GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (IA DIVISION-INDUSTRY-3 SECTOR)

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Dated: 30.07.2021

MINUTES OF THE 14th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR) MEETING HELD DURING JULY 22-23, 2021

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

Time: 10:30 AM onwards

DAY 1 - 22nd JULY, 2021 (THURSDAY)

(i) Opening Remarks by the Chairman

Prof. (Dr.) A.B. Pandit, Chairman EAC welcomed the Committee members and opened the EAC meeting for further deliberations.

Prof. Pandit also appreciated the efforts of the Ministry's Team (Industry 3 Sector) for preparation and uploading the agenda of the EAC meetings very systematically and timely on Parivesh Portal.

(ii) Details of Proposals and Agenda by the Member Secretary

Dr. R. B. Lal, Scientist 'E' & Member Secretary, EAC appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting.

(iii) Confirmation of the Minutes of the 13th Meeting of the EAC (Industry-3 Sector) held during July 1-2, 2021 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-3 Sector) members on the minutes of its **13th Meeting of the EAC (Industry-3) held on July 1-2, 2021** conducted through Video Conferencing (VC), and as such one request has been received for modifications, in the minutes of the project/activities, **confirmed the same with following typographical corrections.**

Correction in the minutes of the EAC meeting

(a) Agenda No. 13.1 of the EAC Meeting held on July 1-2, 2021

Expansion in Nirma Chemical complex by M/s Nirma Limited, located at Village Kalatalav, Taluka Bhavnagar, District- Bhavnagar, Gujarat-Consideration of Environmental & CRZ Clearances

[Proposal No.: IA/GJ/IND3/215076/2014; File No. J-11011/369/2014-IA-II(I)]

The proposal for Environmental & CRZ Clearance to the project for Expansion in Nirma Chemical Complex located at Village Kalatalav, Taluka & District Bhavnagar, Gujarat by M/s Nirma Limited has been recommended by the EAC (Industry-3) in its meeting held on 1-2 July, 2021.

The project proponent has requested for modifications/corrections in the minutes of the meeting as under:

S. No.	As per Minutes of the EAC held on 1-2 July, 2021	Revision sought	Reason / Explanation / Remarks
1	Para 02 (Page 6 of 102 of Minutes): The project proponent had earlier obtained CRZ Clearances vide Letters no. Env-1099-1740- P1 dated 19.08.2000 & Env-10-1099-1371-P dated 21.07.2010 from DoEF for Laying of Treated effluent disposal pipeline for Soda Ash Plant, vide Letters no. J-16011/25/2003-IA-III dated 11.08.2004 from MoEF and Env-10-2003-54-P dated 24.09.2004 from DoEF for development of Salt works and Disposal of Bittern.	The project proponent had earlier obtained CRZ Clearances vide Letters no., ***Env-1098-1122-P dated 14.10.1998 for Seawater intake & cooling water return pipeline*** Env-1099-1740-P1 dated 19.08.2000 & Env-10-1099-1371-P dated 21.07.2010 from DoEF for Laying of Treated effluent disposal pipeline for Soda Ash Plant, vide Letters no. J-16011/25/2003-IA-III dated 11.08.2004 from MoEF and Env-10-2003-54-P dated 24.09.2004 from DoEF for development of Salt works and Disposal of Bittern.	The details on one of the earlier CRZ clearance (letter no. Env-1098-1122-P dated 14.10.1998) have been missed in brief summary. Same has been reflected in MoM of 13th EAC meeting on page no. 14 of 102 under deliberation of the committee. Therefore, PP request to include the same under earlier CRZ clearances on page no. 6. The same details were included in EIA report & Form-2 submitted online and earlier CRZ clearance submitted to EAC.

2	Para 05 (Page 7 of 102 of Minutes): Existing unit has permission for 1500 TPH Coal/Petcoke/Lignite fired boilers, out of which 1,010 TPH Coal/Petcoke/Lignite fired boilers are in operation. Balance existing capacity of 490 TPH along with proposed **510 TPH** Coal/Petcoke/Lignite fired boilers will be installed. ESPs with a stack of height of 121 m will be installed for controlling the particulate emissions within the statutory limits for the proposed boilers.	Existing unit has permission for 1500 TPH Coal/Petcoke/Lignite fired boilers, out of which 1,010 TPH Coal/Petcoke/Lignite fired boilers are in operation. Balance existing capacity of 490 TPH along with proposed ***540 TPH*** Coal/Petcoke/Lignite fired boilers will be installed. ESPs with a stack of height of 121 m will be installed for controlling the particulate emissions within the statutory limits for the proposed boilers.	It was a typographical error by PP. The correct details in tabular form of flue gas stacks details, s. no. 8 under the title of caustic soda & cogeneration plant in section xv. of Brief summary (Annexure-I).
3	Para 04 (Page 14 of 102 of Minutes): The Committee noted that the Ministry had issued EC earlier vide letter dated 24th June, 2008, 8th August, 2014 and 10th March, 2017 for the existing projects in the complex. The Committee also noted that the project proponent had obtained CRZ Clearances earlier vide letters dated 14th October, 1988; 19th August, 2000; 24th September, 2004 and 21st July, 2010 (amendment) from the Forest and Environment Department, Government of Gujarat and vide letters dated 11th August, 2004 from the Ministry for the project/activities in the CRZ area. The certified Compliance Report of existing ECs forwarded by	The Committee noted that the Ministry had issued EC earlier vide letter dated 24th June, 2008, 8th August, 2014 and 10th March, 2017 for the existing projects in the complex. The Committee also noted that the project proponent had obtained CRZ Clearances earlier vide letters dated 14th October, 1998; 19th August, 2000; 24th September, 2004 and 21st July, 2010 (amendment) from the Forest and Environment Department, Government of Gujarat and vide letters dated 11th August, 2004 from the Ministry for the project/activities in the CRZ area. The certified Compliance Report of existing ECs forwarded by the Ministry's IRO, Bhopal vide letter dated 4th October, 2018 after conducting site	Typographical correction is required for the earlier CRZ clearance letter dtd 14th October, 1998 instead of 14th October, 1988.

	the Ministry's IRO, Bhopal vide letter dated 4th October, 2018 after conducting site visit on 15th July, 2018 was found to be satisfactory. The Committee also deliberated on the latest six monthly compliance report submitted by the project proponent and found to be satisfactory	visit on 15th July, 2018 was found to be satisfactory. The Committee also deliberated on the latest six monthly compliance report submitted by the project proponent and found to be satisfactory.	
4	Para 01 (Page 15 of 102 of Minutes): The Committee noted that the Forest and Environment Department, Government of Gujarat vide letter dated 25th February, 2021 has recommended for CRZ clearance to the project for 'Seawater intake and treated effluent discharge pipelines for the proposed expansion in Nirma Chemical complex at Village Kalatalav, Taluka and District Bhavnagar', based on the decisions taken in the 54th meeting of the Gujarat Coastal Zone Management Authority held on **27th January, 2020,** as per the provisions contained in the CRZ Notification, 2011. The comments of the concerned sector in the Ministry has also been obtained on the CRZ angle. The Member Secretary, EAC (CRZ) was also attended the meeting and provided comments.	The Committee noted that the Forest and Environment Department, Government of Gujarat vide letter dated 25th February, 2021 has recommended for CRZ clearance to the project for 'Seawater intake and treated effluent discharge pipelines for the proposed expansion in Nirma Chemical complex at Village Kalatalav, Taluka and District Bhavnagar', based on the decisions taken in the 54th meeting of the Gujarat Coastal Zone Management Authority held on ***27th January, 2021*****,** as per the provisions contained in the CRZ Notification, 2011. The comments of the concerned sector in the Ministry has also been obtained on the CRZ angle. The Member Secretary, EAC (CRZ) was also attended the meeting and provided comments.	With reference to GCZMA recommendation letter, on page no. 5, in the last para , 54th meeting of GCZMA was held on 27th January, 2021.

Deliberations in the EAC:

The Committee made deliberations on the proposal. The Committee also sought affirmation from the project proponent regarding pipeline route in the forest area and mangrove afforestation. The Member Secretary informed the Committee that the project proponent has submitted several letters/Emails for modification/correction in the Minutes of the Meeting. The project proponent has informed the Committee that earlier request letters/Email dated 10.7.2021, 12.7.2021, 15.7.2021 may be treated as withdrawn and the presentation and letter dated 22.07.2021 may be considered for appraisal.

The Committee noted that the project proponent has confirmed and submitted an undertaking with letter dated 22.07.2021 stating that no forest land is involved in the proposed project and the land is Government wasteland. The project proponent also confirmed that they shall be undertaking compensatory mangrove afforestation over an area of 5 ha as recommended by GCZMA in consultation with the Forest Department within one year from commencement of the project.

The Committee, after detailed deliberations, **recommended** for the requested corrections in the minutes of the meeting, as the proposed **corrections pertains to typographical errors** and reiterated its recommendation for environmental and CRZ clearance as per minutes of the meeting held on 1-2 July, 2021.

The EAC confirmed the minutes with above typographical corrections.

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:-

Consideration of Environmental Clearances

Agenda No.14.1

Setting up of Bulk Drugs & Drug Intermediates manufacture unit of capacity 26.475 TPM located at Plot No. 290, Kadechur Industria Area, Kadechur Village, Yadgir, Karnatak by M/s Vidgas Science & Technologies Pvt. Ltd., -Consideration of EC

[Proposal No.: IA/KA/IND3/217809/2021; File No. IA-J-11011/198/2021-IA-II(I)]

The project proponent and the accredited consultant M/s. Rightsource Industrial Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for grant of environmental clearance (EC) to the proposed project for setting up of Bulk Drugs & Drug Intermediates manufacture unit located at Plot No. 290, Kadechur Industria Area, Kadechur Village, Yadgir, Karnatak by M/s Vidgas Science & Technologies Pvt. Ltd.

The details of products and capacity as under:

S. No.	Product Name	Quantity in TPM	CAS No	Therapeutic Use
1	(5-Bromo-2-Chloro-Pyrimidin-4-Yl)-Cyclopentyl-Amine)	0.60	733039-20-8	Palbociclib Intermediate
2	2,4-Dichloro-Pyrimidine	1.00	3934-20-1	Pazopanib intermediate
3	2-Chloro-8-Cyclopentyl-5-Methyl-8h-Pyrido[2,3-D]Pyrimidin-7-One	0.50	1013916-37-4	Palbociclib Intermediate
4	5-Amino-2-Methyl-Benzene sulfonamide	1.00	6973-09-7	Pazopanib Intermediate
5	6-Bromo-2-Chloro-8-Cyclopentyl-5-Methyl-8h-Pyrido[2,3-D] Pyrimidin-7-One	0.50	1016636-76-***2***	Palbociclib Intermediate
6	Allopurinol	2.00	315-30-0	Used to decrease high blood uric acid levels
7	Apixaban	1.00	503612-47-3	Used to treat thrombosis
8	Bimatoprost	0.25	155206-00-1	used to treat glaucoma
9	Brivaracetam	1.00	357336-20-0	Anti-convulsant
10	Carboprost	0.25	58551-69-2	used to treat severe bleeding
11	Ethyl 4-(2-Hydroxypropan-2-Yl)-2-Propyl-1h-Imidazole-5-Carboxylate	1.00	144689-93-0	Olmesartan Intermediate
12	Guggulosterone	1.00	39025-24-6	Used for control of blood cholesterol
13	(Ibrutinib Intermediate) 3-(4-Phenoxy-Phenyl)-1h-Pyrazolo [3,4-D] Pyrimidin-4-Ylamine	1.00	330786-24-8	Ibrutinib Intermediate
14	Ivacaftor	1.00	873054-44-5	Used to treat cystic fibrosis
15	Latanoprost	0.25	130209-82-4	Used to treat glaucoma
16	N-(2-Chloropyrimidin-4-Yl)-2,3-Dimethyl-2h-Indazol-6-Amine	1.00	444731-74-***2***	Pazopanib Intermediate
17	Teneligliptin	2.00	1572583-29-9	Used to treat Type 2 diabetes
18	Tert Butyl 4-(6-Aminopyridin-3-Yl) Piperazine-1-Carboxylate	1.00	571188-59-5	Palbociclib Intermediate
19	Tert-Butyl 4-[6-(6-Bromo-8-Cyclopentyl-5-Methyl-7-Oxo-7,8-Dihydro-Pyrido[2,3-D] Pyrimidin-2-Ylamino)-Pyridin-3-Yl]-	1.00	866084-31-3	Palbociclib Intermediate

S. No.	Product Name	Quantity in TPM	CAS No	Therapeutic Use
	Piperazine-1-Carboxylic Acid Ester			
20	Tofacitinib Citrate	0.10	540737-29-9	Used to treat arthritis
21	Trityl Olmesartan Medoxomil	1.00	144690-92-6	Anti-hypertensive
22	Vildagliptin	2.00	274901-16-5	Anti-diabetic
23	Acalabrutinib	1.00	1420477-60-6	Anti-Cancer
24	Rivaroxaban	1.00	366789-02-8	Used to treat thrombosis
25	Fedratinib	1.00	936091-26-8	Anti-Cancer
26	Bortezomib	0.025	179324-69-7	Anti-Cancer
27	Osimertinib	1.00	1421373-65-0	Used to treat Lung Cancer
28	2,3-Dimethyl-2h-Indazol -6-Amine Hydrochloride	1.00	635702-64-6	Pazopanib Intermediate
29	3-Methyl-6-Nitro-1h-Indazole	1.00	6494-19-5	Pazopanib Intermediate
	Total	**26.475**		

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No.	Name of the product	Name of the By-Product	Quantity in Kg/Day
1	2-Chloro-8-Cyclopentyl-5-Methyl-8h-Pyrido[2,3-D]Pyrimidin-7-One	Sodium Bromide (After neutralization of HBr with Caustic Lye solution)	103.00
2	Apixaban		
3	Tert Butyl 4-(6-Aminopyridin-3-Yl) Piperazine-1-Carboxylate		
4	Trityl Olmesartan Medoxomil		
5	Acalabrutinib		
6	Fedratinib		
7	Ethyl 4-(2-Hydroxypropan-2-Yl)-2-Propyl-1h-imidazole-5-carboxylate		

The proposed project comes under Category 'B1' as per the Environmental Impact Assessment (EIA) Notification S.O. 1533 (E), dated 14th September, 2006 but the proposed project comes under interstate boundary i.e., Karnataka to Telangana State which is located within 5 km from the project boundary, Hence, requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Standard ToR was issued by MoEFCC vide dated 19.05.2021. Public hearing is exempted for the proposed project as it is located at KIADB, Industrial area – Kadechur and Ministry of Environment, Forests and Climate Change (MoEF&CC) has granted environmental clearance (EC) to Kadechur Industrial Area at Kadechur village in Yadgir District, Karnataka vide F. No. 21-8/2014-IA. II Dated: 14.10.2016.

The proposed project will be established in a land area of 10.0 Acres (40470 Sqm). Industry will develop greenbelt in an area of 13681.56 Sqm which is 33.8 % of the total project area The proposed project cost is about Rs.18.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.130 Lakhs and the recurring cost (operation and maintenance) will be about Rs.20 Lakhs per annum. Total Employment under proposed project will be of 100. Industry proposed to allocate Rs.36.0 Lakhs for 5 years towards Corporate Environment Responsibility.

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

Ambient air quality monitoring was carried out at 8 locations during Summer Season (March to May, 2021) and submitted baseline data indicates that ranges of concentrations of PM_{10} (47.6 – 70.2 µg/ m^3), $PM_{2.5}$ (18.6 - 28.9 µg/ m^3), SO_2 (8.2 – 17.6 µg/ m^3), NOx (9.6 – 22.9 µg/ m^3), CO (0.17 – 0.59 mg/ m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $PM_{10,}$ $PM_{2.5}$, SO_2 & NOx would be 0.215 µg/m^3, 0.076 µg/m^3, 0.821 µg/m^3 & 0.945 µg/m^3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS). Total water requirement is 138.6m^3/day and will be met from KIADB water supply. Effluent of 30.3m^3/day will be sent to CETP- Mother Earth, Kadechur.

The Power requirement for the project will be 1000 kVA and will be met from Karnataka Power Corporation Limited (KPCL). The unit has proposed to install 1 X 250 kVA & 1 x 380 kVA DG Sets, Stacks (height 7 & 8 mts) will be provided as per CPCB norms to the proposed DG sets.

PP reported that 1 x 2.0 TPH & 1 x 3.0 TPH boilers are proposed with stacks height of 30 mtrs for each boiler. Cyclone separators followed by bag filters will be installed for the proposed boilers for controlling the particulate emissions (within statutory limit of 115 mg/ Nm^3). 1 x 2 Lakh K. Cal/ Hr Thermic fluid heater is proposed with stack height of 11 mtrs and Cyclone separator will be installed for controlling the particulate emissions (within statutory limit of 115 mg/ Nm^3).

Details of Process emissions generation and its management:

S. No.	Name of the Gas	Quantity in Kg/Day	Treatment Method
1	Carbon dioxide	43.00	Dispersed into the atmosphere
2	Hydrogen	3.00	Diffused by using Nitrogen through Flame arrestor
3	Ammonia	15.00	Scrubbed by using chilled water media
4	Oxygen	59.00	Dispersed into the atmosphere
5	Hydrogen Bromide	67.00	Scrubbed by using C. S. Lye solution
6	Hydrogen chloride	134.00	Scrubbed by using chilled water media
7	Hydrogen Iodide	7.00	Scrubbed by using C. S. Lye solution
8	Propane	8.00	Diffused by using Nitrogen through Flame arrestor

9	Methyl Bromide	16.00	Scrubbed by using C. S. Lye solution
10	Hydrogen fluoride	6.00	Scrubbed by using C. S. Lye Solution
11	Sulphur dioxide	40.00	Scrubbed by using C. S. Lye Solution

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

S. No	Name of the Waste	Quantity	Disposal Method
Hazardous Waste Details			
1	Organic solid waste	611 Kg/Day	Will be sent to Cement Industries
2	Spent Carbon	24 Kg/Day	
3	Solvent Distillation Residue	171 Kg/Day	
4	Inorganic Solid Waste	27 Kg/Day	Will be sent to TSDF - Mother Earth-Kadechur.
5	ETP Sludge	40 Kg/Day	
6	Used Oils	130 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling
7	Detoxified Containers/ Container liners	300 No's / Month	After Detoxification will be sent to SPCB authorized agencies
8	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
Solid waste details			
9	Ash from boilers	4375 Kg/Day	Will be sent to Brick Manufacturers

Deliberations by the EAC:

The EAC, constituted under the provisions of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in the desired format along with the EIA/EMP reports 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 an 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 reports are in compliance of the ToR issued for the project, considering the present environmental status and the projected scenario for all the environmental components. The Committee found the baseline data and incremental GLC due to the proposed project within the NAAQ standards. The Committee suggested that the PP shall undertake all the possible mitigation measures and latest techniques to reduce the impact of boilers and the cogeneration power plant. The Committee suggested that the storage of toxic/explosive raw materials shall be in bare minimum quantity and inventory. The Committee deliberated on the greenbelt development in the unit complex and suggested PP

to develop greenbelt in at least 33% areas around the periphery of the complex. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considering 2m x 2m ratio. The committee suggested to carry out detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species. It also suggested to use Briquettes in place of coal. The Committee also suggested that the PP shall carry out detailed Phyto and Zooplankton study of the Nala water passing through the Industrial park during non-monsoon season and submit the report within one year.

The EAC deliberated on the proposal with due diligence using 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 also found the proposal in order and recommended for the grant of environmental clearance.

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

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

The EAC, after detailed deliberations, **recommended the project for grant of environmental clearance, and subject to compliance of terms and conditions as under, and general terms and conditions given in 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 PFR/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). The PP shall carry out detailed Phyto and Zooplankton study of the Nala water passing through the Industrial park during non-monsoon season and submit the report within one year for its appraisal before the EAC.

(iii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.7 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(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 treated effluent of 30.3 m^3/day proposed to discharge to the CETP. The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(vi). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.

(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, sourced from KIADB water supply, shall not exceed 138.6m^3/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). As committed by the PP, coal having ash content less than 15% is to be used as fuel only during the rainy season when the Biomass Briquettes may not be available and during all other seasons only biomass briquettes shall be used.

(x). 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.

(xi). 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.

(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 provided 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 valves 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 or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

(xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system.

(f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.

(xv). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.

(xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.

(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. 14.2

Setting up of Bulk Drugs & Drug Intermediates manufacturing unit of capacity 110 TPM located at Plot Nos. 89, 90 & 91, Kadechur Industrial Area, Kadechur Village, Yadgir, Karnataka by M/s Indur Life Sciences Pvt. Ltd. -Consideration of EC

[Proposal No.: IA/KA/IND3/217334/2021; File No. IA-J-11011/190/2021-IA-II (I)]

The project proponent and the accredited consultant M/s. Rightsource Industrial Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for grant of environmental clearance (EC) to the proposed project for setting up of Bulk Drugs & Drug Intermediates manufacturing unit located at Plot Nos. 89, 90 & 91, Kadechur Industrial Area, Kadechur Village, Yadgir, Karnataka by M/s Indur Life Sciences Pvt. Ltd.

The details of products and capacity as under:

S. No	Product name	Quantity in TPM	CAS No	Therapeutic use
1	2-(N-Triphenyl methyl Tetrazolyl)-4-Bromo methyl biphenyl (TTBB)	15.00	124750-51-*2*	Olmesartan intermediate
2	1,1-Cyclohexane Diacetic Acid	50.00	4355-11-7	Gabapentin intermediate

3	4-Bromo Methyl Biphenyl Carbonitrile (OTBN)	30.00	114772-54-2	Losartan Potassium intermediate
4	6-Chloro-2-hexanone	30.00	10226-30-9	Pentoxifylline Intermediate
5	Bilastine	10.00	202189-78-4	Antihistamine
6	Dolutegravir	10.00	1051375-16-6	Used to treat HIV
7	Etodolac	10.00	41340-25-4	Anti-inflammatory
8	Gliclazide	10.00	21187-98-4	Used to treat diabetes mellitus type
9	Oseltamivir Phosphate	5.00	196618-13-0	Used to treat influenza-A & B
10	Sitagliptin	5.00	486460-32-6	Used to treat diabetes mellitus type
Total (Any 3 Products will be manufactured at any given point of time)		**110.00**		

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No	Name of the product	Name of the By-product	Quantity in Kg/day
1	1,1-CyclohexaneDi acetic Acid	Ammonium sulphate	1941.10
2	4-Bromo Methyl Biphenyl Carbonitrile	Magnesium hydroxide	296.80
3	6-Chloro-2-Hexanone	Potassium chloride	766.60
		Potassium Bromide	1223.70
4	Bilastine	Sodium p-toluene sulfonate	197.00
		Potassium p-toluene sulfonate	190.00
5	Oseltamivir Phosphate	Tert butyl chloride	48.50
6	(2-(N-Triphenyl methylTetrazolyl)-4-Bromo methyl biphenyl (TTBB)	Sodium Bromide (After neutralization of HBr with Caustic Lye solution)	630.00
7	4-Bromo Methyl Biphenyl Carbonitrile (OTBN)		

The proposed project comes under Category 'B1' as per the Environmental Impact Assessment (EIA) Notification S.O. 1533 (E), dated 14th September, 2006 but the proposed project comes under interstate boundary i.e., Karnataka to Telangana State which is located within 5 km from the project boundary. Hence, requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Standard ToR was issued by MoEFCC vide dated 30.04.2021. Public hearing is exempted for the proposed project as it is located at KIADB, Industrial area – Kadechur and Ministry of Environment, Forests and Climate Change (MoEF&CC) has granted environmental clearance (EC) to Kadechur Industrial Area at Kadechur village in Yadgir District, Karnataka vide F. No. 21-8/2014-IA. II Dated: 14.10.2016. No Litigation is pending against the proposal.

The proposed project will be established in a land area of 3.0 Acres (12000 Sqm). Industry will develop greenbelt in an area of 4218 sqm. which is 35.15 of the total project area. The proposed project cost is about Rs. 16.75 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 97.5 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 15 Lakhs per annum.. Total Employment under proposed project will be of 120 persons. Industry proposed to allocate Rs. 33.5 Lakhs for 5 years towards Corporate Environment Responsibility.

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

Ambient air quality monitoring was carried out at 8 locations during Summer Season (March to May, 2021) and submitted baseline data indicates that ranges of concentrations of PM_{10} (46.2 – 70.2 µg/m^3), $PM_{2.5}$ (19.1 - 28.9 µg/m^3), SO_2 (8.2 – 17.6 µg/m^3), NOx (9.6 – 22.9 µg/m^3), CO (0.17 – 0.59mg/ m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $PM_{10,}$ $PM_{2.5}$, SO_2 & NOx would be 0.21 µg/m^3, 0.06 µg/m^3, 0.57 µg/m^3 & 0.99 µg/m^3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS). Total water requirement is 132.5 m^3/day and will be met from KIADB water supply. Effluent of 48.51 m^3/day will be sent to CETP- Mother Earth, Kadechur.

Power requirement will be 750 kVA and will be met from Karnataka Power Corporation Limited (KPCL). The unit hass proposed to install 1 X 250 kVA & 1 x 380 kVA DG Sets, Stacks (height 7 & 8 mts) will be provided as per CPCB norms to the proposed DG sets.

1 x 3.0 TPH boiler is proposed with stack height of 30 mtrs. Cyclone separator followed by bag filters will be installed for the proposed boiler for controlling the particulate emissions (within statutory limit of 115 mg/ Nm^3).
1 x 4 Lakh K. Cal/ Hr Thermic fluid heater is proposed with stack height of 11 mtrs and Cyclone separator will be installed for controlling the particulate emissions (within statutory limit of 115 mg/ Nm^3).

Details of Process emissions generation and its management:

S. No.	Name of the Gas	Quantity in Kg/Day	Treatment Method
1	Carbon dioxide	1744.00	Dispersed into the atmosphere
2	Hydrogen	8.00	Diffused by using Nitrogen through Flame arrestor
3	Oxygen	17.00	Dispersed into the atmosphere
4	Hydrogen Bromide	495.00	Scrubbed by using C. S. Lye solution
5	Hydrogen chloride	269.00	Scrubbed by using chilled water media
6	Chloromethane	386.00	Scrubbed by using C. S. Lye solution

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

S. No	Name of the Waste	Quantity	Disposal Method
	Hazardous Waste Details		
1	Organic solid waste	2507 Kg/Day	Will be sent to Cement Industries
2	Spent Carbon	25 Kg/Day	
3	Solvent Distillation Residue	465 Kg/Day	
4	Inorganic Solid Waste	80 Kg/Day	Will be sent to TSDF – Mother Earth, Kadechur
5	ETP Sludge	50 Kg/Day	
6	Used Oils	130 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling
7	Detoxified Containers/ Container liners	1200 No's / Month	After Detoxification will be sent to SPCB authorized agencies
8	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
Solid waste details			
9	Ash from boiler	2625 Kg/Day	Will be sent to Brick Manufacturers

Deliberations by the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports 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 an 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 reports. 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 reports are in compliance of the ToR issued for the project, considering the present environmental status and the projected scenario for all the environmental components. The Committee found the baseline data and incremental GLC due to the proposed project within the NAAQ standards. The Committee suggested that the PP shall undertake all the possible mitigation measures and latest techniques to reduce the impact of boilers and cogeneration power plant. The Committee suggested that the storage of toxic/explosive raw materials shall be in bare minimum quantity and inventory. The Committee deliberated on the greenbelt development in the unit complex and suggested PP to develop greenbelt in at least 33% areas around the periphery of the complex. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considering 2m x 2m ratio. The committee suggested to carry out detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species. It also suggested to use Briquettes in place of coal. The Committee also suggested that the PP shall carry out detailed Phyto and Zooplankton study of the Nala water passing through the Industrial park during non-monsoon season and submit the report within one year.

The EAC deliberated on the proposal with due diligence using 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 also found the proposal in order and recommended for the grant of environmental clearance.

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

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

The EAC, after detailed deliberations, **recommended the project for grant of environmental clearance, and subject to compliance of terms and conditions as under, and general terms and conditions given in 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 PFR/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). The PP shall carry out detailed Phyto and Zooplankton study of the Nala water passing through the Industrial park during non-monsoon season and submit the report within one year for its appraisal before the EAC.

(iii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(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 treated effluent of 48.51 m^3/day proposed to discharge to the CETP. The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(vi). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.

(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, sourced from KIADB water supply, shall not exceed 132.5 m^3/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). As committed by the PP, coal having ash content less than 15% is to be used as fuel only during the rainy season when the Biomass Briquettes may not be available and during all other seasons only biomass briquettes shall be used.

(x). 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.

(xi). 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.

(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 provided 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 valves 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 or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

(xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.

(xv). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.

(xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.

(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. 14.3

Setting up of Active Pharmaceutical Ingredients API manufacturing unit of capacity located at Plot No 98 Kadechur Industrial Area, Taluk and District Yadgir, Karnataka by M/s Vineela Biologics,– Re-Consideration of EC

[Proposal No.: IA/KA/IND2/206839/2021; File No. J-11011/143/2021-IA.II(I)]

The project proponent, vide letter dated 19.07.2021, has requested to withdrew the project as they want to revise the application.

The Committee, after detailed deliberations, accepted the request of PP for revision of its application. Accordingly, the proposal was ***returned*** in the present form based on the request of PP.

Agenda No. 14.4

Expansion of Formaldehyde Manufacturing unit in Existing Facility from 15 TPD to 100 TPD at Village Shezadpur, Tehsil- Jagadhri District-Yamunanagar, Haryana by M/s Goyal Overseas-Consideration of TOR

[Proposal No.: IA/HR/IND3/204805/2021; File No. IA-J-11011/107/2021-IA-II(I)]

The proposal is for consideration of TOR for Expansion of Formaldehyde Manufacturing unit in Existing Facility from 15 TPD to 100 TPD, located at Village Shezadpur, Tehsil- Jagadhri District-. Yamunanagar, Haryana by M/s Goyal Overseas.

The project proponent and the accredited consultant M/s Vardan Environet, made a detailed presentation on the salient features of the project and informed that:

The unit is established for manufacturing of 15 TPD Capacity of Formaldehyde based on Consent to Establish (CTE) granted by Haryana State Pollution Control Board vide Letter HSPCB/Consent/313282118YAMCTE5328574, dated 10.05.2018. The plant came in operation after securing Consent to Operate (CTO) vide dated 26.12.2018 which is valid till 31.03.2023. In year 2018.

The chronology of events is as under:

S. No.	Date(s)	Description
1	10.05.2018	The unit has obtained CTE from HSPCB vide letter no. HSPCB/Consent/313282118YAMCTE5328574 for 15 TPD.
2.	26.12.2018	The unit has obtained initial CTO for 15 TPD Formaldehyde manufacturing vide Letter HSPCB/Consent/313282118YAMCTO5794589 dated 26.12.2018 valid up to 31.03.2023.
3.	03.09.2020	Closure order issued by HSPCB vide Endst No. HSPCB/HWM/41-300/2020/1149-52.
4.	11.11.2020	Additional Chief Secretary, Environment Department, Haryana Govt. vide their order dated 11.11.2020 allowed the units to continue their operations for a period of six months without prejudice to any legal actions taken against the violations committed by them, by the competent authorities, with the conditions that they will immediately apply for Environmental Clearance from the competent authority and provide the proof of such application within 60 days from the issuance of this communication to Environment and Climate Change Department and to Haryana State Pollution Control Board.
5.	09.04.2021	urther the CTO was renewed by HSPCB for the same capacity vide Letter HSPCB/Consent/313096621YAMCTO11019799 dated 09.04.2021 valid up to 10.05.2021
6.	03.06.2021	he NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded “Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process.”
7.	03.06.2021	he NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded “no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance”.

Production Capacity

Product	Existing Capacity	Proposed Capacity	Total Capacity
Formaldehyde	15 TPD	85 TPD	**100 TPD**

Raw Material Detail: The major raw material is Methanol which comes by road through tankers from Kandla Port, Gujarat & stored in underground MS tanks. Methanol requirement is

as follows:

Raw Material	Existing Requirement	Proposed Requirement	Total Requirement
Methanol	7 TPD	38 TPD	**45 TPD**

Resource Requirement

S. No.	Particular	Detail
1	Land Requirement	Total area available is 0.607 Hectare. No additional land is required for proposed expansion. Green belt will be developed in an area of 0.207 Hectare (Approximately 34.11% of total land area).
2	Water Requirement	**Existing**: 7.5; **For Expansion**: 42.5; **Total**: **50 KLD** **Source:** Application for Ground Water permission has been submitted to HWRA vide 23-3/20627/1/HR/IND/2021 dated 23.03.2021
3	Power Requirement	**Existing**: 250 KVA; **For Expansion**: ----; **Total**: **250 KVA** **Source:** UHBVN (Uttar Haryana Bijli Vitran Nigam) **DG sets as backup:** 320 KVA (existing) 250 KVA (existing)
4	Boiler	**Existing:** 800 Kg/hr, HSD Fired (1 No.) **Proposed: No**
5	Manpower Requirement	**Existing**: 5; **For Expansion**: 7; **Total**: 12
6	Cost of the Project	**Existing**: 205 Lakhs; **Estimated cost for proposed expansion**: 95 Lakhs; **Total**: 300 Lakhs

PP reported that there is no Wild Life Sanctuary or National Park within 10 km radius of the Project Site. No NBWL Clearance required. No forest land involved in the project site. PP has obtained diversion of 0.003986 ha of forest land for access to their factory from MoEF&CC, Chandigarh vide F.No. 9-HRB147/2018-CHA dated 06.09.2018.

Details of Violation

Period	Production	Remarks
May 2018-May 2021	Formaldehyde Manufacturing (15 TPD)	Prior EC was not secured before setting up and operating the Unit, hence covered under violation as per EIA Notification 2006 and subsequent amendments

The said project/activity is covered under category "A" of item 5(f) "Synthetic Organic Chemicals" of the Schedule to the EIA Notification, 2006, and requires prior EC from Expert Appraisal Committee, MoEF&CC.

The project proponent has submitted an undertaking for development of green belt within plant premises of 34.75% of total plot area in the next 6 months, vide their letter dated 01.07.2021

Deliberations by the EAC:

The Committee was informed that the Ministry had issued a Notification vide S.O. 804 (E) dated 14th March, 2017 for appraisal of the projects for the grant of terms of reference/ Environmental Clearance, that have started the work on site, expanded the production beyond the limit of Environmental Clearance, or changed the product mix without obtaining prior Environmental Clearance under EIA Notification, 2006. The above said notification i.e., Notification vide S.O. 804 (E) dated 14th March, 2017 was an open window for 6 months. The projects or activities which are in violation as on date of this notification only will be eligible to apply for environmental clearance under this notification and the project proponents can apply for environmental clearance under this notification only within six months from the date of this notification.

The Competent Authority in the Ministry (in other proposal) has inter-alia, instructed to deal the violation cases as under:

(i). The violation proposal should be considered by the sectoral EAC on merit
(ii). Action to be taken against the alleged violation as per law
(iii). Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.
(iv). The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established by the Court of competent authority, the punishment/penalty as per law would be imposed.
(v). Assessment of environmental damage, if any.

The Committee was also appraised that there were three recent court cases in the Hon'ble NGT [viz. Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020, Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020, and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019], which were disposed of by Hon'ble NGT vide its Order dated 03.06.2021 with the following directions:

(i). For past Violations, the concerned Authorities are free to take appropriate action in accordance with polluter pays principle, following due process.

(ii). Since having prior EC is statutory mandate, it has to be complied with by the formaldehyde producing industrial units barring which the units cannot be allowed to function.
(iii). State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle.
(iv). State PCB to ensure that the unit does not re-start functioning without requisite Statutory Clearance.
(v). To be duly considered by the concerned regulatory authorities including MOEFCC on merits and in accordance with law.

The Proposal was examined in the Ministry and EDS has been sought on Parivesh Portal on 17th May 2021. The Project Proponent, on 29th June 2021 & 5th July, 2021, has submitted the EDS reply on Parivesh Portal and accordingly the Proposal is placed before the present EAC meeting for its appraisal.

The EAC has deliberated the detailed proposal and after due diligence found the merit on the proposal and accordingly recommended for issuance of TOR with certain conditions, as cited below.

The EAC, after detailed deliberations on the information presented by the PP, **recommended** for issuing **Standard Term of Reference [Annexure-I]** along with the following **specific Term of Reference** for undertaking EIA and preparation of Environmental Management Plan (EMP), as below:

(i) The project proponent will be liable to pay the penalty for the period of violation, as may be determined by Ministry, arisen due to constructing and/or operating the project without prior EC. An undertaking in this regard shall be submitted by PP along with EC proposal. The project proponent shall also submit the details on the cost incurred on establishment of the project and year-wise total turnover till date.

(ii) The Directions of the Hon'ble NGT shall be implemented vide its Orders dated 03.06.2021, in the matter of Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020; Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020; and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019]. Implementation Report may be submitted by the PP at the time of submission of EIA/EMP Report.

(iii) The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.

(iv) The Haryana PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle. Implementation Report may be submitted by the SPCB at the time of submission of EIA/EMP Report by the PP.

(v) Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment. The cost for assessment of environmental damage may be guided by the Ministry of Environment, Forest and Climate Change O.M No. 19-125/2019-IA.III, dated 05.03.2020.

(vi) The EMP shall be prepared comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

(vii) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

(viii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

(ix) Budget for the remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.

Agenda No. 14.5

Formaldehyde Manufacturing Unit of M/s Shri Laxmi Chemical, located at Village- Ramnagar, Tehsil- Ganaur, District- Sonipat, Haryana-Consideration of TOR

[Proposal No.: IA/HR/IND3/216043/2021; File No. IA-J-11011/258/2021-IA-II(I)]

The proposal is for TOR for Formaldehyde Manufacturing Unit by M/s Shri Laxmi Chemical, located at Village- Ramnagar, Tehsil- Ganaur, District- Sonipat, Haryana.

The project proponent and the accredited consultant M/s SBA Enviro Systems Pvt. Ltd., made presentation on the salient features of the project and informed that:

The plant was setup without the consent to establish from the Haryana State Pollution Control Board (HSPCB). Unit is yet to start operation at unit & has not received any closure order.

Production Capacity

Product	Capacity

Formaldehyde	60 TPD

Production Capacity

Product	Capacity
Formaldehyde	60 TPD

Deliberations by the EAC:

The EAC was very unsatisfied with the technical capability of the consultant. Several discrepancies were observed during the presentation in Form-1, PFR, submitted and prepared by the consultant. Layout of the plant was not adequately prepared. The report is in-adequate with various deficiencies/lacunas and there are no proper proposed environment management mitigation measures suggested by PP/Consultant during the presentation.

Considering various discrepancies in the reports, the EAC, after detailed deliberations, recommended the revision of the complete application with regard to correct data and accordingly the proposal was **returned** in its present form.

Agenda No. 14.6

Formaldehyde Manufacturing Unit of M/s JRS Industries, located at Village Kohand, Tehsil - Gharaunda, District: Karnal, State: Haryana.- Consideration of TOR

[Proposal No.: IA/HR/IND3/209352/2021; File No. IA-J-11011/172/2021-IA-II(I)]

The project proponent and the accredited consultant M/s SBA Enviro Systems Pvt. Ltd., made presentation on the salient features of the project and informed that:

The plant was setup with the consent to establish dated 14.09.2018 from the Haryana State Pollution Control Board (HSPCB). The chronology of events is as under –

S. No.	Date	Description
1	14.09.2018	JRS Industries established manufacturing unit based on CTE granted vide File No. HSPCB/Consent/313096618KARCTE5628233
2	27.08.2020	HSPCB issued a closure order to the unit vide letter no HSPCB/HWM/31-306/2020/1044 dated 27.08.2020 to close down the operation, for violating the the section 31A of Air (Prevention & Control of Pollution) Act, 1981 and 33-A of Water (Prevention & Control of Pollution) Act 1974 by manufacturing Formaldehyde without obtaining prior Environmental Clearance under EIA Notification 2006.
3	11.11.2020	Additional Chief Secretary, Environment Department,

		Haryana Govt. vide their order dated 11.11.2020 allowed the units to continue their operations for a period of six months without prejudice to any legal actions taken against the violations committed by them, by the competent authorities, with the conditions that they will immediately apply for Environmental Clearance from the competent authority and provide the proof of such application within 60 days from the issuance of this communication to Environment and Climate Change Department and to Haryana State Pollution Control Board.
4	03.06.2021	The NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded "Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process."
8	03.06.2021	The NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded "no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance".

Production Capacity

Product	Capacity
Formaldehyde	80 TPD

Deliberations by the EAC:

The EAC was very unsatisfied with the technical capability of the consultant. Several discrepancies were observed during the presentation in Form-1, PFR, submitted and prepared by the consultant. Layout of the plant was not adequately prepared. The report is in-adequate with various deficiencies/lacunas and there are no proper proposed environment management mitigation measures suggested by PP/Consultant during the presentation.

Considering various discrepancies in the reports, the EAC, after detailed deliberations, recommended the revision of the complete application with regard to correct data and accordingly the proposal was **returned** in its present form.

Agenda No. 14.7

Formaldehyde Manufacturing Unit of M/s Decent Drugs Private Ltd., located at Salempur Bangar road, Village- Chhachhrauli, District- Yamuna Nagar, Haryana-135103- Consideration of TOR

[Proposal No.: IA/HR/IND3/208562/2021; File No. IA-J-11011/156/2021-IA-II(I)]

The project proponent and the accredited consultant M/s SBA Enviro Systems Pvt. Ltd., made presentation on the salient features of the project and informed that:

The plant was setup with the consent to establish dated 21.01.2009 from the Haryana State Pollution Control Board (HSPCB). The chronology of events is as under –

S. No.	Date	Description
1	21.01.2009	Decent Drugs established manufacturing unit based on CTE granted vide File No. HSPCB/YMN/2009/10901
2	13.04.2021	Decent Drugs was operating the unit based on Consent To Operate granted by HSPCB vide File No. HSPCB/CONSENT: 313096621YAMCTO011020063 valid till 10/05/2021
3	09.09.2019	Decent Drugs received an Closure order for revoking the CTO of the unit vide letter no. HSPCB/PC/2019/2305-2308
4	12.03.2021	Closure order revoking the CTO was suspended by HSPCB vide File No. HSPCB-070001/90/2020-HAZARDOUS WASTE MANAGEMENT CELL-HSPCB
5	19.04.2021	Decent Drugs has filed an application on Parivesh for Post Facto TOR vide Proposal No. IA/HR/IND3/208562/2021
6	11.11.2020	Additional Chief Secretary, Environment Department, Haryana Govt. vide their order dated 11.11.2020 allowed the units to continue their operations for a period of six months without prejudice to any legal actions taken against the violations committed by them, by the competent authorities, with the conditions that they will immediately apply for Environmental Clearance from the competent authority and provide the proof of such application within 60 days from the issuance of this communication to Environment and Climate Change Department and to Haryana State Pollution Control Board.
7	03.06.2021	The NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded “Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC

		on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process."
8	03.06.2021	The NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded "no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance".

Production Capacity

Product	Capacity
Formaldehyde	60 TPD

Deliberations by the EAC:

The EAC was very unsatisfied with the technical capability of the consultant. Seceral discrepancies were observed during the presentation in Form-1, PFR, submitted and prepared by the consultant. Layout of the plant was not adequately prepared. The report is in-adequate with various deficiencies/lacunas and there are no proper proposed environment management mitigation measures suggested by PP/Consultant during the presentation.

Considering various discrepancies in the reports, the EAC, after detailed deliberations, recommended the revision of the complete application with regard to correct data and accordingly the proposal was **returned** in its present form.

Agenda No. 14.8

Formaldehyde Manufacturing Unit of M/s NMR Pyrochem Pvt. Ltd., located at Village: Pundri, Tehsil - Gharaunda, District: Karnal, Haryana - Consideration of TOR

[Proposal No.: IA/HR/IND3/209349/2021; File No. IA-J-11011/171/2021-IA-II(I)]

The project proponent and the accredited consultant M/s SBA Enviro Systems Pvt. Ltd., made presentation on the salient features of the project and informed that:

The plant was setup with the consent to establish dated 05.04.2018 from the Haryana State Pollution Control Board (HSPCB). The chronology of events is as under –

S. No.	Date	Description
1	05.04.2018	Consent to Establish obtained from HSPCB vide letter no.

		HSPCB/Consent/313282118KARCTE5150340 dated 05.04.2018.
2	22.01.2020	HSPCB issued a closure order to the unit vide letter no HSPCB/YMN/2020/175 dated 22.01.2020 to close down the operation, for violating the the section 31A of Air (Prevention & Control of Pollution) Act, 1981 and 33-A of Water (Prevention & Control of Pollution) Act 1974 by manufacturing Formaldehyde without obtaining prior Environmental Clearance under EIA Notification 2006.
3	11.11.2020	Additional Chief Secretary, Environment Department, Haryana Govt. vide their order dated 11.11.2020 allowed the units to continue their operations for a period of six months without prejudice to any legal actions taken against the violations committed by them, by the competent authorities, with the conditions that they will immediately apply for Environmental Clearance from the competent authority and provide the proof of such application within 60 days from the issuance of this communication to Environment and Climate Change Department and to Haryana State Pollution Control Board.
4	03.06.2021	The NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded "Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process."
8	03.06.2021	The NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded "no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance".

Production Capacity

Product	Capacity
Formaldehyde	60 TPD

Deliberations by the EAC:

The EAC was very unsatisfied with the technical capability of the consultant. Seceral discrepancies were observed during the presentation in Form-1, PFR, submitted and

prepared by the consultant. Layout of the plant was not adequately prepared. The report is in-adequate with various deficiencies/lacunas and there are no proper proposed environment management mitigation measures suggested by PP/Consultant during the presentation.

Considering various discrepancies in the reports, the EAC, after detailed deliberations, recommended the revision of the complete application with regard to correct data and accordingly the proposal was **returned** in its present form.

Agenda No. 14.9

Formaldehyde Manufacturing in existing facility of capacity 120 TPD at Plot No. – F 937 to 939, Phase-3, RIICO Industrial Area, Bhiwadi, Tehsil-Tijara, District-Alwar, Rajasthan by "M/s Dee Bee Organics Pvt. Ltd". - Consideration of TOR

[Proposal No.: IA/RJ/IND3/205157/2021; File No. IA-J-11011/115/2021-IA-II(I)]

The proposal is for TOR for Formaldehyde Manufacturing in existing facility of capacity 120 TPD at Plot No. – F 937 to 939, Phase-3, RIICO Industrial Area, Bhiwadi, Tehsil-Tijara, District-Alwar, Rajasthan by "M/s Dee Bee Organics Pvt. Ltd.

The project proponent and the accredited consultant M/s Vardan Environet, made a detailed presentation on the salient features of the project and informed that:

The plant was setup with the consent to establish dated 26.11.1994 from the Rajasthan State Pollution Control Board (RSPCB). Subsequently, the unit has obtained Consent to Operate dated 25.05.1996 for 20 TPD production capacity and renewed it time to time. The last CTO was obtained vide F(Tech)/Alwar(Tijara)/416(1)/2010-2011/1809-1811 dated 30.11.2012 valid upto 31.07.2015 for the same capacity. RSPCB instructed the project proponent to obtain prior environment clearance from the competent authority vide F.14 (23) Policy/Plg/Vol IV/471-510 dated 19.08.2019.

The chronology of events and the actions taken are as under:

S. No.	Date	Description
1	26.11.1994	The unit was established after obtaining CTE from RSPCB vide letter no. RPCB/BHD/354 dated 26th Nov, 1994 for 20 TPD.
2	25.05.1996	1st CTO was obtained vide Letter RPCB/RO/(BWD)/0-20/102 dated 25.05.1996 valid upto 30.04.1998.
3	31.07.1999	Extension of CTO vide Letter No. RPCB/R.O/BWD/0-51/1391 dated 30.07.1991 extended till 31.07.2004.
4	28.07.2004	Extension of CTO was obtained vide letter no. RPCB/RO/BWD/OR-48/1358 extended till 31.07.2007.
5	31.10.2007	Again extension of CTO was obtained vide letter no. RPCB/RO/BWD/OR-48/1564 extended till 31.07.2012.
6	30.11.2012	The last CTO was obtained vide

S. No.	Date	Description
		F(Tech)/Alwar(Tijara)/416(1)/2010-2011/1809-1811 dated 30.11.2012 valid upto 31.07.2015
7	19.08.2019	The Rajasthan State Pollution Control Board has issued an Order No.- F.14(23) Policy/Plg/Vol IV/471-510 to apply for EC within 60 days from the date of issue of letter
8	03.06.2021	The NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded "Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process."
9	03.06.2021	The NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded "no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance".
10	14.07.2021	Directions for closure under Water and Air Act vide Letter No. F.Tech/(CD-616)/RPCB/CD/130.

Production Capacity

M/s Dee Bee Organics Pvt. Ltd. has an existing unit for manufacturing of Formaldehyde with the capacity of Production of 120 ton per day.

Product	Capacity from 1996 to 2018	Capacity enhanced in 2018	Total Capacity from 2018 upto Mar 2021
Formaldehyde	20 TPD	100 TPD	120 TPD

Raw Material Detail

Raw Material requirement for production of Formaldehyde is methanol.

Material	Requirement	Source
Methanol	60 TPD	Imported

Resource Requirement

S. No.	Particular	Detail
1	Land Requirement	Total plot area is 0.2925 ha. Land is in approved industrial area and no additional land is required. Plantation will be carried out in total 0.117 ha., i.e. 40% of

S. No.	Particular	Detail
		the plot area (since project is located in critically polluted area). Out of which 0.0990 will be developed within the plant premises and 0.018 ha. outside the plant premises.
2	Water Requirement	Total water requirement is 100 KLD. **Source:** Ground water
3	Power Requirement	Maximum power requirement for the plant is 350 KW. **Source:** Jaipur Vidyut Vitran Nigam Limited **DG sets as backup:** 82.5 KVA and 160 KVA.
4	Boiler	One HSD Fired Baby Boiler (600 Kg/hr)
5	Manpower Requirement	14 persons are working at the plant.
6	Cost of the Project	The capital cost for the existing project is Rs. 467 Lakhs which includes land, building, plant & machinery etc.

There are no Wild Life Sanctuary or National Park within 10 km radius of the Project Site.

Details of Violation

S. No.	Period	Production	Remarks
1	2018 to Mar 2021	Formaldehyde Manufacturing (100 TPD)	Prior EC was not secured before enhancing the capacity from 20 to 120 TPD. Hence covered under violation as per EIA Notification 2006 and subsequent amendments.

The said project/activity is covered under category "A" of item 5(f) "Synthetic Organic Chemicals" of the Schedule to the EIA Notification, 2006, and requires prior EC from Expert Appraisal Committee, MoEF&CC.

Deliberations by the EAC:

The Committee was informed that the Ministry had issued a Notification vide S.O. 804 (E) dated 14th March, 2017 for appraisal of the projects for the grant of terms of reference/ Environmental Clearance, that have started the work on site, expanded the production beyond the limit of Environmental Clearance, or changed the product mix without obtaining prior Environmental Clearance under EIA Notification, 2006. The above said notification i.e., Notification vide S.O. 804 (E) dated 14th March, 2017 was an open window for 6 months. The projects or activities which are in violation as on date of this notification only will be eligible to apply for environmental clearance under this notification and the project proponents can apply for environmental clearance under this notification only within six months from the date of this notification.

The Competent Authority in the Ministry (in other proposal) has inter-alia, instructed to deal the violation cases as under:

(i). The violation proposal should be considered by the sectoral EAC on merit

(ii). Action to be taken against the alleged violation as per law
(iii). Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.
(iv). The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established by the Court of competent authority, the punishment/penalty as per law would be imposed.
(v). Assessment of environmental damage, if any.

The Committee was also appraised that there were three recent court cases in the Hon'ble NGT [viz. Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020, Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020, and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019], which were disposed of by Hon'ble NGT vide its Order dated 03.06.2021 with the following directions:

(i). For past Violations, the concerned Authorities are free to take appropriate action in accordance with polluter pays principle, following due process.
(ii). Since having prior EC is statutory mandate, it has to be complied with by the formaldehyde producing industrial units barring which the units cannot be allowed to function.
(iii). The State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle.
(iv). The State PCB to ensure that the unit does not re-start functioning without requisite Statutory Clearance.
(v). To be duly considered by the concerned regulatory authorities including MOEFCC on merits and in accordance with law.

The Proposal was examined in the Ministry and EDS has been sought on Parivesh Portal on 17th May 2021. The Project Proponent, on 29th June 2021, has submitted the EDS reply on Parivesh Portal and accordingly the Proposal is placed before the present EAC meeting for its appraisal.

The EAC deliberated on the detailed proposal and after due diligence found the merit on the proposal and accordingly recommended for issuance of TOR with certain conditions, as cited below.

The EAC, after detailed deliberations on the information presented by the PP, **recommended** for issuing **Standard Term of Reference [Annexure-I]** along with the following **specific Term of Reference** for undertaking EIA and preparation of Environmental Management Plan (EMP), as below:

(i) The project proponent will be liable to pay the penalty for the period of violation, as may be determined by Ministry, arisen due to constructing and/or operating the project without prior EC. An undertaking in this regard shall be submitted by PP along with EC proposal. The project proponent shall also submit the details on the cost incurred on establishment of the project and year-wise total turnover till date.

(ii) The Directions of the Hon'ble NGT shall be implemented vide its Orders dated 03.06.2021, in the matter of Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020; Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020; and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019]. Implementation Report may be submitted by the PP at the time of submission of EIA/EMP Report.

(iii) The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.

(iv) Rajasthan PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle. Implementation Report may be submitted by the SPCB at the time of submission of EIA/EMP Report by the PP.

(v) Assessment of the ecological damage with respect to air, water, land and other environmental attributes shall be done. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment. The cost for assessment of environmental damage may be guided by the Ministry of Environment, Forest and Climate Change O.M No. 19-125/2019-IA.III, dated 05.03.2020.

(vi) The EMP shall be prepared comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

(vii) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

(viii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

(ix) The Budget for the remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.

Agenda No. 14.10

Formaldehyde 45 TPD at Plot No.– F-626, RIICO Industrial Area, Khushkhera, Tehsil- Tijara, District- Alwar, Rajasthan by M/s Topnotch Trading Corporation Pvt. Ltd.- Consideration of TOR

[Proposal No.: IA/RJ/IND3/205045/2021; File No. IA-J-11011/112/2021-IA-II(I)]

The proposal is for TOR for manufacturing of Formaldehyde 45 TPD, located at Plot No.– F-626, RIICO Industrial Area, Khushkhera, Tehsil- Tijara, District- Alwar, Rajasthan by M/s Topnotch Trading Corporation Pvt. Ltd.

The project proponent and the accredited consultant M/s Vardan Environet, made a detailed presentation on the salient features of the project and informed that:

The plant was setup with the consent to establish dated 23.09.2014 from the Rajasthan State Pollution Control Board (RSPCB). Subsequently, the unit has obtained Consent to Operate dated 05.05.2016 for a period of validity from 01.11.2015 to 31.10.2018 for 45 TPD production. Further CTO renewed by RSPCB vide letter no F (Tech)/Alwar (Tijara)/2709(1)/2016-2017/200-202 which is valid till 31/10/2023 for the same capacity. RSPCB instructed the project proponent to obtain prior environment clearance from the competent authority vide F.14(23) Policy/Plg/Vol IV/471-510 dated 19.08.2019.

The chronology of events and the actions taken are as under:

S. No.	Date	Description
1	23.09.2014	Consent to Establish obtained from RSPCB vide letter no. F(Tech)/Alwar(Tijara)/2020(1)/2014-2015/1172-1174/3421 dated 23th Sep, 2014.
2	05.05.2016	CTO vide Letter F(Tech)/Alwar(Tijara)/2709(1)/2016-2017/94-95/189 dated 5th May, 2016 for a period of validity from 01st November, 2015 to 31st October, 2018
3	12.11.2018	Rajasthan State Pollution Control Board issued show cause notice for refusal of CTO under the Water and Air Act vide Letter No. RPCB/RO/BWD/1909/1951.
4	19.08.2019	The Rajasthan State Pollution Control Board has issued an Order No.- F.14(23) Policy/Plg/Vol IV/471-510 to apply for EC within 60 days from the date of issue of letter
5	15.11.2019	Show cause notice issued from RSPCB again for refusal of CTO under the Water and Air Act vide Letter No. F.14(CD-620)/Tech/RPCB/CD/810
6	18.01.2021	Final show cause notice issued for refusal of CTO under the Water and Air Act vide Letter No. F.Tech/(CD-620)/RPCB/CD/569
7	12.04.2021	CTO was renewed by RSPCB for the same capacity vide letter no F(Tech)/Alwar(Tijara)/2709(1)/2016-2017/200-202 dated 12th April, 2021 which is valid for a period of 1st November 2018 to

S. No.	Date	Description
		31st October, 2023
8	03.06.2021	The NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded "Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process."
9	03.06.2021	The NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded "no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance".

Production Capacity

M/s Topnotch Trading Corporation Pvt. Ltd. has an existing unit for manufacturing of Formaldehyde with the capacity of Production of 45 ton per day.

Product	Capacity
Formaldehyde	45 TPD

Raw Material Detail

Raw Material requirement for production of Formaldehyde is methanol.

Material	Requirement	Source
Methanol	22.5 TPD	Imported

Resource Requirement

S. No.	Particular	Detail
1	Land Requirement	Total area available is 0.2 Hectare. Land is in approved industrial area and no additional land is required. Plantation will be carried out in total 0.08 ha., i.e. 40% of the plot area (since project is located in severely polluted area). Out of which 0.0680 will be developed within the plant premises and 0.012 ha. outside the plant premises.
2	Water Requirement	Total water requirement is 23 KLD. **Source:** Ground water (NOC has been granted from CGWA NOC No: CGWA/NOC/IND/ORIG/2021/10511 dated 12.01.2021 and valid up to 11.03.2023)
3	Power Requirement	Maximum power requirement for the plant is 148 KW. **Source:** Jaipur Vidyut Vitran Nigam Limited **DG sets as backup:** 125 KVA.
4	Boiler	One HSD Fired Baby Boiler (500 Kg/hr capacity)

S. No.	Particular	Detail
5	Manpower Requirement	10 persons are working in the plant
6	Cost of the Project	The capital cost for the existing project is Rs. 396 Lakhs which includes land, building, plant & machinery.

There are no Wild Life Sanctuary or National Park within 10 km radius of the Project Site.

Details of Violation

S. No.	Period	Production	Remarks
1	Sep 2014 to Present	Formaldehyde Manufacturing (45TPD)	Prior EC was not secured before setting up and operating the Unit, hence covered under violation as per EIA Notification 2006 and subsequent amendments.

The said project/activity is covered under category "A" of item 5(f) "Synthetic Organic Chemicals" of the Schedule to the EIA Notification, 2006, and requires prior EC from Expert Appraisal Committee, MoEF&CC.

Deliberations by the EAC:

The Committee was informed that the Ministry had issued a Notification vide S.O. 804 (E) dated 14th March, 2017 for appraisal of projects for grant of terms of reference/ Environmental Clearance, which have started the work on site, expanded the production beyond the limit of Environmental Clearance, or changed the product mix without obtaining prior Environmental Clearance under EIA Notification, 2006. The above said notification i.e., Notification vide S.O. 804 (E) dated 14th March, 2017 was an open window for 6 months. The projects or activities which are in violation as on date of this notification only will be eligible to apply for environmental clearance under this notification and the project proponents can apply for environmental clearance under this notification only within six months from the date of this notification.

The Competent Authority in the Ministry (in other proposal) has inter-alia, instructed to deal the violation cases as under:

(i). The violation proposal should be considered by the sectoral EAC on merit
(ii). Action to be taken against the alleged violation as per law
(iii). Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.
(iv). The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established by the Court of competent authority, the punishment/penalty as per law would be imposed.
(v). Assessment of environmental damage, if any.

The Committee was also appraised that there were three recent court cases in the Hon'ble NGT [viz. Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020, Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020, and

Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019], which were disposed of by Hon'ble NGT vide its Order dated 03.06.2021 with the following directions:

(i). For past Violations, the concerned Authorities are free to take appropriate action in accordance with polluter pays principle, following due process.
(ii). Since having prior EC is statutory mandate, it has to be complied with by the formaldehyde producing industrial units barring which the units cannot be allowed to function.
(iii). The State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle.
(iv). The State PCB to ensure that the unit does not re-start functioning without requisite Statutory Clearance.
(v). To be duly considered by the concerned regulatory authorities including MOEFCC on merits and in accordance with law.

The Proposal was examined in the Ministry and EDS has been sought on Parivesh Portal on 17th May 2021. The Project Proponent, on 29th June 2021, has submitted the EDS reply on Parivesh Portal and accordingly the Proposal is placed before the present EAC meeting for its appraisal.

The EAC has deliberated the detailed proposal and after due diligence found the merit on the proposal and accordingly recommended for issuance of the TOR with certain conditions, as cited below.

The EAC, after detailed deliberations on the information presented by the PP, **recommended** for issuing **Standard Term of Reference [Annexure-I]** along with the following **specific Term of Reference** for undertaking EIA and preparation of Environmental Management Plan (EMP), as below:

(i) The project proponent will be liable to pay the penalty for the period of violation, as may be determined by Ministry, arisen due to constructing and/or operating the project without prior EC. An undertaking in this regard shall be submitted by PP along with EC proposal. The project proponent shall also submit the details on the cost incurred on establishment of the project and year-wise total turnover till date.

(ii) The Directions of the Hon'ble NGT shall be implemented vide its Orders dated 03.06.2021, in the matter of Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020; Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020; and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019]. Implementation Report may be submitted by the PP at the time of submission of EIA/EMP Report.

(iii) The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.

(iv) Rajasthan PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle. Implementation Report may be submitted by the SPCB at the time of submission of EIA/EMP Report by the PP.

(v) The assessment of ecological damage with respect to air, water, land and other environmental attributes shall be done. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment. The cost for assessment of environmental damage may be guided by the Ministry of Environment, Forest and Climate Change O.M No. 19-125/2019-IA.III, dated 05.03.2020.

(vi) The EMP shall be prepared comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

(vii) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

(viii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

(ix) The Budget for the remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.

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Agenda No.14.11

Expansion of existing industry and addition of New Products of capacity from 6,715.00 MTPM to 20,090.94 MTPM by M/s. Godavari Biorefineries Ltd., located at Gut No. 159-165,180/1, 180/2, 181/1, 181/2, 187/1, 187/2, 188, 189, 199, 158, 167-178, 511, 139/2, Sakarwadi, Taluka Kopargaon, District Ahmednagar, Maharashtra -Consideration of EC

[Proposal No.: IA/MH/IND3/210653/2019; File No. IA-J-11011/154/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Building Environment 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 of existing industry and addition of New Products of capacity from 6,715.00 MTPM to 20,090.94 MTPM, located at Gut No. 159-165,180/1, 180/2, 181/1, 181/2, 187/1, 187/2, 188, 189, 199, 158, 167-178, 511, 139/2, Sakarwadi, Taluka Kopargaon, District Ahmednagar, Maharashtra by M/s. Godavari Biorefineries Ltd.

The details products and capacities are as under:

S. No.	Products Details	Quantity [MT/M]		
		Existing	Proposed	Total
1.	Ethyl Acetate	3000.00	5700.00	8700.00
2.	Acetaldehyde	1500.00	1300.00	2800.00
3.	Croto Resin and Croto Di Urea	45.00	85.00	130.00
4.	Crotonaldehyde	500.00	500.00	1000.00
5.	1,3 Butylene Glycol	41.66	158.34	200.00
6.	Acetic Acid	598.85	0.00	598.85
7.	Dilute Acetic Acid	110.00	0.00	110.00
8.	Dilute Ethyl Acetate and other ester	0.00	30.00	30.00
9.	Acetaldol	0.00	425.00	425.00
10.	Paraldehyde	60.00	0.00	60.00
11.	Crotonic Anhydride	8.33	1.67	10.00
12.	Crotonitrile	8.33	1.67	10.00
13.	Dilute 1-3 Butylene Glycol	12.90	19.32	32.22
14.	Butanol	64.60	53.10	117.70
15.	2-Ethyl, 1, 3 Hexane Diol	33.33	0.00	33.33
16.	3-Methoxy Butanol	25.00	250.00	275.00
17.	Dilute 3 Methoxy Butanol	0.00	30.00	30.00
18.	3-Methoxy Butyl Acetate	0.00	340.00	340.00
19.	3-Methyl 3- Pentene -One (MPO)	333.33	166.70	500.00
20.	Sodium Sulphate	242.00	3.00	245.00
21.	Ketone Mixture	131.67	65.80	197.50
22.	Absolute Alcohol (Fuel Grade from RS/IS)	0.00	2000.00	2000.00
23.	Acetaldehyde Oxime	0.00	175.00	175.00

S. No.	Products Details	Quantity [MT/M]		
		Existing	Proposed	Total
24.	Ammonium Sulphate	0.00	139.70	139.70
25.	Acetaldehyde Diethyl Acetal	0.00	250.00	250.00
26.	Ethyl Vinyl Ether	0.00	100.00	100.00
27.	Acetonitrile	0.00	425.00	425.00
28.	Diethyl Oxalate	0.00	175.00	175.00
29.	Gbamber	0.00	100.00	100.00
30.	Sorbic Acid or Potassium Sorbate	0.00	500.00	500.00
31.	Acetals (534-15-6,109-87-5,462-95-3,871-22-7,4285-59-0,13002-09-0,10602-34-3,4461-87-4,7148-78-9, 5870-82-6,6607-66-5,3390-12-3,3658-95-5,94089-21-1)	0.00	15.00	15.00
32.	Esters (623-70-1, 623-43-8,14205-39-1,7318-00-5, 24937-93-7,105-54-4,123-25-1,131-11-3,6284-46-4, 142-92-7,6259-76-3,84-66-2,108-22-5,96-33-3,105-37-3,109-60-4,123-86-4,93-92-5,2155-60-4,1608-72-6, 1516-17-2,102-76-1,109-94-4)	0.00	20.00	20.00
33.	Oximes (110-69-0, 96-29-7)	0.00	15.00	15.00
34.	Other Aldehydes (123-72-8, 97-96-1, 19780-25-7, 14371-10-9, 142-83-6, 101-86-0, 645-62-5,123-05-7, 67801-65-4,27939-60-2,1742-14-9,530-45-0,6728-26-3)	0.00	200.00	200.00
35.	Other Acids (107-92-6, 107-93-7, 99-04-7,65-85-0)	0.00	15.00	15.00
36.	Other Alcohol (97-95-0,104-76-7, 111-27-3, 111-28-4, 6117-91-5, 104-54-1,78-83-1,77-99-6, 1883-75-6, 60-12-8, 98-85-1, 123-51-3, 142583-61-7)	0.00	20.00	20.00
37.	Ketones (108-29-2, 565-61-7, 78-93-3, 67-64-1, 96-22-0, 98-86-2, 590-90-9)	0.00	15.00	15.00
38.	Waxes –(NA)	0.00	12.00	12.00
39.	Nitriles (107-12-0, 109-74-0, 78-82-0, 110-59-8)	0.00	20.00	20.00
40.	Ethers (109-53-5, 107-25-5, 111-34-2, 60-29-7)	0.00	15.00	15.00
41.	Ketene (463-51-4)	0.00	15.00	15.00
42.	Other Salts (532-32-1,7647-14-5,7783-20-2 & 7757-82-6)	0.00	19.64	19.64
	TOTAL	**6,715.00**	**13,375.94**	**20,090.94**
Captive power generation				
1	**Turbine (Captive power generation)**	**2.3MWH**	**4.8MWH**	**7.1MWH**

The project/activities are covered under Category 'A' of item 5(f) '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)' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

Unit has obtained NOC from Department of Environment, State of Maharashtra vide letter No. ENV(NOC)1091/1485 / CR-272/D-I, dated 25th January 1993. The PP reported that since this is the existing Unit prior to 2006, EC was not required under the provisions of the EIA Notification, 2006. The Unit is being operated with statutory clearance and valid CTO under Air/Water Act.

Standard ToR has been issued by the Ministry vide letter dated 13th May, 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 14th October, 2020 which was presided over by the Additional District Magistrate. The main issues raised during the public hearing are related to ZLD details, NGT court case status, Water Source, Employment generation, ground water quality etc. Inspection report dated 24.12.2020 submitted by the PP which was deliberated by the EAC.

The land area available for the project is 13, 92,123.00 m^2. No additional land will be used for proposed expansion. Industry has already developed Greenbelt in an area 33 % i.e. 4, 59,839.00 m^2 out of total area of the project. The estimated project cost is Rs. 366.44 Crores including existing investment of Rs.166.44 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.28.033 Crores and the Recurring cost (operation and maintenance) will be about Rs.6.4 Crores per annum. Total Employment will be 613 persons as direct and 180 persons indirect after expansion. Industry proposes to allocate Rs.1.5 Crores towards CER.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Godavari River is flowing at a distance of 1.0km in W direction.

Ambient air quality monitoring was carried out at 8 locations during March 2018 to May 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (61.80 µg/m^3 – 79.60µg/m^3), $PM_{2.5}$ (32.42µg/m^3-51.30µg/m^3), SO_2 (11.75µg/m^3- 14.71µg/m^3) and NO_2 (17.31µg/m^3- 24.70µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 82.4µg/m^3, 22.75µg/m^3 and 32.71µg/m^3 with respect to PM10, Sox and NOx. Further the PP has submitted one month more baseline data of January 2021 and compared the data with 2018. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). The Committee deliberated the baseline data and found in order.

Total water requirement is 5,783m^3/day of which fresh water requirement of 2,691m^3/day will be met from River through Canal and Ground Water through open well. Effluent of 1,082m^3/day quantity will be treated through ETP of 1,250CMD capacity [Existing – 600CMD + Proposed 650CMD]. The plant will be based on Zero Liquid discharge system.

PP reported that the Power requirement after expansion will be 14,000KVA [11.2MW/H]

including existing KVA and will be met from MSEDCL State power distribution corporation limited. Existing unit has 2 DG sets of 1000KVA and 590KVA capacity, additionally 3 DG sets of 1000x3 Nos. DG sets are used as standby during power failure. Stack (height of 9m, 9m and 6m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 18TPH [2 Nos.] and 12TPH Coal fired boiler. Additionally, 45TPH and 24TPH [2 Nos.] Coal fired boiler will be installed. Thermic Fluid Heater of 10Lakh Kcal/Hr. and 2 Lakh Kcal/Hr. Hydrogen Generator of 5200 x 3 cum/day Nitrogen Generator and 1000 cum/day with HSD fired will also be installed**.** [Existing 3 Boilers shall be replaced with Boiler of 45TPH]. ESP and Bag filter with a stack of height of 30m, 30m, 45m, 50m, 15m and 10m respectively will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Details of Process emissions generation and its management: Emission of Aldehyde Content, CO_2/ O_2 from Acetaldehyde Plant and Acid Mist, CO2/ O2 from Acetic Acid Plant, for which industry has provided Aldehyde Scrubbers [1 for each plant] with stack height of 12.9m and 8.25m.

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

Category as per HW Rules	Source and Name	Quantity			Unit	Disposal
		Existing	Proposed	Final		
Hazardous Waste						
5.1	Used/Spent Oil	1.2	1.8	3.0	KL/Y	Recycler
35.3	Chemical Sludge from WW Treatment Plant	1.5	2.5	4.0	TPD	CHWTSDF
1.4	Organic Residue	8.0	0.0	8.0	CMD	CHWTSDF/Recycler/ Cement industry
36.1	Distillation/ Process Residue	0.192	14	14.192	TPD	CHWTSDF/Recycler/ Cement industry
1.6	Spent Catalyst and Molecular Sieve	1.4	180	181.4	Kg/Day	CHWTSDF/Cement industry
28.3	Spent Carbon	00	0.3	0.3	TPD	Authorized Recycler
26.4	Mixed Spent Solvents	00	5.0	5.0	KLD	CHWTSDF/Recycler/ Cement industry
A1160	Lead Acid Batteries	00	80	80	No's/Y	Registered recycler
	Used Filters (HEPA filters, oil filters, etc.)	00	100	100	Nos./Y	CHWTSDF / Recycler
	Used/Discarded Filters Bags	00	100	100	Nos./Y	Detoxified and reused
	Discarded PPE's	00	0.5	0.5	TPA	CHWTSDF
	Salts generated in	0.3	15.0	15.3	TPD	CHWTSDF

	MEE					
	Salt generated in MEE from RO reject	0.3	3.0	3.3	TPD	CHWTSDF for Land filling
	Bio Medical Waste	00	0.8	0.8	TPA	CHWTSDF

Non Hazardous Waste					
Source and Name	**Existing**	**Proposed**	**Total**	**UOM**	**Disposal**
Dust	3.0	4.0	7.0	MT/D	Sent to Brick manuf.
Bio-Degradable Waste	408	198	606	Kg/D	Composted and used as manure
Non-Biodegradable Waste	272.5	132	404.5	Kg/D	Given to authorized vendors
Boiler Ash	65	85	150	TPD	Sent to Brick manuf.
Glass Bottles	00	100	100	No./M	Sent to outside agencies/recyclers
HDPE Containers	00	100	100	Nos/ M	Detoxified & Reused
Liner and Bags	00	0.5	0.5	TPM	Authorized Recycler
Paper, Cotton waste and packing materials i.e wood, carton, ropes	00	5.0	5.0	TPA	Sent to outside agencies/recyclers
STP Sludge	28.5	4.98	33.48	Kg/D	Used as manure
Metal Scrap	00	30	30	TPA	Authorized Recycler
Plastic Waste	00	0.5	0.5	TPA	Authorized Recycler
Waste Packing Wood/ Broken glass etc.	00	5.0	5.0	TPA	Authorized Recyclers
Used/Discarded RO membrane	00	2.4	2.4	TPA	Authorized Recyclers
Insulation and glass wool waste	00	1.0	1.0	TPM	Dispose off to outside agencies after detoxification

Status of Litigation Pending against the proposal: PP reported that a Case No-68/2014 in Hon'ble NGT (WZ) Pune, related to Distillery effluent pollution. Distillery plant is closed since Feb 2013 and Distillery license is also surrendered by the Industry. Case is disposed on 19th May 2015. Now execution work is in progress, as per Hon'ble NGT Order. Major directions of Hon'ble NGT order are as below;

1. CPCB to execute Bio- remediation plan of soil & water [Ground & Surface] contaminated by the earlier Distillery Unit; and

2. Under the Guidance of Professor C.R. Babu, appointed by CPCB to remediate the area and Prepare Ground Water Remediation Action Plan.

Accordingly, PP has started actions for the implementation of directions of the Hon'ble NGT

and reported that the bioremediation activity is in progress since 2017 and major achievements over Bioremediation, are as below:

(i) The contaminated upper layers (upto 2-3 feet) of soil and soil + sludge decontaminated using weedy and grassland communities.

(ii) The deep layers of contaminated soil and soil + sludge (upto &10 feet depth or more) are being decontaminated by dense plantation of deep rooted tree species. This is evident not only from the vertical soil profiles of the rfrizospheric zone of trees but also by the histochemical studies. The histochemical studies showed that the main pollution (melanoidins) were taken up by plants and deposited in the outer bar exuded through resins.

(iii) The contaminated surface water bodies (puddles to shallow water bodies) were decontaminated by aquatic and marsh vegetation, besides blue green algae.

(iv) lt was observed that the aquifer at 32' deep is contaminated and the litigant's well is 32' deep. The contaminated aquifers are localized and some of the aquifers are interconnected through seed joints. The only way to decontaminate the contaminated aquifer system is to flush out the contaminated water through continuous extraction from the wells/ trenches and recharging through reservoirs trenches filled with flood waters of river Godavari. Both the flood water filled trenches and reservoirs are being used continuously in recharging the trenches/ wells from where the contaminated water is being extracted. The reservoirs and trenches are filled with flood waters of river Godavari. Using this technology, the litigant's well and its surroundings dug wells and bore wells were decontaminated. The water quality of decontaminated wells was also tested and found to that major parameters are within the limits of standards prescribed by the CPCB. These results are also further confirmed by the MPCB.

(v) The extracted contaminated water from the wells and trenches dug up to 32' deep was bio remediated in the Experimental Tank using floating wetlands and used for irrigation of high density deep rooted plants and weedy and grassland communities.

(vi) There are trenches dug at the lower gradient which are yet filled with contaminated water. These are not yet extracted due to lack of storage space. More recharging reservoirs are being developed in the low-lying areas and as soon as these will be developed the extraction of contaminated water will be carried out to flush out other localized contaminated aquifers.

(vii) The PP further reported that the contaminated water in the aquifer at 32’ is decontaminated by flushing out of contaminated water through continuous extraction and recharging and recharging through water reservoirs and trenches using flood water of Godavari River. Contaminated soils, surface waters and sub-soil waters were successfully bio remediated by vegetating the contaminated area with herbaceous weedy species, grasses and deep rooted tree species.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports 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 an 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 reports. 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 reports are in compliance of the ToR issued for the project, considering the present environmental concerns and the projected scenario for all the environmental components. The Committee found the baseline data and incremental GLC due to the proposed project within NAAQ standards additional baseline data for the year 2020 and 2021 submitted by the PP was also found satisfactory. The Committee suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio. Accordingly, revised allocation for green area development in budgeted EMP amount Recurring cost of Rs. 386.5 lakhs/annum for proposed EMP & totaling to Recurring cost Rs. 687.5 Lakhs/annum for entire project submitted by the PP. The Committee also deliberated the court case status and the implementation of directions regarding bio-remediation tasks raised during the Public Hearing and found the reply to be satisfactory.

The Committee noted that since this is an Unit existing prior to 2006, EC was not required under the provisions of the EIA Notification, 2006. The MPCB has inspected the Unit on 24.12.2020. The Committee deliberated the compliance status of existing Unit and found in order. The Committee noted that the project proponent has submitted an undertaking regarding greenbelt development and other mitigation measures. The Committee found the additional information to be satisfactory.

The EAC deliberated on the proposal with 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 found the proposal in order and recommended for grant of environmental clearance.

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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 and conditions in 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 PFR/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). Implementation of the directions of Hon'ble NGT w.r.t. Bio- remediation plan of soil and water [Ground & Surface] contaminated by the earlier Distillery Unit on time bound manner.

(iii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97% with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(iv). An 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). As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.

(vi). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.

(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, sourced from River through Canal and Ground Water through open well, shall not exceed 2,691m^3/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(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 (if applicable).

(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 provided 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 valves 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 or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

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

(xiv). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.

(xv). The activities and the action plan proposed by the project proponent to address the socio-economic and public hearing issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.

(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.14.12

Setting up of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit located at Plot No F-2, MIDC, Chincholi, Sholapur, Maharashtra, Solapur, Maharashtra by M/s Challa Chlorides Pvt. Ltd.-Consideration of EC

[Proposal No.: IA/MH/IND2/68692/2017; File No. IA-J-11011/198/2021-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

The proposal is for environmental clearance to the project for setting up of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit located at Plot No F-2, MIDC, Chincholi, Sholapur, Maharashtra, Solapur, Maharashtra by M/s Challa Chlorides Pvt. Ltd.

The details products and capacities are as under:

S. No	Name of Product	Capacity	
		TPM	Kg/day
1	Metformin Hydrochloride	50.4	1680
2	Lumefantrine	3	100
3	Aluminium Chloride	36.15	1205
4	Ibuprofen	23.6	786.67
5	Ambroxol Hydrochloride	10.75	358.33
6	Amlodipine Besylate	2	66.67
7	Folic acid	2	66.67
8	Oxyclozanide	2	66.67
9	Cinnarizine	1	33.3
	Total	**130.9**	**4363.3**

List of By-Products

S. No.	Name of the Product	Name of By Product	Quantity (Kg/Day)
1	Ibuprofen	Hydrogen Chloride (20%)	2050.8
		Aluminium hydroxide	292.5
		Sodium carbonate	432.4
		Chromic sulphate	498.5
		Sodium sulphate	180.6
2	Amlodipine Besylate	Spent Acetic Acid (80%)	312.5

The project/activities are covered under Category ‘B’ of item 5(f) ‘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)’ of the Schedule to the Environment Impact Assessment Notification, 2006, and due to Great Indian Bustard Sanctuary is located within 5 km of the prosed Unit, hence, requires appraisal at Central Level by the Expert Appraisal Committee

(EAC) in the Ministry. The Unit is outside of ESZ, as reported by the PP. The project violated the provisions of the Environment Impact Assessment Notification, 2006.

The project proposal was considered by the Expert Appraisal Committee (Violation) in its 8th meeting held on 13.06.2018, 27th meeting held on 27.11.2018 and 17th meeting held on 30.01.2019 and recommended Terms of Reference (Tors) for the project. The ToR has been issued by Ministry vide letter no 23-120/2018-IA-III (V) dated 24.04.2019. There is no pending litigation against the proposal, however MPCB is yet to file a case against the project under the provisions of Environment (Protection) Act, 1986.

The land area available for the project is 4 acres. Industry will develop Greenbelt in an area of 33.75% i.e., 1.35 acres out of 4 acres of area of the project site. The estimated project cost is Rs4.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs1.56 crores and the Recurring cost (operation and maintenance) will be about Rs1.48 crores per annum. Total Employment will be 40 persons as direct and 30 persons indirect. Industry proposes to allocate Rs.12 lakhs towards CER.

It is reported that the Great Indian Bustard sanctuary is at a distance of 2.4 km in NNE direction and that there are no other National parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 Km distance. The ESZ of the sanctuary is at a distance of 2 km from the site in NE direction. Ujjani left bank canal is at a distance of 2.8 km in southwest direction, Nanaji odha a seasonal stream is at a distance of 3.2 km in west direction and Sina river stream is at a distance of 6.2 km in southwest direction.

The Ambient air quality monitoring was carried out at eight locations during March 2019 to May 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (51-74 µg/m3), PM2.5 (20-29 µg/m3), SO_2 (9-15 µg/m3) and NO_2 (10-16 µg/m3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC_S after the proposed project would be 0.01 µg/m3, 0.0001 µg/m3, and 0.0003 µg/m3 with respect to PM_{10}, SO_X and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement is 81.1 KLD out of which 43.1 KLD will be fresh water and 38 KLD is recycled. Water requirement will be met from MIDC Chincholi. Total effluent of 41.5 m3/day will be treated through “Zero Liquid Discharge” based effluent treatment system. The treated wastewater is reused for cooling towers, boiler make-up, scrubber’s circulation and washings.

Power requirement will be met by MSEDCL. DG sets of capacity 1 x 250 kVA proposed to cater to the energy requirement during load shut down period. DG sets which will be used as standby during power failure. Stack (height 3.2 m) will be provided as per CPCB norms to the proposed.

It is proposed to establish coal/bagasse fired boiler of 1 x 2 TPH capacity. Multi cyclone separator/ bag filter with a stack height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm3).

Details of Process emissions generation and its management: Process emissions contain Hydrogen chloride, carbon dioxide, hydrogen and sulphur dioxide. Hydrogen chloride,

sulphur dioxide is sent to scrubber. Sodium chloride from Hydrogen chloride scrubbing, sodium hydrogen sulfite salt from Sulphur dioxide scrubbing are sent to ETP. Carbon dioxide is let out into atmosphere following a standard operating procedure. Hydrogen is let out into atmosphere through water column by following standard operating procedure.

Details of Solid waste/ Hazardous waste generation and its management: Solid wastes are generated from process, solvent distillation, wastewater treatment and utilities. The effluent treatment system generates stripper distillate, ATFD salts and ETP sludge. The process operations generate process residue and recycling operation of distillation generates solvent residue and spent mixed solvents. The utilities i.e., boiler generates ash while DG sets generate waste oil and used batteries. The stripper distillate, process residue and solvent residue are sent to cement plants for co-incineration based on acceptability. If these wastes are not suitable for co-incineration, the same is sent to CHWTSDF facility. The evaporation salts and ETP sludge are sent to CHWTSDF. Waste oil and used batteries from the DG sets are sent to authorized recyclers. The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification.

Damage Assessment Report

Monetary Value for Damage Assessed – Land Environment

Description	**Quantity**	**Cost/Ton**	**Total Cost (Rs.)**
Top Soil Excavated	350 Tons	875	3,06,250
Total			**Rs. 3,06,250**

Monetary Value for Damage Assessed – Air Environment

Period of Violation	**Pollutant**			
	PM 10	**PM 2.5**	**SOx**	**NOx**
Cost Per Kg	340	524	165	96
Total cost for 180 days (in Rs.)	Rs. 2,31,109.88	Rs. 22,191.27	Rs. 0.11	Rs. 4,320.00
Grand Total	**Rs. 2,57,621.26**			

Monetary Value for Damage Assessed – Water Environment

S. No	**Description**	**Damage Cost Estimation**
1	Utilization of water for construction of 2328 sq.mt; at 1 Cum per Sq.mt Construction.	Damage Cost= 2300 x 1m^3 x Rs. 10 = Rs. 23,000/-
2	Non-Provision of RWH structures and damage to ground water natural recharge @ Rs.2.5 Lacs/structure	Damage Cost= 1 no. x Rs. 2,50,000 = Rs. 2,50,000/-
3	Non-provision of Soak Pit during construction	Damage Cost= 1 no. x Rs. 50,000 = Rs. 50,000/-
	Total	**Rs. 3,23,000/-**

Monetary Value for Damage Assessed – Noise Environment

Description	Quantity	Unit Rate (Rs.)	Total Cost (Rs.)
Partial Provision of PPE	20 nos.	1000	20,000
Total			**Rs 20, 000**

Monetary Value for Damage Assessed – Ecology and Biodiversity

Description	Quantity	Unit Rate (Rs.)	Total Cost (Rs.)
Plantation	400 nos.	2000	8,00,000
Total			**Rs. 8,00, 000**

Consolidated cost table for ecological damage on environment due to violation Remediation Plan with Budget Allocation

S.No	Component Remediation	Location	Nos.	Rate Rs.	Total Cost in Rs.	Year Wise Cost Breakup (In. Rs)		
						Year I	Year II	Year III
1	**Air Environment Remediation Proposed: Avenue Plantation**							
	Plantation of native plants at 90% survival rate; with allocated cost of each sapling of not less than Rs.2000, including maintenance for 3 years	1. Within MIDC 2. Chincholikati	400	2000	8,00,000	4,00,000	2,00,000	2,00,000
	Total				**8,00,000**	**4,00,000**	**2,00,000**	**2,00,000**

Natural Resource Augmentation with Budget Allocation

S.No	Component Remediation	Location	Nos.	Rate Rs.	Total Cost in Rs.	Year Wise Cost Breakup (In. Rs)		
						Year I	Year II	Year III
Ground Water regime recharging								
1	Construction of RWH-4 Nos @ 1,00,000/per RWH (including raw material, labour, construction and maintenance for one	1. MIDC area 2. Chincholikati 3. Ujjani colony	8	1,00,000	8,00,000	4,00,000	2,00,000	2,00,000

	year). 2 Nos in each location	4. Dharpal Bibi						
	Total				**8,00,000**	**4,00,000**	**2,00,000**	**2,00,000**

Community Resource Augmentation with Budget Allocation								
S. No	**Component Remediation**	**Location**	**Nos**	**Unit Rate Rs.**	**Total Cost in Rs.**	**Year Wise Cost Breakup (In. Rs)**		
						Year I	**Year II**	**Year III**
Improving socio-economic & Health conditions during the pandemic (COVID 19 IInd Wave)								
1	Providing materials related to Covid-19 prevention to the nearby villagers. (@ Rs.1, 01,000/village).	1. MIDC Area 2. Chincholikati 3. Ujjani colony 4. Dharpal Bibi	4	98,250	3,93,000	3,93,000		
	1 Placement of 2 Nos SHYCOCAN Device in each village to prevent Viral disease air & surface transmission (Including Corona family of viruses) - Rs.25, 000/unit.							
	2 Masks-Rs.25,500 (Distribution of 1965 masks@ Rs.25/mask)							
	3 Sanitisors-Rs.25, 000 (Distribution of 982 sanitizers @ Rs.50/sanitizer).							
	Total				**3,93,000**	**3,93,000**		

Monetary Value for Damage Assessed – Waste Management

S. No	Description of Waste	No. of Days	Estimated Quantity	Damage Cost Estimation
1	Domestic solid Waste handled for 20 Nos Construction workers at 180 grams per day per capita	150	540 Kg	Damage Cost= 540 kg x Rs.25 = Rs. 13,500/-
2	Storage of topsoil approx. without proper	50	90 cum	Damage Cost= 90m^3

	provision to avoid erosion due to wind and surface runoff during rainy season			x Rs. 75 x 30 = Rs. 2,02,500/-
				Rs. 2,16,000

Total Damage Assessed

S. No	Description	Damage Cost (Rs.)
1	Land	3,06,250
2	Air	2,57,621
3	Water	3,23,000
4	Noise	20,000
5	Ecology and Biodiversity	8,00,000
6	Waste Management	2,16,000
	Total (Rs. Lakhs)	**Rs. 19,22,871**

Deliberations in the EAC:

The EAC deliberated the cost of ecological damage on environment due to violation and found in-adequate. The committee was of view that the cost of damage on environment needs to be calculated w.r.t. proper remediation plan and other mitigation measures. The Committee also commented that punishment for violation in form of remediation cost should be exemplary so that it will deter other project proponent from repeating such violation in future.

The Committee, after detailed deliberations, suggested revision of the Remediation Plan, Natural and Community Resources Augmentation Plan and the damage assessment by the PP as the same were found to be inadequate. Accordingly, EAC recommended to **defer** the project and same may be considered after appropriate revision of the Remediation Plan, Natural and Community Resources Augmentation Plan and damage assessment.

Agenda No.14.13

Expansion of Synthetic organic chemicals manufacturing facility located at S No. 8 pts, 25 pts village Chinchvali Gohe, 13 pts, 15 pts, 16 pts village Honad, 75 pt village Thanenhave, Taluka Khalapur, District Raigad, Maharashtra by M/s Prasol Chemicals Private Limited, -Consideration of EC

[Proposal No.: IA/MH/IND3/216031/2012; File No. J-11011/260/2012-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Aditya Environmental Services 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 Synthetic organic chemicals manufacturing facility located at S No. 8 pts, 25 pts village Chinchvali Gohe, 13 pts, 15 pts, 16 pts village Honad, 75 pt village Thanenhave, Taluka Khalapur, District Raigad,

Maharashtra by M/s Prasol Chemicals Private Limited.

The details products and capacities are as under:

S. No.	Products	Existing Capacity (MT/Year)	Additional Capacity (MT/Year)	Total Capacity (MT/Year)
Products				
1	Diacetone Alcohol	9,000	23,000	32,000
2	Nonyl Phenol	720	30	750
3	Phosphorous Penta sulphide	6,000	4,000	10,000
4	Phosphorous Acid Food Grade	600	0	600
5	Dil. Phosphoric Acid	500	0	500
6	Phosphorous Pentoxide	624	26	650
7	Isophorone	3,600	8,400	12,000
8	Phenol	20,000	0	20,000
9	Acetone	12,000	3,000	15,000
10	Zinc Diorgano Dithiophosphate	1,500	2,000	3,500
11	Mesityl Oxide	750	2,250	3,000
12	Hexylene Glycol, Trimethyl Cyclohexanol, Trimethyl Cyclohexanone,	1,800	13,200	15,000
13	Methyl Isobutyl Ketone	0	5,000	5,000
14	Methyl Isobutyl Carbinol	0	3,000	3,000
15	Di-isobutyl Ketone	0	1,500	1,500
16	Di-isobutyl Carbinol	0	1,000	1,000
17	Cumene Hydroperoxide	0	5,000	5,000
18	3,5 Dimethyl Phenol	0	3,000	3,000
19	Methyl Pentadiene	0	2,000	2,000
20	Bisphenol-S	0	3,000	3,000
21	Lubricant Additives (Hydraulic Packages/ Gear Oil Packages etc.)	0	500	500
22	Sodium Dithiophosphate	0	500	500
23	Sodium Dialkyl Dithiophosphate	0	500	500
24	Benzylidene Acetone	0	800	800
25	Benzyl Acetone	0	500	500
26	Dialkyl Dithiophosphoric Acid	0	500	500
27	Poly Isobutanyl Succinic Anhydride(PIBSA)	0	1,500	1,500
28	Poly Isobutanyl Succinimide (PIBSI)	0	750	750
29	Phosphate Esters	0	500	500
30	Amine Phosphates	0	300	300
31	Carbazole Esters	0	1,500	1,500
32	Ashless Lubricant Additive	0	300	300
33	Resorcinol	0	3,000	3,000
34	Dicumyl Peroxide	0	500	500
35	Cumyl Alcohol	0	250	250

S. No.	Products	Existing Capacity (MT/Year)	Additional Capacity (MT/Year)	Total Capacity (MT/Year)
36	Cogeneration Power	4.6 MW	0	4.6 MW
37	Steam generation	38 Ton/hr	0	38 Ton/hr
38	Research and Development activities with Pilot Plant	-	-	-
	Sub Total (Products)	**57,094**	**91,306**	**148,400**
By-Products				
1	Di-Nonyl Phenol	60	0	60
2	Alpha Methyl Styrene (AMS)	1,500	0	1,500
3	Acetophenone (ACP)	800	0	800
4	Sodium Hydrogen Sulphide (NaHS)/ Flakes	0	2000	2,000
5	Dicarbinol	0	240	240
	Sub Total (By Products)	**2,360**	**2,240**	**4,600**
	Grand Total (Products + By products)	**59,454**	**93,546**	**153,000**

The project/activities are covered under Category 'A' of item 5(f) '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)' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR has been issued by Ministry vide letter dated 27th June, 2019. The Ministry had issued EC earlier vide letter no. J-11011/260/2012-IA II (I) dated 18.09.2014 to the existing facility. Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 13.10.2020 which was presided over by the Addl. District Magistrate. Major points raised during the public hearing are related to Local employment, CSR, safety aspects, Green belt, pollution aspects etc. Certified compliance report is received from Regional office (WCZ), MoEF&CC, Nagpur vide letter dated 18th September 2019. No litigation is pending against the proposal.

The land area available for the project is 68644 sq. m. Industry will develop greenbelt in an area of 33.5% i.e. 23,004 sq. m out of total area of the project. Out of 23,004 sq.m. total green belt area, 13,374 sq. m. is developed within own plot and 9,630 sq. m. will be developed on adjacent lease plot. The estimated project cost is Rs.50 Crores in addition to existing investment of Rs.170.53 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 8.7 Cr and the Recurring cost (operation and maintenance) will be about Rs.3.395 Cr per annum. Total Employment will be 610 persons (Existing- 500 & Proposed- 110) as direct & ~1000 persons indirect after expansion. Industry proposes to allocate Rs.50 Lakhs of proposed project cost towards CER.

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

distance of 20 m in south direction.

Ambient air quality monitoring was carried out at 8 locations during March to May 2019 and the baseline data indicates the ranges of concentrations as: PM_{10} (53.7 to 75.2 µg/m^3), $PM_{2.5}$ (22.2 to 31.4 µg/m^3), SO_2 (10.8 to 15.5 µg/m^3), NOx (17.1 to 25 µg/m^3), NH_3 (11.5 to 22.3 µg/m^3), CO (0.17 to 0.45 mg/m^3), nMHC (0.15 to 0.32 ppm). H_2S is found to be BDL. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.19 µg/m^3, 8.54 µg/m^3 and 0.22 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement in post expansion scenario is 1518 CMD of which fresh water requirement of 1140 CMD will be met from Patalganga river for which NOC is obtained from Irrigation Department, Raigad and balance 378 CMD by recycling treated effluent. Trade effluent of 364 CMD quantity will be treated through ETP, RO, MEE & ATFD. Domestic sewage of 27 CMD will be treated in STP. Plant is based on Zero Liquid discharge facility.

Power requirement after expansion will be 4900 kVA including existing 2900 kVA. Power requirement will be fulfilled from Maharashtra State Electricity Distribution Company Limited (MSEDCL) and existing Co-Generation Plant of 4.6 MW capacity. Existing unit has 250 kVA and 380 kVA DG sets. Additionally, 625 KVA DG set is used as standby during power failure. Stack height of 3.6 m above roof will be provided as per CPCB norms to the proposed DG set.

Existing unit has 5 nos. of coal fired boiler (3 TPH, 8 TPH, 10 TPH, 16 TPH & 38 TPH capacity respectively) and 2 nos. of coal fired Thermic Fluid heater (30 & 20 Lakh Kcal/hr). Additionally, 5 TPH boiler and 30 Lakh Kcal/hr Thermic Fluid Heater based on Furnace oil will be installed. Stack height of 38 m for Boiler & 40 m for Thermic Fluid Heater will be provided. 3, 8 & 10 TPH coal fired boiler will be discontinued once 5 TPH FO fired boiler is installed. 20 Lakh Kcal/hr coal fired TFH will be discontinued once 30 Lakh Kcal/hr FO fired TFH is installed. Particulate emissions will be maintained within the statutory limit of 150 mg/Nm^3 for the proposed boilers.

Details of Process emissions generation and its management.

Parameter	Zinc Di Organo Dithiophosphate plant	Phosphorus Pentasulphide plant
Pollutant	H_2S	H_2S/ Off gas
Scrubbing media	Caustic	Caustic
Temp	ambient	ambient
Diameter	0.15	0.15
MOC	SS	SS
Shape	Round	Round
Height in m	12	11
Control Equipment	2 stage scrubber equipped with Temperature/ Pressure transmitter/ pH sensor	2 stage scrubber equipped with Temperature/ Pressure transmitter/ pH sensor
Norm to be	10 ppm	10 ppm

complied		

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

S. No.	Waste Type	UOM	Existing Qty.	Additional Qty.	Total	Disposal
1	Sand from water filtration	TPA	11	6.5	17.5	Sale to Authorized Vendor/ recycler/ re processor/ landfill
2	Used hand gloves Cotton/ PVC/ Rubber	Pcs/A	20,000	5000	25,000	CHWTSDF/ Sale to Authorized Vendor
3	Miscellaneous (Rubber & Teflon Gasket/ Packing/ Transmission Belt/ V Belt/ PP / FRP etc)	Kg/A	500	500	1000	CHWTSDF/ Sale to Authorized Vendor
4	Fly Ash	TPD	30	0	30	Sale to Brick manufacturer/ Cement Manufacturer/ Authorized Vendor

S. No.	Waste Type	Cat.	UOM	Existing Qty.	Additional Qty.	Total	Disposal
1	Used/ Spent Oil	5.1	KL/A	12	3	15	Sale to Authorized Vendor/ recycler/ re processor
2	Filter residue	6.1	TPA	38	82	120	CHWTSDF/ Sale to Authorized Vendor/recycler/ reprocessor
3	Tar	1.2	TPA	1500	0	1500	CHWTSDF/ Sale to Authorized Vendor/recycler/ reprocessor
4	Distillation residue	20.3	TPA	613.2	1225	1838.2	CHWTSDF/ Sale to Authorized Vendor/recycler/ reprocessor
5	Used, Empty containers/ barrels/ liners	33.1	Nos/A	7000	18000	25000	Sale to Authorized Vendor/ recycler/ reprocessor

S. No.	Waste Type	Cat.	UOM	Existing Qty.	Additional Qty.	Total	Disposal
6	ETP sludge from WWT	35.3	TPA	80	320	400	CHWTSDF
7	Evaporation Residue/ ATFD salts	37.3	TPA	0	1200	1200	CHWTSDF
8	Spent catalyst	19.2	TPA	5	15	20	CHWTSDF/ Sale to authorized reprocessor
9	Ion exchange resin	35.2	TPA	1	0.5	1.5	Sale to Authorized Vendor/ recycler/ re processor

The PP vide letter dated 23.07.2021 submitted commitment that the project is outside the Eco Sensitive Zone and directions issued on Western Ghat. The PP will use low ash content imported coal in cogeneration boiler. PP also submitted revised water balance as pointed out by the EAC. Conservation plan for schedule –I species also submitted by PP. The Committee deliberated the same and found in order.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with the EIA/EMP reports 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 an 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 reports. 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 reports are in compliance of the ToR issued for the project, considering the present environmental concerns and the projected scenario for all the environmental components. The Committee found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio. Accordingly, revised allocation for green area development submitted by the PP also PP committed to plant 3905 additional tree. The committee deliberated issues raised during the Public Hearing and found the reply to be satisfactory.

The Committee deliberated the certified compliance report of the earlier EC, issued by IRO MoEFCC and found in order. The Committee also noted that the Unit is outside of the Eco Sensitive Zone. The Conservation plan for schedule –I species also deliberated by the

EAC and found in order. The Committee also deliberated the action plan on the issues raised during PH and found in order.

The Committee suggested that natural gas/briquettes shall be used as fuel in the boiler in place of coal and only during emergency coal (with Sulphur <0.5%) may be used. Ash shall be used as manure/soil conditioner. The Committee noted that the project proponent has submitted an undertaking regarding greenbelt development. The Committee found the additional information to be satisfactory.

The EAC deliberated on the proposal with 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 found the proposal in order and recommended for grant of environmental clearance.

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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 and conditions in 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 PFR/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(iii). An 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.

(iv). As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.

(v). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.

(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, sourced from Patalganga river, shall not exceed 1140 CMD. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(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 (if applicable).

(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 provided 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 valves 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 or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

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

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

Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. PP shall plant 7000 trees and All trees must be planted within first year.

(xiv). The activities and the action plan proposed by the project proponent to address the socio-economic and public hearing issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.

(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.14.14

Establishment of chemical complex and captive power plant located at Post Sameerwadi, Taluk Mudhol, District Bagalkot, Karnataka by M/s Godavari Biorefineries Limited (GBL), - Consideration of EC

[Proposal No.: IA/KA/IND3/213700/2018; File No. IA-J-11011/503/2017-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan, 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 chemical complex and also generate 16 MW captive power (2 x 8 MW) at Sy. Nos. 48/1, 53/1, 55, 47, 50/2, 57/1, 57/2, 57/3. 49/1, 49/2, 49/3, 49/4, 56/3 & 46 of Handigund Village, 150/1 of Kappalguddi and 74/1, 74/2, & 75 of Madhabhavi Village, Sameerwadi- 587316, Mudhol Taluk, Bagalkot District, Karnataka State by M/s. Godavari Biorefineries Limited (GBL).

The details products and capacities are as under:

S. No.	Name of Product	Existing TPM	Proposed TPM	Total after Expansion TPM
I	**Regular Products**			
1	Acetaldehyde		2800	2800
2	Crotonaldehyde		1000	1000
3	Acetaldol60%		420	420
4	Crotonyldehyde Di- Urea (CDU)		78	78
5	Crotoresin		52	52
6	Paraldehyde		60	60
7	1, 3 Butylene Glycol		200	200
8	1-3 Butylene Glycol (Min 40%)		32.22	32.22
9	Butanol		117.7	117.7

10	2-Ethyl, 1, 3 Hexane Diol		33.33	33.33
11	3-Methoxy Butanol		275	275
12	3 Methoxy Butanol (Min 40%)		30	30
13	3-Methoxy Butyl Acetate		340	340
14	3-Methyl 3- Pentene -One (MPO)		500	500
15	Ketone Mixture		197.5	197.5
16	Sodium Sulphate		245	245
17	Acetaldehyde Oxime		175	175
18	Ammonium Sulphate		133.9	133.9
19	n- Hexanol		42	42
20	Acetaldehyde Diethyl Acetal		250	250
21	Ethyl Vinyl Ether		100	100
22	Acetophenone		175	175
23	Phenyl Methyl Carbinol		44.8	44.8
24	Benzoic Acid or Sodium Benzoate		36.9	36.9
25	Acetonitrile		425	425
26	Diethyl Oxalate		175	175
27	Gbamber		100	100
28	Polyol		100	100
29	Propyl Acetate/ Butyl Acetate		1000	1000
30	Crude Propyl Acetate or Crude Butyl Acetate		140	140
31	Tri Ethoxy Butane	100	0	100
32	Ethyl Lactate/Methyl Lactate/ Iso Propyl Lactate	50	50	100
33	NaturoWax		100	100
34	Cellulose	3	750	753
35	Micro Crystalline Cellulose		700	700
36	Xylitol		350	350
37	Furfural		350	350
38	Lignosulphonate		600	600
39	Bio-composite		2500	2500
		153	**14678.35**	**14831.35**
II	**Campaign Basis**			
1	Ethyl Crotonate		7.5	7.5
2	Methyl Crotonate		9.9	9.9
3	Methyl Beta Amino Crotonate		15	15
4	Ethyl Beta Amino Crotonate		30	30
	Acetals			
1	Acetaldehyde Dimethyl Acetal		15	15
2	Formaldehyde Dimethyl Acetal		15	15
3	Formaldehyde Diethyl Acetal		15	15
4	Acetaldehyde Dibutyl Acetal		15	15
5	Acetaldehyde di-Iso Propyl Acetal		15	15
6	Acetaldehyde di-iso amyl acetal		15	15
7	Crotonaldehyde Diethyl Acetal		15	15

8	Butyraldehyde Dimethyl Acetal		15	15
9	Cinnamaldehyde Diethyl acetal		15	15
10	Tri Methoxy Butane		15	15
11	Acetaldehyde Propylene Glycol Acetal		15	15
	Esters			
1	Butane Diol polyester		15	15
2	Ethyl Levulinate		15	15
3	Ethyl Butyrate		15	15
4	Diethyl Succinate		15	15
5	Dimethyl Phthalate		15	15
6	Isopropyl Crotonate		15	15
7	Hexyl Acetate		15	15
8	Hexyl Salisilate		15	15
9	Valerolactone		15	15
10	Diethyl Phthalate		15	15
11	Ethyl Formate		15	15
14	Ethyl propionate		20	20
	Oximes			
1	Butaraldehyde Oxime		20	20
2	Methyl Ethyl Ketone Oxime		20	20
	Other Aldehydes			
1	Butyraldehyde		20	20
2	2-Ethyl butyraldehyde		20	20
3	2-Ethyl Hexenal		20	20
4	2-Ethyl Hexanal		20	20
5	2- Ethyl Crotonaldehyde		20	20
6	Cinnamaldehyde		20	20
7	Sorbaldehyde		20	20
8	Hexyl cinnmaldehyde		20	20
9	Crude Hexyl Cinnamaldehyde		8	8
	Organic Acids			
1	Butyric acid		20	20
2	Crotonic acid		20	20
3	Levulinic acid		20	20
4	Hydroxy Methyl Fufural		20	20
5	Formic acid		1.5	1.5
	Alcohols			
1	2-ethyl Butanol		20	20
2	2-Ethyl Hexanol		20	20
3	Hexanol		20	20
4	Sorbic Alcohol		20	20
5	Crotyl Alcohol		20	20
6	Cinnamic Alcohol		20	20
7	Polycosanol		20	20
8	Sorbic Alcohol (Min 30%)		1.78	1.78
9	Crotyl Alochol (Min 30%)		2.46	2.46

10	Cinnamyl Alcohol (Min 30%)		7.84	7.84
11	Isobutanol		14	14
12	2,5 Furan Dimethanol		20	20
	Nitriles			
1	Propionitrile		20	20
2	Butyronitrile		20	20
3	Isobutyro nitrile		20	20
4	Valeronitrile		9	9
	Ketones			
1	Acetone		20	20
2	3-Methyl 2-Pentanone		20	20
3	Methyl Ethyl Ketone		20	20
4	Diethyl Ketone		20	20
	Ethers			
1	Isobutyl Vinyl ether		20	20
2	1-ethoxy Ethyl Acetate		20	20
3	Methyl vinyl Ether		20	20
4	Butyl Vinyl Ether		20	20
5	Diethyl Ether		20	20
	Total - II (Any 6 product at a time)		130	130
III	R & D Products		5	5
	Grand Total (I+II+III) - Total 46 from regular, -- products from campaign products and R&D products.	**153**	**14813.35**	**14966.35**
Co-Generation Power Plant				
1	Co-Generation Power Plant	-	2 x 8.0 MW	2 x 8.0 MW

The project/activities are covered under Category 'A' of item 5(f) '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 1(d) 'Thermal Power Plants' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR has been issued by Ministry vide letter dated 17th June, 2018 and amendment to ToR vide letter dated 17.09.2020. Public hearing for the proposed project has been conducted by the Karnataka State Pollution Control Board on 29.01.2021 which was presided over by the Deputy Commissioner. The main issues raised during the public hearing are related to provide best pollution control systems, ensure that health of the people not affected, further in to the Air pollution control in existing plant, to improve the approach road to the Factory, the irrigation canal should be got cleared from debris, provide job opportunity to the local people and to improve the arch provided to the entrance to the Factory.

PP reported that the Ministry has earlier granted EC for sugar complex. The Certified Compliance Report issued by Regional Office, MoEFCC Bangalore dated 11.02.2021. The EC compliance is reported to be "Satisfactory".

PP reported that the land area available for the project is 2122576.19 m^2 (524.5 acres) and an area of 194.0 acres land will be used for proposed Chemical Complex and establishment of captive power plant. Industry has already developed greenbelt in an area of 33 % of the total area in an area of 175 Acres out of 524.5 Acres. In proposed chemical complex also 33 % of greenbelt will be separately developed and maintained i.e., out of 194 Acres; 64.02 Acres of land is earmarked for greenbelt development. Rs.350 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.21.78 Crores and the Recurring cost (operation and maintenance) will be about Rs.6.02 Crores per annum. Total Employment will be 549 persons, out of this the direct employment is 405 persons & indirect is 144 persons after expansion. Industry proposes to allocate Rs.5.25 Crores 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. Ghataprabha River is flowing at a distance of 4.5 km in South of the industry.

Ambient air quality monitoring was carried out at 8 locations during November 2018, December 2018, January 2019 and the baseline data indicates the ranges of concentrations as: PM_{10} (73.18 - 39.89 µg/ m^3), $PM_{2.5}$ (33.41 - 19.46 µg/m^3), SO_2 (11.42 – 4.18 µg/ m^3) and NO_2 (13.58 – 9.14 µg/ m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 26.26 µg/m^3, 17.19 µg/m^3, 10.76 µg/m^3 and 22.06 µg/m^3 with respect to $PM_{10,}$ $PM_{2.5}$, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement in post expansion scenario is 11627 m^3/day of which fresh water requirement of 4497 m^3/day will be met from Ghataprabha River. Effluent of 6872 m^3/day quantity will be treated through ETP, RO followed by MEE. The plant will be based on Zero Liquid discharge system.

Power requirement for chemical complex will be 8.7 MW, it is proposed to set up captive power plant of capacity 2 x 8 MW. DG sets of 6 x 1500 kVA capacity will be provided as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets.

It is proposed to install 2 x 75 TPH coal fired boilers. Electro static Precipitator with a stack of height of 68 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Details of Process emissions and their management: The process emissions contain Hydrogen, SO_2 and acid mists generated from manufacturing process and it will be treated in two stage scrubbers.

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

Sl. No.	Description of waste	Categorization	Quantity	Disposal method
1	Process/ Distillation residue	28.1	16.09 TPD	TSDF / Cement Industry
2	Spent Carbon	28.3	0.3 TPD	TSDF / Cement Industry

3	Spent catalyst	28.2	0.1085 TPD	Sent to reactivation to the supplier
4	Hyflow	-	20 Kg/d	TSDF
5	Mixed Spent Solvents	20.2	1.86 KLD	TSDF / Cement Industry
6	Boiler Ash	-	280 TPD	TSDF to use as a stabilizing agent / Brick manufactures
7	Used Oil	5.1	3 KLPA	Authorized recyclers
8	Lead acid batteries		80 Nos./ Annum	Authorized recyclers
9	Softener / DM Plant Resins	-	120 TPA	TSDF
10	Forced Evaporation Salts	34.3	19.88 TPD	TSDF
11	ETP Sludge	34.3	4.95 TPD	TSDF
12	STP Sludge	34.3	0.3 TPD	Composted and used as manure
13	Used/Discarded Filter Bags	33.1	100 Nos. / Annum	TSDF for Incineration
14	Used / Discarded RO Membranes	-	0.2 TPA	TSDF for Incineration
15	HDPE containers	33.1	100 Nos/ Month	Detoxified and reuse
16	Liners & Bags	33.1	0.5 TPM	Authorized recyclers
17	Used Filters (HEPA filters, Oil Filters etc)	33.1	100 Nos. /Annum	TSDF for Incineration
18	Insulation and Glass wool Waste	-	1 TPM	TSDF
19	Discarded PPE	-	1.7 TPA	TSDF for Incineration
20	Glass Bottles	-	100 Nos/ Month	Dispose off to outside agencies after detoxification
21	Paper, cotton waste & Packing materials i.e. wood, carton, ropes	-	5 TPA	Sold to recyclers outside Agencies/recycler
22	Waste packing wood/ broken glass etc	-	5.2 TPA	Sold to recyclers Outside agencies/recycler
23	Metal scrap	-	5.4 TPA	Sold to recyclers Outside agencies/ recycler
24	Plastic Waste	-	5 TPA	Authorized recyclers
25	Canteen Waste	-	0.85 Kg/Day	Composted and used as manure
26	Bio Medical Waste	-	2.1 TPA	Sent to Bio Medical Waste Treatment Facility
27	E- Waste	-	4.5 TPA	Authorized agencies

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports 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 an 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 reports. 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 reports are in compliance of the ToR issued for the project, considering the present environmental concerns and the projected scenario for all the environmental components. The Committee found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio. Accordingly, revised allocation for green area development submitted by the PP also PP committed to plant 29000 saplings. The committee deliberated issues raised during the Public Hearing and found the reply to be satisfactory.

The Committee noted that since this is the existing Sugar Complex for which EC was granted by the Ministry. Now PP wants to set up new separate chemical complex. The Committee deliberated the compliance status of existing Sugar Complex and found in order. The Committee noted that the project proponent has submitted an undertaking regarding greenbelt development. The Committee found the additional information to be satisfactory.

The EAC deliberated on the proposal with 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 found the proposal in order and recommended for grant of environmental clearance.

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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, <u>subject to compliance of terms and conditions</u> as under, and general terms and conditions in 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). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(iii). An 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.

(iv). As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.

(v). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.

(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, sourced from Ghataprabha River, shall not exceed 4497 m^3/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(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 (if applicable).

(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 provided 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 valves to prevent

losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xi). Process organic residues and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

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

(xiii). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.

(xiv). The activities and the action plan proposed by the project proponent to address the socio-economic and public hearing issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.

(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.14.15

Setting up of Active Pharmaceutical Ingredients (APIs) and API Intermediates Manufacturing Unit at Plot No. D-10, MIDC Paithan-431107, Taluka Paithan, District Aurangabad, Maharashtra, by M/s Shalini Organics Private Limited.

[Proposal No.: IA/MH/IND3/214281/2020; File No. IA-J-11011/281/2020-IA-II(I)]

The Project Proponent and the accredited Consultant Dr. Subbarao Environment Center, 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 of Active Pharmaceutical Ingredients (APIs) and API Intermediates Manufacturing Unit at Plot No. D-

10, MIDC Paithan-431107, Taluka Paithan, District Aurangabad, Maharashtra, by M/s Shalini Organics Private Limited.

The details products and capacities are as under:

S. No.	Product details	Nos.	Tonnage (MT)
1.	API	6	112
2.	API Intermediate	43	1171
	Total	49	1283
	Per Month capacity	42.76 MT/ M	

API

Sr. No.	Product Name	UOM	Qty /Month	CAS NO	Remark
1	Albendazole	MT	60	54965-21-8	Anthelmetis
2	Frusemide	MT	10	54-31-9	Anti Diuretic
3	Tizanidine	MT	2	51322-75-9	Muscle Relaxar
4	Fenbendazole	MT	15	43210-67-9	Antihelmintis
5	Triclabendazole	MT	15	68786-66-3	Anti Liver flukes.
6	8-Hydroxy Quinoline	MT	10	148-24-3	Antimalarial/ Anti corona
=	Total API	MT	112	==	==

API Intermediates

Sr. No.	Product Name	UOM	Qty. /Month	CAS NO	Remark
1	2-Nitro-4-propyl thioaniline	MT	80	54393-89-4	Albendazole Inter.
2	2-Amino -4-Propyl thioaniline/ 4-Propyl Thiodiamine	MT	80	229326-17-4	Albendazole inter
3	2-Nitro Thiocyano aniline/ 2-Nitro-4-propyl sulfanyl aniline	MT	80	54029-45-7	Albendazole inter
4	2-Nitro -5-Phenyl mercapto Aniline	MT	10	43156-47-4	Albendazole/Fabental/Fenb.
5	ThiophenoL	MT	30	108-98-5	Starting raw material
6	5-Chloro -4-Amino-2,1,3-Benzothiadiazole	MT	1	30536-19-7	Tizanidine Intermediate
7	Sodium Bromide	MT	50	7647-15-6	Reagent
8	Sodium Sulphide Flakes/ NAHS soln	MT	50	1313-82-2	Reagent
9	4-Bromo-2-fluoro Aniline	MT	15	367-24-8	Flurbiprofen Intermediate
10	2-Fluoro Aniline	MT	20	106-94-5	Flurbiprofen Intermediate
11	4-nItro Benzamide	MT	30	619-80-7	Dimizimine HCl int
12	3,4 Dimethoxy Aniline	MT	15	6315-89-5	Common inter
13	3-Hydroxy -Acetonephenone	MT	10	121-71-1	Phenyl epherine interm.
14	Chloro Acetaldehyde Dimethyl Acetal	MT	20	97-97-2	Intermediate
15	Lasamide	MT	20	2736-23-4	Frusemide Inter
16	3-Nitro Acetophenone	MT	15	121-89-1	PHEP Intermediate

17	4-Chloro-(2,3-dichloro phenoxy)-2-Nitroaniline	MT	20	139369-42-9	Triclabendazole Int
=	6-Chloro-5-(2,3-dichlorophenoxy-1H-Benzimidazole	MT	=	100648-13-3	Triclabendazole int.
=	2-Nitro 4,5-dichloroacetanilide	MT	=	5462-30-6	Triclabendazole int
18	2-Chloro 1-(2,4-difluorophenyl)ethanone	MT	5	51336-94-8	Fluconazole int.
19	2-(4-Amino 4,5-dihydro-[1,2,4-]triazole-1yl}-1-(2,4-difluoro ethanone	MT	5	86404-63-9	Fluconazole intermediate
20	5-Amino Salicylic acid	MT	20	89-57-6	Intermediate
21	1[4-chlorophenyl] phenyl methyl piperzine	MT	10	300543-56-0	Cetrizine diHCl int.
22	Tetra Butyl ammonium Bromide	MT	30	1642-19-2	Catalyst.
23	2-(4-methoxyphenyl) acetic acid	MT	30	104-01-8	Dextromethorpan HBr.int.
24	Hydrogenation of Aldehydes and Amines[Aldehyde to Alcohol]	MT	15	NA	General hydrogenation of aldehydes and Amines.
25	1(2,4-dichloro phenyl)-2-(1-H-imidazole -1-yl) Etanone/Ethanol	MT	20	24155-42-8	Miconazole Inter.
26	1-(carbamethyl-cyclohexyl)Acetic acid	MT	20	1157262-35-5	Gabapentin Intermediate
27	5-(4-(Ethylphenylethoxy) benzyl thiozolidine-2,4- dione	MT	10	112529-15-4	Pioglutazone intermediate
28	4-(4-Ethylphenyl-ethoxy) benzaldehyde	MT	15	114393-97-4	Pioglutazone intermediate.
29	2-(5-ethyl pyridine-ethanol)	MT	=	5223-06-3	Pioglutazone Intermediate
30	Ammonium thiocyanate	MT	100	1762-95-4	Intermediate
31	Hydrogen Cynamide	MT	50	420-04-2	Intermediate
32	N-Propyl Bromide	MT	25	106-94-5	Intermediate
33	Cyanuric acid	MT	25	108-80-5	Starting raw material
34	5-Methoxy-2-mercapto benzimidazole	MT	20	37052-78-1	Omeprazole Intermediate
35	2-Chloro-5-Iodo Benzoic acid	MT	5	19094-56-5	API Intermediate
36	4-Hydroxy coumarin	MT	5	1076-38-6	Warfarin inter.
37	Cyanoacetic acid	MT	25	372-09-8	Intermediate
38	5-Chloro-2- Ntroaniline	MT	50	1635-61-6	Tricalbendazole Intermediate
39	2-Nitro Aniline	MT	100	88-74-4	Intermediate
40	2-Bromo Isopropyl Isobutyrate	MT	10	51368-55-9	Finofibrate Intermediate
41	m-Nitro Benzaldehyde	MT	05	99-61-8	Intermediate

42	2,2,4-Trichloro Acetophenone	MT	15	4252-78-2	Miconazole Nitrate Interm.
43	4-Amino Benzonitrile	MT	10	873-74-5	Intermediate
=	Total Intermediate	MT	1171	== ==	== == == ==

The project/activities are covered under Category 'B' of item 5(f) and '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)' of the Schedule to the Environment Impact Assessment Notification, 2006, But, due to presence of Jaykawadi Bird Sanctuary, 4.46 km from the protected area, General condition is applicable to project and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR has been issued by Ministry vide letter dated 27th November, 2020. Public hearing is exempted as the proposed project is located in the Notified Industrial Area.

The land area available for the project is 20000 m^2. Industry will develop greenbelt in an area of 33 % i.e. 6600.42 m^2 out of total area of the project. The estimated project cost is Rs.8.62 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.116 Lakhs and the recurring cost (operation and maintenance) will be about Rs.31.5 Lakh per annum. Total Employment will be 40 persons as direct & 20 person as indirect. Industry proposes to allocate Rs.17.24 Lakhs towards Corporate Environment Responsibility.

The project site is 4.46 km from the protected area of the Jaykawadi Bird Sanctuary. The Distance certificate obtained from Divisional Forest Officer (Wildlife) Aurangabad. PP reported that the Unit is outside of the ESZ.

The Ambient air quality monitoring was carried out at 8 locations during December 2020 to February 2021 and the baseline data indicates the ranges of concentrations as: PM10 (40.2 – 58.6µg/m3), $PM_{2.5}$ (12.1 – 25.4µg/m3), SO_2 (13.0-18.5µg/m^3) and NOx (13.8-28.3 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.12 µg/m^3, 0.05 µg/m^3, 2.1 µg/m^3 and 1.45 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 246 m^3/day, out of which fresh water requirement of 63 m^3/day will be met from MIDC water supply. Effluent of 145 m^3/day will be treated through ETP. The plant will be based on Zero Liquid Discharge system.

Power requirement will be 280 kVA and will be met from MSEDCL. It is proposed to install 2*500 kVA DG Set, Stack height of 6 m above roof level is provided as per CPCB norms for the DG sets. It is proposed to use 2 TPH Briquette fired steam boiler. Cyclone separator followed by bag filter with a stack of height of 30 m shall be provided.

Details of Process emissions generation and its management: Two stage alkali scrubber followed by water and NaOH solution will be provided.

Details of Solid waste/ Hazardous waste generation and its management: Boiler ash generated will be around 450 MT/A which shall be disposed as TSDF. Septic tank sludge and canteen waste will be 3 MT/A respectively which shall be disposed as TSDF. Hazardous

waste i.e. spent oil of 5.10 kg/Month and chemical sludge and oil grease skimmer residue as 35.40 kg/Month shall be disposed as CHWTSDF.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports 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 an 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 reports. 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 reports are in compliance of the ToR issued for the project, considering the present environmental concerns and the projected scenario for all the environmental components. The Committee found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio. Accordingly, revised allocation for green area development submitted by the PP. As per committee suggestions PP committed that the water collected from the roof terraces of the rainwater shall not be used for ground water recharge. It would be stored and utilized for process and utilities.

The Committee suggested that natural gas/briquette shall be used as fuel in the boiler in place of coal and only during emergency coal (with Sulphur <0.5%) may be used. Ash shall be used as manure/soil conditioner. The Committee noted that the project proponent has submitted an undertaking regarding greenbelt development. The Committee found the information to be satisfactory.

The EAC deliberated on the proposal with 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 found the proposal in order and recommended for grant of environmental clearance.

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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 and conditions in 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 PFR/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(iii). An 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.

(iv). As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.

(v). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.

(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, sourced from MIDC water supply, shall not exceed 63 m^3/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(viii). As committed by the PP, coal having ash content less than 15% is to be used as fuel only during the rainy season when the Biomass Briquettes may not be available and during all other seasons only biomass briquettes shall be used.

(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 (if applicable).

(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 provided 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 valves to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xii). Process organic residues and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

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

(xiv). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.

(xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.

(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. 14.16

Capacity Expansion of Formaldehyde Manufacturing Unit in existing facility from 120 TPD to 200 TPD at Village Jathlana, Tehsil Radaur, District Yamuna Nagar, Haryana by M/s Guruji Overseas-Consideration of TOR

[Proposal No.: IA/HR/IND3/217910/2021; File No. IA-J-11011/270/2021-IA-II(I)]

The project proponent and their accredited consultant M/s Vardan Environet, made a detailed

presentation on the salient features of the project:

The plant was established after obtaining CTE/NOC vide letter no. 313282118YAMCTE5620024 dated 30.10.2018 for 120 TPD. HSPCB instructed the project proponent to obtain prior environment clearance from the competent authority vide SCN No. HSPCB/HWM/41-301/2020/571-572 dated 08.06.2020.

The chronology of events and the actions taken are as under

S. No.	Date	Description
1	30.10.2018	Consent to Establish obtained from HSPCB vide letter no. 313282118YAMCTE5620024.
3	08.06.2020	Show cause notice for closure of the unit from HSPCB, Panchkula vide letter no. HSPCB/HWM/41-301/2020/571-572
4	11.11.2020	Additional Chief Secretary, Environment Department, Haryana Govt. vide their order dated 11.11.2020 allowed the units to continue their operations for a period of six months without prejudice to any legal actions taken against the violations committed by them, by the competent authorities, with the conditions that they will immediately apply for Environmental Clearance from the competent authority and provide the proof of such application within 60 days from the issuance of this communication to Environment and Climate Change Department and to Haryana State Pollution Control Board.
5	19.05.2021	HSPCB has given directions to stop operation of the unit in view of expiry of relaxation granted by Haryana Govt.
6	03.06.2021	The NGT order dated 03.06.2021 in Original Application No. 287/2020 (Dastak N.G.O. vs Synochem Organics Pvt. Ltd. & Ors.) concluded “Since prior EC is statutory mandate, the same must be complied. We have no doubt that the stand of the private respondents will be duly considered by the concerned regulatory authorities, including the MoEF&CC on merits and in accordance with law but till compliance of statutory mandate, the units cannot be allowed to function. For past violations, the concerned authorities are free to take appropriate action in accordance with polluter pays principle, following due process.”
7	03.06.2021	The NGT order dated 03.06.2021 for the Original Application No. 840/2019 (Ayush Garg Vs. Union of India & Ors.) concluded “no further direction appears to be necessary except that the State PCB may ensure that the unit does not re-start functioning without requisite statutory clearance”.

Production Capacity

Product	Capacity for which CTE obtained	Proposed capacity	Total capacity after expansion
Formaldehyde	120 TPD	80 TPD	200 TPD

Raw Material Detail

The major raw material is Methanol which comes in road tankers from Kandla Port, Gujarat & stored in underground M.S tanks.

Raw Material	Total Requirement
Methanol	90 TPD

Resource Requirement

S. No.	Particular	Detail
1	Land Requirement	Total built up area is 0.9274. Green belt will be developed in an area of 0.3134 Hectare (approximately 33.79% of total land area).
2	Water Requirement	235 KLD will be required for the proposed plant. The water will be sourced from Haryana Water Resources Authority.
3	Power Requirement	Maximum power requirement for the plant is 8000 kwH/day which will be sourced from UHBVN (Uttar Haryana Bijli Vitran Nigam) **DG sets as backup-** 2x320 KVA (Proposed)
4	Manpower Requirement	20 Manpower will be employed once the plant is in operation phase.
5	Cost of the Project	Total project cost is Rs. 60 Lakhs

There is no Wild Life Sanctuary or National Park within 10 km radius of the Project Site. Project attracts General Condition of Interstate boundaries “Haryana-Uttar Pradesh interstate boundary at a distance of 4.38 km to SE direction”

Company has obtained diversion of 0.0053 Ha. of forest land for access to their factory by Chief Conservator of Forests, Forest Department, Haryana vide file no. 8864/3746 dated 14.01.2020.

Details of Violation

Period	Production	Remarks
Oct 2018-Dec 2020	Formaldehyde Manufacturing (200 TPD)	Prior EC was not taken before setting up and operating the Unit, hence covered under violation

The said project/activity is covered under category A of item 5(f) “Synthetic Organic Chemicals” of the Schedule to the EIA Notification, 2006, and requires prior EC from Expert

Appraisal Committee, MoEF&CC.

Deliberations by the EAC:

The Committee was informed that the Ministry had issued a Notification vide S.O. 804 (E) dated 14th March, 2017 for appraisal of projects for grant of terms of reference/ Environmental Clearance, which have started the work on site, expanded the production beyond the limit of Environmental Clearance, or changed the product mix without obtaining prior Environmental Clearance under EIA Notification, 2006. The above said notification i.e., Notification vide S.O. 804 (E) dated 14th March, 2017 was an open window for 6 months. The projects or activities which are in violation as on date of this notification only will be eligible to apply for environmental clearance under this notification and the project proponents can apply for environmental clearance under this notification only within six months from the date of this notification.

The Competent Authority in the Ministry (in other proposal) has inter-alia, instructed to deal the violation cases as under:

(i). The violation proposal should be considered by the sectoral EAC on merit
(ii). Action to be taken against the alleged violation as per law
(iii). Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.
(iv). The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established by the Court of competent authority, the punishment/penalty as per law would be imposed.
(v). Assessment of environmental damage, if any.

The Committee was also appraised that there were three recent court cases in the Hon'ble NGT [viz. Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020, Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020, and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019], which were disposed of by Hon'ble NGT vide its Order dated 03.06.2021 with the following directions:

(i). For past Violations, the concerned Authorities are free to take appropriate action in accordance with polluter pays principle, following due process.
(ii). Since having prior EC is statutory mandate, it has to be complied with by the formaldehyde producing industrial units barring which the units cannot be allowed to function.
(iii). The State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle.
(iv). The State PCB to ensure that the unit does not re-start functioning without requisite Statutory Clearance.
(v). To be duly considered by the concerned regulatory authorities including MOEFCC on merits and in accordance with law.

The Proposal was examined in the Ministry and EDS has been sought on Parivesh Portal

on 5th July, 2021. The Project Proponent, on 9th July, 2021, has submitted the EDS reply on Parivesh Portal and accordingly the Proposal is placed before the present EAC meeting for its appraisal.

The EAC has deliberated the detailed proposal and after due diligence found the merit on the proposal and accordingly recommended for issuance of TOR with certain conditions, as cited below.

The EAC, after detailed deliberations on the information presented by the PP, **recommended** for issuing **Standard Term of Reference [Annexure-I]** along with the following **specific Term of Reference** for undertaking EIA and preparation of Environmental Management Plan (EMP), as below:

(i) The project proponent will be liable to pay the penalty for the period of violation, as may be determined by Ministry, arisen due to constructing and/or operating the project without prior EC. An undertaking in this regard shall be submitted by PP along with EC proposal. The project proponent shall also submit the details on the cost incurred on establishment of the project and year-wise total turnover till date.

(ii) The Directions of the Hon'ble NGT shall be implemented vide its Orders dated 03.06.2021, in the matter of Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020; Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020; and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019]. Implementation Report may be submitted by the PP at the time of submission of EIA/EMP Report.

(iii) The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.

(iv) The Haryana PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle. Implementation Report may be submitted by the SPCB at the time of submission of EIA/EMP Report by the PP.

(v) The assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment. The cost for assessment of environmental damage may be guided by the Ministry of Environment, Forest and Climate Change O.M No. 19-125/2019-IA.III, dated 05.03.2020.

(vi) EMP shall be prepared comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

(vii) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

(viii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

(ix) Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.

Agenda No.14.17

Manufacturing of Formaldehyde 70 TPD at Plot No. F476, RIICO Industrial Area Chopanki, Bhiwadi, Alwar, Rajasthan by M/s Shri Ramkripa Organics Pvt Ltd. - Consideration of TOR

[Proposal No.: IA/RJ/IND3/205995/2021; File No. IA-J-11011/130/2021-IA-II(I)]

The project proponent vide letter dated 22.07.2021 has requested to defer the proposal as they were unable to attend the meeting.

The proposal was accordingly ***deferred*** based on the request of PP and may be placed before the best EAC meeting.

Agenda No.14.17

Additional item with the approval of the Ministry and permission of Chairman

Existing and Proposed expansion of Cosmeceuticals, Active Pharmaceuticals and Speciality Chemicals manufacturing unit" at Plot No's. 62/63(A)/64 and 60/65, KIADB Industrial Area, Jigani village, Anekal Taluk, Bengaluru District, Karnataka by M/s. Kumar Organic Products Ltd.

[Proposal No.IA/KA/IND2/67915/2017, File No. 23-47/2018-IA.III]

The project proponent and the accredited consultant M/s AM Enviro Engineers, made a Terms of Reference presentation on chronology of the industrial activity and the salient features of the project and informed that:

The proposal is for grant of Terms of Reference to the proposed project for "Existing and Proposed expansion of Cosmeceuticals, Active Pharmaceuticals and Speciality Chemicals manufacturing unit" at Plot No's. 62/63(A)/64 and 60/65, KIADB Industrial Area, Jigani village,

Anekal Taluk, Bengaluru District, Karnataka State by M/s. Kumar Organic Products Ltd.

Chronology of the project:

M/s Kumar Organic Products Ltd having 2 units with Plot No. 62/63(A)/64 and 60/65 at KIADB Industrial Area, Jigani village, Anekal Taluk, Bengaluru District, Karnataka State which are engaged in manufacturing Cosmeceuticals, Active Pharmaceuticals and Specialty Chemicals.

The plant with plot No. 62/63(A)/64 was setup with the consent to establish dated 16.12.1991 from the Karnataka State pollution Control Board (KSPCB). Subsequently, the unit has started operation after obtaining consent to operate dated 5.07.1993.

The plant with plot No. 60/65 was setup with the consent to establish dated 3.32006 from the Karnataka State Pollution Control Board (KSPCB). Subsequently, the unit has started operation after obtaining consent to operate dated 30.3.2007.

Both the units were established before EIA Notification 2006. The individual unit's establishment status is as follows.

S. No.	Details	Date	Description
1	Unit -1: Plot No. 62/63(A)/64	CFE dated - 16/12/1991	Consent for Establishment obtained from KSPCB Vide Letter No. KSPCB/BNG/IND/227/TA-3/AE-1/91-91/969
2	Unit -1: Plot No. 62/63(A)/64	CFO dated - 05/07/1993	Consent for Operation obtained from KSPCB Vide Letter No. APC/BNG/IND/DEO-2/AEO-1/93-94/2467 valid 30.6.1993 Subsequently renewal the CFO order before completion of validity
3	Unit -1: Plot No. 62/63(A)/64	CFEx dated- 19/11/1999	Consent for Establishment obtained from KSPCB Vide Letter No. KSPCB/BNG/IND/CFE/DEO-2/AEO-1/99-2000/199
4	Unit -1: Plot No. 62/63(A)/64	CFO dated - 05/05/2000	Consent for Operation obtained from KSPCB Vide Letter No. KSPCB/DEO-2/WPC/AEO-3/99-2000/66 valid 30.6.2000 Subsequently renewal the CFO before completion of validity
5	Unit -1: Plot No. 62/63(A)/64	CFEx dated- 2005	Consent for Establishment obtained from KSPCB Vide Letter No. 107/KSPCB/RO-BNG(S-II)/DEO/CFE/2005-2006
6	Unit -1: Plot No. 62/63(A)/64	CFO dated - 20/11/2006	Consent for Operation obtained from KSPCB Vide Letter No. 17/CAT/APC/KUMAR/2006-07/308 valid till 30.6.2007 Subsequently renewal the CFO before completion of validity
7	Unit -2: Plot No.	CFE dated -	Consent for Establishment obtained from KSPCB

	60/65	03/03/2006	Vide Letter No. 313/KSPCB/RO-BNG(S-II)/DEO/CFE/2005-2006/8846
8	Unit -2: Plot No. 60/65	CFO dated - 30/03/2007	Consent for Operation obtained from KSPCB Vide Letter No. 351/KSPCB/BNG-SRI/DEO/AEO-2/INR NO. 148125/R.No. 6053/APC/2006-2007/7421 valid till 30.6.2008 Subsequently renewal the CFO before completion of validity
9	Unit -1: Plot No. 62/63(A)/64	CFEx dated-21/09/2010	Consent for Establishment obtained from KSPCB Vide Letter No. KSPCB/HPI/36/SEO/EIA/KOPL/2010-11/1067
10	Unit -1: Plot No. 62/63(A)/64	CFO dated - 27/2/2012	Consent for Operation obtained from KSPCB Vide Letter No. KSPCB/036/HPI/KUMAR/11-12/H1293 valid till 31.32012 Subsequently renewal the CFO before completion of validity
11	Unit -2: Plot No. 60/65	CFEx dated-22/09/2010	Consent for Establishment obtained from KSPCB Vide Letter No. KSPCB/HPI/191/SEO/EIA/KOPL/2010-11/1069
12	Unit -2: Plot No. 60/65	CFO dated - 21/2/2012	Consent for Operation obtained from KSPCB Vide Letter No. KSPCB/036/HPI/KUMAR/11-12/H1139 valid till 29.2.2012 Subsequently renewal the CFO before completion of validity
13	Unit -1: Plot No. 62/63(A)/64 and Unit -2: Plot No. 60/65	2016	Industry applied for CFO renewal and KSPCB put an objection to the products for which EC not taken and Later on, by combining both units for which industry obtained consent separately from Pollution Control Board.
14		27/04/2016	Industry approached State level Environment Impact Assessment Authority (SEIAA) and submitted the application to get Environmental Clearance (EC)
15		14/3/2017	As per Notification No. S.O 804(E) dated 14.3.2017, SEIAA Karnataka decided and considered as violation project and forwarded the application to MoEF & CC
16		06/05/2017	Industry approached MoEF&CC and submitted the application to get Environmental Clearance (EC) with File No. [F.No.23-47/2018-IA.III]
17	4th EAC meeting	19-21 Feb. 2018	The project proponent was asked to submit the complete details in the format for consideration of the proposal. The proposal was, therefore, not taken forward.
18	6th EAC meeting	19-20 April 2018	1) The State Government/SPCB to act against the project proponent under the provisions of EP Act, 1986, and further no consent to

			operate or occupancy certificate to be issued till the project is granted EC. 2) Grant of Terms of Reference for undertaking EIA and preparation of EMP as enumerated in Annexure-II, along with public hearing. 3) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
19	15th EAC meeting	27th -29th November 2018	The violation had already been established by the SEIAA and KSPCB, and thereafter referred to the Ministry for consideration under the Notification SO 804 (E) dated 14.03.2017 and the same was considered in the 6th EAC meeting held on 20.04.2018 as per the provisions of the said Notification and recommended for issue of Terms of Reference. At this stage, the project proponent appealed to the Ministry to absolve the case of violation against the M/s Kumar Organic Product Ltd. Hence the Committee recommended that the project proponent may approach to SEIAA and KSPCB for appeal in this regard. The Banerghata National Park is within 6 km from the proposed project. Hence, Wildlife Clearance is to be obtained from Ministry.
20	Unit -1: Plot No. 62/63(A)/64	CFO dated - 20/03/2020	Combined Consent order No. AW-317748 PCB ID: 11434 dated 20.3.2020 (Valid from 29.11.2019 till 30.6.2021)
21	Unit -2: Plot No. 60/65	CFO dated - 20/03/2020	Combined Consent order No. AW-317762 PCB ID: 10545 (Valid from 29.11.2019 till 30.6.2021)
22		17/02/2021	Subject to 44th EAC meeting agenda, PP submitted the letter by requesting the EAC to consider the project for appraisal in the next upcoming meeting.
23	44th EAC meeting	18-19 February 2021	EAC noted that the PP did not attend the meeting therefore status on the project could not be ascertained. EAC however, opined matter may be referred to the Ministry to verify whether any reply was furnished by them, if not, then Ministry may initiate action and issue necessary directions to

			the Project Proponent as may be deemed fit.
24	-	12/7/2021	With continuation of the same, Industry submitted the requisition to Ministry dated 12/7/2021 to consider the project in the upcoming meeting and issue the ToR to conduct Environment Impact Assessment study as per MoEF & CC notification dated 14/03/2017, 08/03/2018 and OM dated 07/07/2021.

The details of products and capacity as under:

S.No	Name of Product	Quantity in TPM	CAS No.	Therapeutic Use
1.	4-Hexyl resorcinol	4	136-77-6	Antiseptic for the treatment of minor skin infections
2.	6-pyrrolidino 2,4-diaminopyrimidine 3-oxide, monohydrate	2	-	Inhibits general male-pattern or female pattern hair loss
3.	Benzalkonium Chloride	25	63449-41-2	Antiseptic
4.	Benzethonium Chloride	10	121-54-0	Used to treat minor cuts, scrapes, wounds, or cracked skin
5.	Chloroxyenol	80	88-04-0	Antimicrobial used to treat cuts, etc
6.	Ciclopirox Olamine	2	41621-49-2	To treat fungal skin infections
7.	Ethyl hexyl glycerin	18	70445-33-9	Impressive skin moisturizing agent
8.	Kopdil aqua	1	-	Hair growth ingredient.
9.	Kopexil (2,4-Diaminopyrimidine 3-N-oxide)	4	74638-76-9	To slow or stop hair loss and promote hair regrowth
10.	Kopexil Aqua	1	-	Strengthens hair from root to tip, and promotes hair thickness
11.	Kopyrrol (6-pyrrolidino 2,4-diaminopyrimidine 3-oxide)	2	-	Inhibits general male-pattern or female pattern hair loss
12.	Kopyrrol Aqua	1	-	To slow or stop hair loss and promote hair regrowth
13.	Minoxidil	7	38304-91-5	To slow or stop hair loss and promote hair regrowth
14.	Minoxidil sulphate	2	83701-22-8	For treatment of hair loss
15.	n-Butyl Resorcinol	2	18979-61-8	To treat hyperpigmentation
16.	Piroctone Olamine	7	68890-66-4	To treat dandruff and fungal infections

17.	Triclosan	97	3380-34-5	To reduce or prevent bacterial contamination
18.	Zinc Citrate	50	546-46-3	To prevent dental plaque formation and gingivitis
19.	Zinc Lactate	20	16039-53-5	Used to eliminate halitosis
	TOTAL	**335 TPM**		
	TOTAL (10 products)	**318 TPM**		

Raw material detail: The raw materials will be sourced from local market and also from the different suppliers across the world. The raw materials and finished products will be transported through road.

Resource Requirement:

Description	**Details**
Total Site Area	18,615.5 Sq.m (4.6 Acres)
Greenbelt area	3978.6 Sq.m (21.3%) *Note: The industry has proposed for additional greenbelt area of 1619.3 sqm and 1069 sqm in nearby plots 83 & 84 and 36A & 36B respectively, so that total greenbelt area is 3978.6 sqm (21.3% of total site area).
Land use	KIADB land
Manpower	Existing: 262 numbers Proposed: 30 numbers Total: 292 numbers
Project cost	Existing: 123.3 Crores Proposed: 2 Crores Total: 125.3 Crores
Source of water	KIADB
Total Water required	Existing: 156 KLD Proposed: 230.8 KLD Total: 386.8 KLD
	Fresh water requirement – 269.2 KLD Recycled water Requirement – 117.6 KLD Total water requirement – 386.8 KLD
Effluent generation	Existing: 80.5 KLD Proposed: 122.6 KLD Total: 203.1 KLD
Treatment Method	HTDS effluent in MEE of capacity - 120 KLD LTDS effluent in BTP of capacity - 200 KD Domestic sewage in septic tank
Power	900 KVA
Power Source	BESCOM
Power Back up	1X640KVA, 1X250KVA, 2X125KVA

Boiler	CNG boiler - 1X3 TPH Furnace Oil Fired Boiler -2 X 850 kgs/hr Thermo-pack - 1X6 lakh kcal/hr Thermic fluid heater - 2X2lakh kcal/hr

Bannerghatta National Park is at distance of 4.3 km towards West direction and Konasandra lake is at distance of 140m towards South-West direction.

Details of Violation:

S. No.	Plot No.	Production quantity	Remarks
1	62/63(A)/64	1. Tricolsan - 30 MT/month 2. N-Oxide - 2 MT/month 3. Carageenan – 0.9 MT/month 4. Indanone – 8.34 MT/month 5. Ascorbyl palmitate-1MT/month 6. Stenol – 0.2 MT/month	Prior EC was not obtained before operating the unit with change of product with capacity, hence covered under Violation as per EIA Notification 2006 and subsequent amendments. PP has applied under violation notification, 2017.
2	60/65	1. Tricolsan - 90 MT/month 2. N-Oxide – 0.99 MT/month 3. Indanone – 4.1 MT/month 4. Synovia HR – 0.99 MT/month 5. Kopirox –4 MT/month	

The said 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 due to applicability of general condition as the project is located at critically polluted industrial area.

Deliberations in the EAC:

The Committee was informed that the instant proposal was considered in various EAC (violation) meetings and EAC (violation) after due diligence **recommended** for the grant of following **TOR additional to the standard TOR:**

a. The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted EC.

b. Grant of Terms of Reference for undertaking EIA and preparation of Environment Management Plan (EMP) as enumerated in Annexure-II, along with public hearing.

c. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released

after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

The Committee, after detailed deliberations, on the information presented by the PP, **recommended** for issuing **Standard Term of Reference [Annexure-I]** along with the following **specific Term of Reference** in addition to the TOR recommended by the EAC (Violation) for undertaking EIA and preparation of Environmental Management Plan (EMP), as below:

(i). The project proponent will be liable to pay the penalty for the period of violation, as may be determined by Ministry, arisen due to constructing and/or operating the project without prior EC. An undertaking in this regard shall be submitted by PP along with EC proposal. The project proponent shall also submit the details on the cost incurred on establishment of the project and year-wise total turnover till date.

(ii). The State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle. Implementation Report may be submitted by the SPCB at the time of submission of EIA/EMP Report by the PP.

(iii). The assessment of ecological damage with respect to air, water, land and other environmental attributes shall be done. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment. The cost for assessment of environmental damage may be guided by the Ministry of Environment, Forest and Climate Change O.M No. 19-125/2019-IA.III, dated 05.03.2020.

(iv). The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

(v). The Budget for the remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared.

There being no item left, the meeting ended with a vote of Thanks to the Chair.

***

ANNEXURE

GENERAL EC 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 Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.

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

(iv) 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).

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

(vi) 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.

(vii) 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.

(viii) 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 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.

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

(x) 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.

(xi) 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.

(xii) 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.

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Annexure-I

Standard TOR for 5 (f) Category

A. STANDARD TERMS OF REFERENCE

1) Executive Summary

2) Introduction

i. Details of the EIA Consultant including NABET accreditation
ii. Information about the project proponent
iii. Importance and benefits of the project

3) Project Description

i. Cost of project and time of completion.
ii. Products with capacities for the proposed project.
iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
iv. Details of existing products and production, if any, along with present product/production details in tabular format, to verify the compliance of the EIA Notifications.
v. List of raw materials required and their source along with mode of transportation.
vi. Other chemicals and materials required with quantities and storage capacities
vii. Details of Emission, effluents, hazardous waste generation and their management.
viii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
ix. Details of boiler/gensets (including stacks/exhausts) and fuels to be used
x. Process description along with major equipment's and machineries, process flow sheet (quantitative) from raw materials to products to be provided
xi. Hazard identification and details of proposed safety systems.
xii. Expansion/modernization proposals:
    a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, copy of the latest CTO and status of compliance of Consent to Operate for the ongoing/existing operation of the project from SPCB shall be attached with the EIA-EMP report.
    b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

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

5) <u>Forest, wildlife and CRZ related issues (if applicable):</u>

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
ii. Land-use map based on High resolution satellite imagery of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha)*
iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area

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

vii. Recommendations and NOC from the concerned State/UT Coastal Zone Management Authority on CRZ angle

6) Environmental Status

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

- AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Study should indicate minimum, maximum value of different parameters for the period (3 months) collected. Collected data should be supported by the reference data of either CPCB or SPCB. AAQ data & GLC of pollutants from stack emissions should suggest technology/ measures- Best Practiced Technology (BPT) indicating best achieved results.

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

iii. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

iv. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

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

vi. Noise levels monitoring at 8 locations within the study area.

vii. Soil Characteristic as per CPCB guidelines.

viii. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

ix. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

x. Socio-economic status of the study area.

7) Environment Impact and Environment Management Plan

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a

location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality Modelling – in case of discharge in water body

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

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

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

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

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

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

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

8) Occupational health

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

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

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

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

9) Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

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

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

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

v. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

10) Corporate Environmental Responsibility (CER)

i. Adequate funds, as per the Ministry's OM/Guidelines, shall be earmarked towards the Corporate Environmental Responsibility based on Public Hearing issues/socio-economic issues and item-wise details along with time bound action plan shall be included (CER activities shall be related to environment). Socio-economic development activities need to be elaborated upon. For the projects where public hearing is not conducted, CER plan shall be provided based on socio-economic study of the area.

10) Additional studies/Measures to be considered

(i). Provide latest and ecofriendly technology for product manufacturing.

(ii). Emphasize on Green chemistry/Clean Manufacturing

(iii). Provide CAS No. of products along with product list.

(iv). Provide details of amount of carbon sequestered in their unit through greenbelt/other modes, in case of expansion project.

(v). Life structure and sustainability for carbon and water foot print.

(vi). Detailed pollution Load estimation.

(vii). Transportation of Hazardous substance, effluents etc shall be carriedout through authorized and GPS enable vehicles/Trucks only.

(viii). Category of Hazardous Wastes shall be mentioned in the EIA/EMP report and in presentation.

(ix). Details of greenhouse gases and emissions shall be provided.

(x). Greenbelt shall be developed in the first year of the project and wind breaks shall

be erected.

(xi). Study area map shall be overlapped with all the associated features.

(xii). Emphasize on green fuels.

(xiii). The project from NCR shall not use Coal as fuel. Further, PP shall avoid use of Coal in the CPAs and elsewhere also if alternatives are available.

(xiv). Provide the Cost-Benefit analysis with respect to the environment due to the project.

11) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

12) A tabular chart with index for point wise compliance of above TORs and its details needs to be submitted in the EIA/EMP Report.

B. SPECIFIC TERMS OF REFERENCE FOR EIASTUDIES FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants* like NH_3*,chlorine*,HCl*,HBr*,H_2S*,HF*,*etc*.,(*-as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting ‘Zero’ liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

Annexure-II

List of the Expert Appraisal Committee (Industry-3) members participated during Video Conferencing (VC) meeting

S. No.	Name of Members	Designation
1.	**Prof. (Dr.) A.B. Pandit** Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	Interim EAC Chairman
2.	**Dr. Ashok Kumar Saxena, IFS** Bunglow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	**Prof. (Dr.) S. N. Upadhyay** Research Professor (Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail: snupadhyay.che@iitbhu.ac.in	Member
4.	**Prof. (Dr.) Vijay S. Moholkar** Professor in Department of Chemical Engineering, Block-K (Academic complex), Room No. 111, Inidia Institute of Technology Gawahati, Gawahati – 781039 E-mail: vmoholkar@iitg.ac.in	Member
5.	**Shri Santosh Gondhalkar** 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
6.	**Dr. Suresh Panwar** House No.4, Gayateri Green Society, NH 58 Bypass,Kankerkhera, Meerut, Uttar Pradesh Email-spcppri@gmail.com	Member
7.	**Shri Dinabandhu Gouda** Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032, E-mail: dinabandhu.cpcb@nic.in	Member
8.	**Shri Tukaram M Karne** "SHREYAS ORNATE" F-1, 95-Tulasibagwale Colony, Sahakarnagar-2, PUNE: 411 009, Maharashtra E-mail: tmkarne@gmail.com	Member

9.	**Shri Sanjay Bisht** Scientist 'E', Room No. 517, Office of the Director General of Meteorology, Indian Meteorological Department, Musam Bhawan, Lodhi Road, New Delhi -110003 E-mail: sanjay.bist@imd.gov.in	Member
10.	**Dr. R. B. Lal** Scientist 'E'/Additional Director Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan, Room No. V-304, Vayu Wing, Jor Bag Road, New Delhi-110003 Telefax: 011-24695362 E-mail: rb.lal@nic.in	Member Secretary

MoEFCC		
10.	**Dr. Saranya P.** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Scientist 'D'
11.	**Dr. E.P. Nobi** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Research Officer
12.	**Mr. Ritin Raj** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Research Assistant

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Annexure-III

Approval of EAC Chairman

Email **Additional Director MoEFCC Dr R B LAL**

Re: Zero Draft Minutes of the 14th EAC (Industry 3 Sector) meeting held during July 22-23, 2021 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir.

From : ab pandit <ab.pandit@ictmumbai.edu.in> Fri, Jul 30, 2021 03:44 PM

Subject : Re: Zero Draft Minutes of the 14th EAC (Industry 3 Sector) meeting held during July 22-23, 2021 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir. 1 attachment

To : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>, ashoksaxena1159@gmail.com, snupadhyay che <snupadhyay.che@iitbhu.ac.in>, dwivedisuneet@rediffmail.com, suneetdwivedi@gmail.com, santoshgo@gmail.com, pkmishra che <pkmishra.che@itbhu.ac.in>, drpkm18@gmail.com, spcppri@gmail.com, tmkarne@gmail.com, Dinabandhu Gouda <dinabandhu.cpcb@nic.in>, Sanjay Bist <sanjay.bist@imd.gov.in>, vmoholkar@iitg.ac.in, Central Ground Water Authority <cgwa@nic.in>

Dear Dr. Lal,

Please find attached the signed MOM,

Thanks and Warm Regards
Pandit

Approved

I/C Chairman