification on applicability of Environment Clearance under EIA Notification, 2006 for manufacturing of Nano fertilizers in respect of M/s Indian Farmers Fertiliser Cooperative Limited, Kalol Gujarat.

The EAC after details deliberation observed that the final product is chemical product and shall require prior environmental clearance for its operations. The project proponent has argued that the nano fertilizer is most technologically advanced fertilizer having no emissions during process and more environmentally friendly. The committee has suggested that PP shall get clarification from Ministry of Chemicals and

Fertilizers/Ministry of Agriculture & Farmers Welfare regarding difference on chemical and nano fertilizer.

The Committee has suggested that the project proponent may obtain prior environmental clearance under provisions of the EIA Notification, 2006; However, considering the submissions of the PP, the Committee desired that the PP submit requisite information on the nano-fertilizer and clarity from the concerned Departments.

## **Agenda No.23.28.4**

Clarification for applicability of Environmental Clearance in continuation of CCA Amendment application (additional Spray Dryer) in respect of M/s Coromandel International Ltd. located at Plot No. Z-10, Dahej SEZ, Dahej, Taluka Vagra, District Bharuch, Gujarat - regarding.

The project proponent made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for clarification on applicability of Environmental Clearance in continuation of CCA Amendment application (additional Spray Dryer) in respect of M/s Coromandel International Ltd. located at Plot No. Z-10, Dahej SEZ, Dahej, Taluka Vagra, District Bharuch, Gujarat.

The project proponent has requested for Non-Applicability in the EC with the details as under:

<b>Purpose of</b>	Technical details for non-	Justification/ Reasons by PP
Application	applicability of EC	
Regarding	PP have applied CTE	To avoid chocking in MEE, it requires
Non –	Amendment application at	drain and hot water dilution every three
Applicability	Gujarat Pollution Control	to four days every 12 hours. Considering
of EC	Board (GPCB) for propose	this the MEE stops 36 hours every week.
	additional optional mode of	Additionally, the MEE also requires jet
	disposal of Concentrated/High	cleaning on monthly basis to remove
	TDS stream of Industrial	salt deposition in tubes which requires 4
	effluent from process (152	to 5 days MEE shutdown and this all
	KL/day) at common MEE	activities and shut down time effect
	Facilities of M/s. Detox India	production activity at frequent interval.
	Pvt. Ltd. at Ankleshwar or	
	M/s. BEIL Infrastructure Ltd.,	Therefore, PP have proposed/applied
	Dahej for further treatment	only for "Additional optional mode of
	and disposal in case of non-	disposal of concentrated/ high TDS
	operation of in-house MEE or	stream of industrial effluent from
	during maintenance/ scaling	process (152 KL/Day) at common MEE
	of in-house MEE.	Facilities of M/s. Detox India Pvt. Ltd. at
		Ankleshwar or M/s. BEIL Infrastructure
	And	Ltd., Dahej for further treatment and
		disposal in case of non-operation of in-

Also, as per MoEF&CC, N	ew	house	MEE	or	during	ma	intenand	:e/
Delhi letter F. No.	J-	scaling	of in-	-hous	e MEE	for	continuo	us
11012/22/1996-IA-II(I) dat	ed	product	ion ac	tivity	″			
5 <sup>th</sup> November, 2019	for							
manufacturing 60 KLPD	of							
Alcohol at Kotputli, Jaip								
Rajasthan,	,							
,								
EC is Not Applicable for afor	re-							
said proposal/amendments.								
1 1 ,								

The EAC was informed by the project proponent that they would like to add optional mode of disposal of concentrated/ High TDS stream of industrial effluent from process (152 KL/Day) at common MEE Facilities of M/s. Detox India Pvt. Ltd. at Ankleshwar or M/s. BEIL Infrastructure Ltd., Dahej for further treatment and disposal in case of non-operation of in-house MEE or during maintenance/ scaling of in-house MEE for continuous production activity.

It has informed to the Committee that there is lack of clarity on the availability of environmental clearance for the existing operations. As per the details submitted by the PP, it was indented to treat/discharge the effluent outside the premises and such activities require amendment in the EC. If the unit is not attracting the provisions of the EIA Notification, 2006, then PP shall obtain CTO from the SPCB.

The Committee, after detailed deliberations, is of the view that the proposed changes does not require Environmental Clearance under the provisions of the EIA Notification, 2006 and accepted the request of PP.

The meeting ended with thanks to the Chair.

\*\*\*\*

### **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 socioeconomic 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 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the

- status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

\*\*\*

# **Annexure-I**

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

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Shri R. K. Singh	Member
3.	Shri Ashok Agarwal	Member
4.	Shri S.C. Mann	Member
5.	Dr. Y.V. Rami Reddy	Member
6.	Dr. T. K. Joshi	Member
7.	Dr. J. S. Sharma	Member
8.	Dr. T. Indrasena Reddy	Member
9.	Shri Dinabandhu Gouda, CPCB	Member
10.	Sh. Sanjay Bist, IMD	Member
11.	Dr. R. B. Lal,	Member
	Scientist `E'/Additional Director, MoEFCC	Secretary
MoEFC	CC	
12.	Dr. M. Phulwaria	Scientist `C'
13.	Dr. E.P. Nobi	Research Officer
14.	Mr Ritin Raj	Research Assistant

\*\*\*\*

## **Approval of EAC Chairman**

Email rb.lal@nic.in

Re: Draft Minutes of the 23rd EAC (Industry 2 Chemical Sector) meeting held during September 15-17, 2020 (through Video Conferencing)

From:jpglobalconsultinggroup@gmail.com

Mon, Sep 28, 2020 03:12 PM

Subject : Re: Draft Minutes of the 23rd EAC (Industry 2 Chemical Sector) meeting held during September 15-17, 2020 (through Video Conferencing)

To: Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>

Dear Dr R B Lal,

The draft minutes stand approved.

Regards Dr J P Gupta