GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 27.07.2020

MINUTES OF THE 21st MEETING OF THE EXPERT APPRAISAL COMMITTEE (INDUSTRY-2 SECTOR FOR CHEMICAL BASED PROJECTS), HELD DURING 14th to 16th July, 2020

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

(i) Opening Remarks by the Chairman: The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.

(ii) Confirmation of the Minutes of the 20th Meeting of the EAC (Industry-2) held during 15-17 June, 2020 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC members on the minutes of its 20th Meeting of the EAC (Industry-2) held during 15-17 June, 2020 conducted through Video Conferencing (VC), confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:-

DAY 1: 14th July, 2020 (Tuesday)

Consideration of Environmental Clearance

Agenda No. 21.1

Manufacturing of Pesticides at Village Kolimajra, Samalheri, PO –Lalru SAS Nagar Punjab by M/s Punjab Chemicals and Crop Protection Ltd.(Unit-II)- Consideration of Environment Clearance
[IA/PB/IND2/104211/2019,IA-J-11011/185/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Eco Chem Sales & Services (ECSS) - Surat, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for manufacturing of pesticides at Village: Kolimajra & Samalheri, P.O. Lalru, Tal. Dera Bassi, Dist.: SAS Nagar Punjab by M/s. Punjab Chemicals and Crop Protection Ltd.(Unit-II)

The ToR has been issued by Ministry vide letter No.IA-J-11011/185/2019-IA II (I); dated 11th June 2019. The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' and item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

PP reported that the land area available for the project is 21555 $m^{2.}$ Industry will develop greenbelt in an area of 33 % i.e.7113.15 m^2 out of total area of the project. The proposed project cost will Rs. 60 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 640 Lakhs and the Recurring cost (operation and maintenance) will be about Rs1200 Lakhs per annum. Total Employment will be 300numberspersons (220direct &80indirect). Industry proposes to allocate Rs120 Lakhs towards Corporate Environment Responsibility which is 2% of the project cost as per the OM F.No.22-65/2017-IA.III dated 1stMay 2018.

There are no national parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. within 10 km distance from the project site. River Ghaggar is flowing at a distance of 4 km in West direction.

Ambient air quality monitoring was carried out at 8 locations during December 2018 to February 2019and the baseline data indicates the ranges of concentrations as: PM_{10} (62.4–85.4µg/m^3), $PM_{2.5}$ (32.2 – 43.8µg/m^3), SO_2 (7.7– 19.4µg/m^3) and NOx (12.2 – 23.4µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.88µg/m^3, 3.1µg/m^3 and 0.49µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 367 KLD (Fresh: 140 KLD + Recycled - 227 KLD) will be met from ground water. Effluent (Industrial) of 267 KLD quantity will be treated through ETP followed by RO & MEE. The plant will be based on Zero Liquid discharge system.

Total industrial Waste Water Generation will be 267 KLD, out of which 187 KLD from Process and 7 KLD from floor and container washing will be treated in ETP/MEE (12.5 m3/h capacity) followed by ATFD. Total 50 KLD of waste water (3 KLD from the DM Plant, 10 KLD from the boiler, and 30 KLD from the cooling tower with 7 KLD fresh water) will be treated in the RO. RO rejection (10 KLD) will be taken to ETP/MEE. 40 KLD of RO permeate will be recycled in cooling tower. 20 KLD water from the boiler will be treated in ATFD. Total 227 KLD water (i.e. 40 KLD RO Permeate, 64 KLD ATFD condensate, 103 KLD MEE condensate and 20 KLD boiler condensate) will be recycled. Average 55 TPD salt from MEE will be dispose off into TSDF. Thus there will be a Zero Liquid Discharge.

Power requirement for the proposed project will be 2125 kVA and will be met from Punjab State Cooperation Limited. Proposed 03 DG sets of 1000 kVA capacity each will be installed. DG sets are used as standby during power failure. Stack (height10 m) will be provided as per CPCB norms to the proposed DG sets. Proposed one number of 18 TPH boiler and Multi cyclone separator, dust collector with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boiler.

Details of Process emissions generation and its management: There will be generation of sulphur dioxide, nitrogen oxides, HCl and SPM from the Incinerator. Multi dust cyclone separator followed by wet scrubber and height of 30 m chimney will be provided. There will be generation of HCl during manufacturing of Trizinone, which will be scrubbed in alkali scrubber. 5 m height of chimney will be provided.

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

Sr. No.	Process waste	Category	Quantity, TPA	Mode of disposal
1	Used oil	Sch: I/5.1	6000 L/A	Generation, collection, storage, transportation and disposed to TSDF, Ramky enviro.
2	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	Sch: I/33.1	Empty barrels-1.0 TPA,Containers-1200 drums /Annum	Generation, collection, storage, transportation and disposed to TSDF, Ramky enviro.
3	Sludge from wet scrubber	Sch: I/37.1	5	Generation, collection, storage, transportation and disposed to TSDF, Ramky enviro.
4	Ash from Incinerator & Flue Gas Cleaning Residue	Sch:I/37.2	20	Generation, collection, storage, transportation and disposed to TSDF, Ramky enviro.
5	MEE Residue	Sch:I/37.3	20075	Generation, collection, storage, transportation and disposed to TSDF, Ramky enviro.
6	Salt from Process	Sch:I/35.3	4203.6	Generation, collection, storage, transportation and disposed to TSDF, Ramky enviro.
Solid Waste				
7	STP Sludge	--	0.5	Used as a manure within own premises.

Public Hearing for the proposed project has been conducted by the Punjab Pollution Control Board on 31/12/2019. The main issues raised during the public hearing are related to employment generation and information regarding air and water pollution and its mitigation measures. It is reported that no litigation is pending against the proposed project.

The details of products and capacity as under:

Sr. No.	Product	CAS No.	Capacity, TPA	End-Use
1.	Azoxystrobin	131860-33	2400	Agriculture - active agent protecting plants.
2.	Triazinone	88122-99-0	3600	
3.	Aminoacetonitrile Sulfate (AANS)	5466-22-8	1920	
4.	**CS2 Based 4 Products-Xanthates**			
	Potassium Ethyl Xanthate	140-89-6	1500	
	Sodium Isopropyl Xanthate	140-93-2	1500	
	Potassium isopropyl Xanthate	140-92-1	1000	
	Potassium amyl Xanthate	2720-73-2	1000	
5.	Asulam (Methyl Sulfonyl carbamate)	3337-71-1	500	
6.	Metobromuron	3060-89-7	720	
Total		**---**	**14140**	

List of By-Products

S No	By Products	CAS No.	TPA
1.	Methyl acetate	79-20-9	1308.00
2.	Dimethoxymethane	109-87-5	1866.24
3.	NaHS	16721-80-5	4210.20
4.	Methanol	67-56-1	123.00
5.	Sodium Sulfate from PHU	7757-82-6	276.48
6.	Sodium Sulfate from PMMU	7757-82-6	439.20
7.	Sodium Bromide	7647-15-6	1361.52
		Total	**9584.64**

The EAC during deliberations noted that the project proponent is operating another unit in the same premises/area (as Unit 1) and have not mentioned/provided any details regarding the existing project in EIA Report/presentation and the PP and consultant tried to hide many details and managed not to provide detailed information. **The Committee was of the opinion that the strict action shall be taken against the Consultant for hiding the facts, misinformation and for not providing correct information in the EIA report. The Ministry may take necessary action against the Consultant.**

The Committee after detailed deliberations decided to **RETURN** the proposal in its present form and insisted for following requisite information/inputs in respect of the following:

(i). QCI/NABET to take action against the consultant.

(ii). Revised EIA/EMP report taking into consideration cumulative effect of Unit 1 and Unit 2.

(iii). Details of existing unit in the premises/area, along with copy of EC and CTO and production details since inception to verify the violation cases, if any.

(iv). The project site is located in the critical water scarcity area and considering order of Hon'ble NGT, alternate source of water for the Industry needs to be explored.

(v). Details of existing water permission from the regulatory authority

(vi). Certified Compliance status from Regional Office of the MoEFCC for the existing EC conditions of Unit 1

(vii). Details of hazardous chemicals in the units

(viii). Land conversion documents.

(ix). Recommendations of 3D modeling study. Detailed note whether existing unit and proposed units were considered for modeling scenario or not.

The proposal was accordingly **RETURNED** in its present form.

Agenda No.21.2

Expansion of existing sugar plant of production capacity from 12,000 TCD to 16,000 TCD at Hupari Yalgad Tal Hathkanangale Kolhapur Maharashtra by M/s Jawahar Shetkari Sahkari Sakhar Karkhana Ltd. - Consideration of Environment Clearance

[IA/MH/IND2/38479/2014, J-11011/146/2020-IA-II(I)]

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

The proposal is for environmental clearance to the project for Expansion of Sugar factory from 12,000 TCD to 16,000 TCD at Survey No. no. 315/7 to 315/15, A/P: Hupari, Tal: Hatkanangale, Dist: Kolhapur, Maharashtra by M/s Jawahar Shetakari S.S.K.L (JSSSKL).

The Standard ToRs has been issued by Ministry vide letter No. F. No J-11011/38/2016-IA-II (I) dated 30th March, 2019. The project/activities are covered under category B of item 5 (j) 'Sugar' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general condition (interstate boundary within 5 km), the

project requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Ministry has issued earlier EC, vide letter No. J–11011/38/2016-IA-II (I), dated 20.12.2016 for expansion of Sugar Factory capacity from 7,500 to 12,000 TCD and SEAC & SEIAA vide letter No.: ENV (NOC) 2005/159/CR224/TC-II dated 27.08.2007 for expansion of Sugar Factory from 5000 TCD to 7500 TCD and Cogeneration Plant from 24 to 28.5 MW to M/s Jawahar Shetkari Sakhar Karkhana Ltd. (JSSSKL).

Existing land area is 99.57 Ha. Existing Built- up is 23.78 Ha. No additional land area required for proposed expansion. Industry has already developed Green Belt in an area of 35 % i.e. 34.39 Ha out of total plot area. Moreover, additional Green Belt area of 5% i.e. 4.97 ha, will be developed. After expansion, the total Green Belt area would be 39.37 Ha which accounts for 40 % of total plot area.

The estimated project cost is Rs.332.6 Crores including existing investment of Rs. 298.6 Crores. Total capital cost earmarked towards environmental pollution control measures under expansion is Rs. 1.10 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.12 Crores per annum. Total Employment would be 1382 persons as direct as well as indirect after expansion of projects. Industry proposes to allocate Rs. 2.60 Crores towards Corporate Environmental Responsibility.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. River Dudhganga and Panchganga is flowing at a distance of 4 Km in South and North direction respectively.

Ambient air quality monitoring was carried out at 8 locations during January 2019 – March 2019 and submitted baseline data indicates that ranges of concentrations of PM_{10} (50.10 – 69.40 µg/m^3), $PM_{2.5}$ (12.80 – 29.80 µg/m^3), SO_2 (12.80 – 29.80 µg/m^3) and NO_x (20.10 – 35.70 µg/m^3) respectively. Incremental GLC is not done through AERMOD Software since, No new boiler will be installed under the proposed expansion of sugar factory. Hence, there will be no increase in baseline concentrations of Ambient Air.

Total water requirement for Sugar Factory after expansion of project will be 4394 CMD. Out of which, 328 CMD will fresh water from Dudhganga river while 4066 CMD will be cane condensate to be recycled. The permission for lifting of fresh water is granted to JSSSKL by Irrigation Department; Kolhapur, Govt. of Maharashtra from the Dudhganga River.

Effluent of 1430 CMD after expansion of sugar factory operations will be treated existing in existing ETP in the JSSSKL premises which shall be duly upgraded. The ETP units comprises of namely Screen chamber & Oil & Grease trap, Equalization Tank Anaerobic Digester, Aeration Tank – I, Primary Clarifier Tank, Secondary Clarifier Tank, treated water Sump, Pressure Sand Filter, Treated water Tank. The treated effluent shall be used for green belt in premises and on shareholders farmland. As per CREP norms, 15 days storage capacity tank for treated water shall be provided on site.

Power requirement to the tune of 17 MW after expansion of project will be procured from own Co-gen Plant. Existing unit has Two DG set of capacity 515 KVA & 1320 KVA are used as standby during turbine tripping. Stack of height 6 M ARL is provided as per CPCB norms to the DG sets.

Existing sugar factory unit has 20 TPH, 90 TPH & 75 TPH bagasse fired boilers. No new boiler will be installed under expansion of Sugar Factory. There are no any sources of process emissions from Sugar Factory. No any Hazardous Waste will be generated under expansion of Sugar Factory.

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

No	**Type of Waste**	**Existing** (MT/D)	**Total After Expansion** (MT/D)	**Disposal**
1	ETP sludge	3	3.5	Used as manure.

Public hearing for expansion project was conducted on 12.12.2019 at Jawahar Shetakari Sahakari Sakhar Karkhana Ltd. A/P – Hupari, Tal.: Hatkanangale, Dist.: Kolhapur, State: Maharashtra. Issues were raised mainly w.r.t effluent generation its disposal, air pollution and its management, benefits to farmers from proposed project, employment generation, working days of industry etc.

The EC compliance has been inspected and certified by the Regional Officer; MoEFCC, Nagpur during his visit on 21.01.2020 and certification report dated 31.01.2020 was forwarded by the Regional Office to MoEFCC Nagpur.

There is litigation pending against existing Sugar Factory of 12,000 TCD under EPA act 1986 and EIA Notification 2006. A Court Case was filed by the MPCB for Excess Crushing happened during 2015-16 Season. Court Case No. : R.C.C/181/18/2016.

Details of products and by-products are as under:

Product & By-product	**Quantity (MT/M)**		
	Existing (12,000 TCD)	**Expansion** (4,000 TCD)	**Total** (16,000 TCD)
White Sugar (14.45%)*	52,050	17,340	69,390
By-product			
Molasses (4%)*	14,400	4,800	19,200
Bagasse (29.30%)*	1,05,500	35,160	1,40,660
Press mud (4%)*	14,400	4,800	19,200

The EAC during deliberations noted that the project proponent proposed to lift fresh water from the Dudhganga river and treated effluent/cane condensate are proposed to send to nearby farm/share holders farm land. The Committee was of the view that such discharge shall lead to contamination of the farm land and the PP shall reuse the treated water and accordingly fresh water requirement shall be reduced. The

Committee after detailed deliberations insisted for following requisite information/inputs in respect of the following:

(i). Revised Water balance with complete Zero Liquid Discharge Plan. PP can drop the fresh water requirement by utilizing water from harvested rain water, cane condensate and reuse of treated water.
(ii). Current status of court case. Details of action taken by SPCB along with copies/CTO etc..
(iii). Commitment that no treated/untreated waste water shall be discharged outside the plant premises.
(iv). Plan for rain water harvesting.
(v). Committee sought the plan for green energy viz. solar power generation (at least 2.5 MW for use in the unit).
(vi). Commitment for employment to the local people along with details.
(vii). Issues raised during public hearing, action plan, and as committed for utilization of Rs 5.0 crore for CER, revised action plan.
(viii). Earlier EC was granted in 2016. The Committee noted that there is Schedule-I species in the study area and PP has still not taken the approval of conservation plan.
(ix). Consultant needs to upload all the required details in Form 2 (Parivesh Portal), [for eg. Letter of SPCB forwarding the Public Hearing to MoEFCC at S No. 7.1 has not uploaded; In S No. 6, in place of TOR, minutes uploaded etc.]

The proposal was accordingly **DEFERRED** for the needful.

Agenda No. 21.3

Synthetic organic manufacturing unit at Survey No. 32, Village - Tupakulagudem, Mandal - Tallapudi, District - West Godavari Balanagar, Rangareddi, Telangana by M/s Tagoor Chemicals Private Limited- Consideration of Environment Clearance

[IA/AP/IND2/159022/2016, IA-J-11011/368/2014-IA-II(I)]

The Project Proponent and accredited Consultant M/s. Rightsource Industrial Solutions Pvt. Ltd., gave 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 Bulk Drugs & Drug Intermediates Manufacturing Unit along with 2.5 MW co-generation located at Survey No.: 32, Tupakulagudem (V), Tallapudi (M), West Godavari (Dist.), Andhra Pradesh State by M/s Tagoor Chemicals Pvt. Ltd.

The ToR has been issued by Ministry vide letter no. J-11011/368/2014-IA-II (I) dated 22nd January 2019. The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Ministry had issued EC earlier vide letter No. J-11011/368/2014-IA-II (I), dated: 09th October, 2018 to the Synthetic Organic Manufacturing Unit in favour of M/s Tagoor Chemicals Pvt. Ltd.

Existing land area is 7.0 acres (28328 Sqm) & additional area of 4.0 acres (16178 Sqm) together with an area of 11 Acres (44506 Sq. m) land will be used for proposed expansion. Industry has developed greenbelt in an area of 9385.21 Sqm and proposed to develop Greenbelt in an area of 5428.81 Sqm i.e., 14814.02 which is 33.29% out of 44506 Sqm of the total project area.

The proposed project cost for expansion is about Rs. 45 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 262 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 60 Lakhs per annum. Total Employment after expansion will be 200 persons. Industry proposed to allocate Rs. 45 Lakhs for 5 years @ 1.0 % of the Project cost towards Corporate Environment Responsibility.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance. Godavari river flows at 9.6 km from the project site.

Ambient air quality monitoring was carried out at 8 locations during October 2018 - December 2018 and submitted baseline data indicates that ranges of concentrations of PM_{10} (41.5 – 65.4 µg/ m^3), $PM_{2.5}$ (16.6 – 26.2 µg/ m^3), SO_2 (9.2 – 14.5 µg/ m^3), NOx (16.6 – 21.9 µg/ m^3), CO (0.32 – 0.75 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 0.395 µg/ m^3, 0.099 µg/ m^3, 2.061 µg/ m^3 & 3.982 µg/ m^3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS).

The total water requirement is 533.75 m^3/day of which fresh water requirement is 293.46 m^3/day and will be met from River Godavari. The permission to draw of surface water for industrial and drinking water purpose was obtained for 600 KLD from AP Irrigation department vide proceeding No: CE/ GDS/ DWM/ OT1/ AEE1/ 62D dated: 14.02.2019.

Generated effluent of 193.19 m^3/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant will be based on Zero Liquid Discharge System.

Power requirement after expansion will be 2000 KVA including existing 300 KVA and will be met from Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL). Existing unit has 250 KVA DG set is dropped and proposed to install 2 X 1000 KVA DG Sets, Stack (height 10 mts) will be provided for each as per CPCB norms to the proposed DG sets.

Coal fired boiler of 18.0 TPH is proposed with stack of height 40 mtrs, Multi cyclone separators & bag filters 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	Sulphur dioxide	1796	Scrubbed by using C. S. Lye Solution
2	Hydrogen chloride	577	Scrubbed by using chilled water media
3	Hydrogen Bromide	371	Scrubbed by using C. S. Lye solution
4	Nitrogen	15	Dispersed into the atmosphere
5	Carbon dioxide	822	Dispersed into the atmosphere
6	Hydrogen	30	Diffused by using Nitrogen through Flame arrestor
7	Ammonia	104	Scrubbed by using chilled water media
8	Oxygen	664	Dispersed into the atmosphere
9	Chloro Methane	242	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 waste (Process Residue)	5298 Kg/ Day	Will be sent to Cement Industries
2	Spent Carbon	281.5 Kg/ Day	
3	Solvent Distillation Residue	2064 Kg/ Day	
4	Inorganic Waste	807 Kg/ Day	Will be sent to TSDF
5	Spent Mixed Solvents	4 KLD	Will be sent to SPCB authorized recyclers/ Cement Industries
6	ETP Sludge	500 Kg/ Day	Will be sent to TSDF
7	MEE Salts	9414 Kg/ Day	
8	Organic Evaporative Liquid (from MEE Stripper)	1660 Kg/ Day	Will be sent to Cement Industry
9	Used Oils	500 L/ Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/Recycling
10	Detoxified Containers	800 No's/Month	After Detoxification will be sent to SPCB Authorized Agencies
11	Used Lead Acid Batteries	10 No's/Annum	Send back to suppliers for buyback of New Batteries
Solid Waste Details			
12	Ash from boiler	9.4 MT/ Day	Will be sent to Brick Manufacturers

Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 05.07.2019. The main issues raised during the public hearing are related to utilization of CSR & CER funds.

The unit was visited by Regional Office, Chennai on 09.01.2020 and Certified the Compliance report vide F. No.: EP/12.1/2017-18/AP/0242 Dated: 14.02.2020. No Litigation pending against the proposal.

The details of products and capacity as under:

S. No.	Product Name	Production Capacity MT/Month	CAS No.	Therapeutic category
1	Amitriptyline	10	549-18-8	Antidepressant
2	Atrovastatin Calcium	5.0	134523-03-8	Hypercholesterolemia
3	Bupropion	5.0	34841-39-9	Anti depressant
4	Clopidogrelbisulfate	5.0	135046-48-9	Antithrombotic
5	Cyclobenzaprine HCl	5.0	6202-23-9	Muscle relaxant
6	Cyproheptadine HCl	10	41354-29-4	Anti allergic
7	Desloratadine	5.0	100649-74-8	Antihistamine
8	Domperidone	30	99497-03-7	Anti emetic
9	Domperidone maleate	2.0	99497-03-7	Anti emetic
10	Donepezil HCl	1.0	12004-70-3	Alzheimer's disease
11	Ebastine	5.0	90729-43-4	Anti allergic
12	Esomeprazole Sodium	3.0	161796-78-7	Anti ulcerative
13	Esomeprazole Magnesium trihydrate	3.0	217087-09-7	Anti ulcerative
14	Fexofenadine Hydrochloride	5.0	143439-40-8	Anti histamine
15	Haloperidol	2.0	52-86-8	Antipsychotic
16	Itopride Hydrochloride	2.0	122892-31-3	Antispasmodics
17	Itraconazole	15	84625-61-6	Antifungal
18	Ketrolac Tromethane	2.0	74103-07-4	Anti Inflammatory
19	Lansoprazole	10	103577-45-3	Ant ulcerative
20	Loperamide Hydrochloride	10	34552-83-5	Anti diarrhea agent
21	Losartan Potassium	2.0	124750-99-8	Anti Hypertensive
22	Nebivolol HCl	2.0	99200-09-6	Anti Hypertensive
23	Nortriptyline HCl	2.0	894-71-3	Anti depressant
24	Omeprazole	60	95510-70-6	Ant ulcerative
25	Omeprazole Sodium	2.0	95510-70-6	Ant ulcerative
26	Omeprazole Magnesium Dihydrate	2.0	95382-33-5	Ant ulcerative

27	Oxatomide	1.0	60607-34-3	Antihistamine
28	Pantoprazole Sodium Sesqui Hydrate	20	164579-32-2	Ant ulcerative
29	Pimozide	2.0	2062-78-4	Antipsychotic
30	Pregabalin	2.0	148553-50-8	Epileptic
31	Quetiapine Hemifumarate	2.0	111974-72-2	Antipsychotic
32	Rabeprazole Sodium	20	117976-90-6	Ant ulcerative
33	Rupatadine fumarate	2.0	182349-12-8	Antihistamine
34	Telmisartan	2.0	144701-48-4	Anti Hypertensive
35	Terbinafine hydrochloride	15	78628-80-5	Anti fungal
36	Valsartan	2.0	137862-59-4	Anti Hypertensive
37	1-Benzy-4-piperidone	5.0	3612-20-2	Drug Intermediate
38	1-Benzyl-4-chloropiperidine	5.0	67848-71-9	Drug Intermediate
39	1-Benzylpiperidin-4-ol	5.0	4727-72-4	Drug Intermediate
40	1-Methylpiperidin-4-amine	5.0	41838-46-4	Drug Intermediate
41	4-Aminopiperidine	5.0	13035-19-3	Drug Intermediate
42	4-Hydroxy piperidine	5.0	5382-16-1	Drug Intermediate
43	4-Phenylpiperidine	1.0	771-99-3	Drug Intermediate
44	4-piperidinopiperidine	1.0	4897-50-1	Drug Intermediate
45	N-tert-Butoxycarbonyl-4-hydroxy piperidine	5.0	109384-19-2	Drug Intermediate
Total (PP will manufacture any 10 Products at any given point of time)		**200**		
Co-generation power		**2 MW**		

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No.	Product Name	Name of the By- product	Quantity in Kg /Day
1	Clopidogrel Bisulphate	Ammonium sulphate	7848.00
	Omeprazole		
	Domperidone		
2	Domperidone	Sodium bromide	948.00
	Cyclobenzaprine hydrochloride		
	Itraconazole		
3	Cyclobenzaprine hydrochloride	Magnesium Chloride	239.00
	Cyproheptadine Hydrochloride		

	Desloratadine		
4	Desloratadine	Potassium chloride	226.00
	Ebastine		
5	Ebastine	Aluminium hydroxide solution (12%)	667.00
6	Itraconazole	Potassium bromide	117.00
	Telmisartan		
7	Pantoprazole sodium Sesquihydrtae	Ammonium chloride	2215.57
	Domperidone		
8	Pantoprazole sodium Sesquihydrtae	Ammonium acetate	437.00
		Acetic acid	289.00
		Ammonium phosphate	994.00
		Sodium methyl sulphate	1238.00
9	Pantoprazole sodium Sesquihydrtae	Sodium acetate	1660.00
	Domperidone		
	Rabeprazole sodium		
	Omeprazole		
10	Omeprazole	Sodium nitrite	757.37
11	Domperidone	Methanol	299.00
12	Losartan Potassium	Trityl alcohol	43.50
13	Bupropion	Sodium bromide (After neutralization of HBr with Caustic Lye solution)	556.00
	Itraconazole		
	Loperamide Hydrochloride		

The EAC during deliberations noted that project proponent has not provided the details of existing and proposed products. Further the project proponent has also not developed the adequate greenbelt as per the existing EC. The Committee after detailed deliberations desired for following requisite information/inputs in respect of the following:

(i). Details of existing, proposed and total products in tabular format.
(ii). Details of existing products vis-a-vis EC & CTO.
(iii). Production details since inception of the Unit to verify the violation, if any.
(iv). Alternate fuel in place of Coal.
(v). Detailed action plan on the Public hearing issues, response and as proposed, CER plan for Rs 2 crores.
(vi). Revised water balance and plan for ZLD.
(vii). Rain water harvesting plan and reuse in the plant.
(viii). Plan for generation of 20% power requirement of the unit from green energy solar power.
(ix). Verification/re-analysis of AAQ study and predicted incremental values.
(x). Risk and safety assessment using advanced models.

The proposal was **DEFERRED** for the needful.

Agenda No. 21.4

Bulk drugs Manufacturing unit at APIIC - Industrial Park, Hindupur, Anantapur, Andhra Pradesh by M/s Sriphal Life Sciences Pvt Ltd. - Consideration of Environment Clearance

[IA/AP/IND2/158646/2019, IA-J-11011/360/2019-IA-II(I)]

The Project Proponent and their accredited consultant M/s Rightsource Industrial Solutions Pvt Ltd, gave a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Establishing Bulk Drugs Manufacturing Unit at Sy No: 138/3, APIIC - Industrial Park, Gollapuram (V), Hindupur Mandal, Anantapur District, Andhra Pradesh State by M/s Sriphal Life Sciences Pvt Ltd.

The ToR has been issued by Ministry vide letter dated 12th January 2020. The project/activity is covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general conditions (Interstate boundary-Karnataka State at 1.1km), the project requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposed project is located in a notified industrial area/estate i.e., APIIC – Industrial park, Hindupur by Govt. of Andhra Pradesh, which was notified on 04.03.1995. There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.

The proposed project will be established in an area of 2.37 acres (9584.83 sqm). Industry will develop greenbelt in an area of 3883.33 Sqm covering 40.51% of total project area. The proposed project cost is about Rs. 8.0 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. 18 Lakhs per annum. The project will provide employment for 50 persons. Industry proposed to allocate Rs. 16 Lakhs for 5 years @ 2.0 % of the Project cost towards Corporate Environment Responsibility.

Ambient air quality monitoring was carried out at 8 locations during December 2019 - February 2020 and the baseline data indicates the ranges of concentrations as: PM_{10} (44.1 – 62.7 µg/ m^3), $PM_{2.5}$ (18.5 – 26.3 µg/ m^3), SO_2 (8.0 – 11.3 µg/ m^3), NOx (11.4 – 16.2 µg/ m^3), CO (0.19 – 0.27 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 0.141 µg/ m^3, 0.073 µg/ m^3, 1.188 µg/ m^3 & 1.795 µg/ m^3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS).

The total water requirement is estimated to be 112.62 m^3/day, which includes fresh water requirement of 86.73 m^3/day, proposed to be met from APIIC water supply.

Generated effluent of 32.72 m^3/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant. The plant will be based on Zero Liquid Discharge System.

Power requirement will be 600 KVA and will be met from Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL). The unit is proposed to install 1 X 250 KVA & 1 x 320 KVA DG Sets, Stack (height 10 mts) will be provided for each as per CPCB norms to the proposed DG sets. Briquette fired boilers of capacity 2 TPH & 3 TPH are proposed with stacks of height 30 mtrs. Cyclone separators and bag filters will be installed separately for each of the boiler 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	Hydrogen	9.00	Diffused by using Nitrogen through Flame arrestor
2	Chloromethane	20.00	Scrubbed by using C. S. Lye solution
3	Sulphur dioxide	48.00	Scrubbed by using C. S. Lye solution
4	Carbon dioxide	154.00	Dispersed into the atmosphere
5	Hydrogen chloride	331.00	Scrubbed by using chilled water media

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 (Process Residue)	2118 Kg/Day	Will be sent to Cement Industries
2	Spent Carbon	41 Kg/Day	
3	Solvent Distillation Residue	302 Kg/Day	
4	Inorganic Solid Waste	431 Kg/Day	Will be sent to TSDF
5	ETP Sludge	20 Kg/Day	
6	MEE Salts	1448.5 Kg/Day	
7	Organic distillate from MEE Stripper	440 Kg/Day	Will be sent to Cement Industries
8	Used Oils	100 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling
9	Detoxified Containers/ Container liners	400 No's / Month	After Detoxification will be sent to SPCB authorized agencies.
10	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
Solid waste details			
11	Ash from boilers	5950 Kg/Day	Will be sent to Brick Manufacturers

Public hearing is exempted as the project site is located in the notified Industrial area/estate. No Litigation pending against the proposal.

The details of products and capacity as under:

S. No	Name of the Product	Quantity in MT/Month	CAS No	Therapeutic Category
1	Amlodipine Besylate	3.00	88150-42-9	Anti-hypertensive
2	Atoravastatin calcium	4.00	344423-98-9	Anti-Cholesteremic Agent
3	Cetirizine dihydrochloride	10.00	83881-52-1	Anti-histamine
4	Curcumin	30.00	458-37-7	Anti-bacterial
5	Esomeprazole Magnesium Trihydrate	10.00	217087-09-7	Anti-ulcerative
6	Fexofenadine hydrochloride	10.00	153439-40-8	Anti-histamine
7	Fluconazole	5.00	86386-73-4	Anti-fungal
8	Montelukast sodium	1.00	151767-02-1	Anti-histamine
9	Pantoprazole sodium	5.00	138786-67-1	Gastric acid suppressant
10	Piroctoneolamine	10.00	68890-66-4	Antiseborrheic
11	Rosuvastatin calcium	5.00	147098-20-2	Antihyperlipidemic
12	Sertraline Hydrochloride	5.00	79559-97-0	Anti-depressant
Total (Any five products will be manufactured at any given point of time)		**70.00**		

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No	Name of the Product	Name of the By-Product	Quantity in Kg/Day
1	Atorvastatin calcium	Potassium chloride	57.38
2	Fexofenadine hydrochloride	Boric acid	25.87
		Sodium methoxide	22.61
		Potassium iodide	127.93
		Potassium chloride	96.58
3	Pantoprazole Sodium	Sodium Di hydrogen phosphate	483.42
4	Sertraline hydrochloride	Ammonium Chloride	35.17
		Boric acid	11.82

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his

knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area.

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

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

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). Process safety and risk assessment studies carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). Total fresh water requirement shall not exceed 86.73 cum/day, proposed to be met from APIIC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.

(x). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

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

(xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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 nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xv). As committed Rs. 16 lakh shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting requirement in the study area, as proposed. The CER plan shall be completed before commissioning /expansion of the project. Preference shall be given to local villagers for employment in the unit.

(xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project

area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 21.5

Setting up of Synthetic organic chemical manufacturing unit by M/s Shree Vallabh Chemical (Unit II) at Survey No. 703/P/1, Village Kanera, Taluka Kheda, District Kheda (Gujarat) -Consideration of Environmental Clearance

[IA/GJ/IND2/103846/2019, IA-J-11011/181/2019-IA-II(I)]

The Project Proponent and their accredited Consultant M/s. Green Circle Inc, gave a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up of Synthetic organic chemical manufacturing unit of capacity 1900 TPM by M/s. Shree Vallabh Chemical (Unit II) in an area of 5240.74 sqm at Survey No. 703/P/1, Village Kanera, Taluka Kheda, District Kheda, Gujarat.

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

The Standard ToR has been issued by the Ministry, vide letter dated 6th June, 2019. The land area available for the project is 5240.74 sqm. Industry will develop greenbelt in an area of 30.16 % i.e., 1580.74 m2 out of total area (5240.74 m^2) of the project. The estimated project cost is Rs. 8 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 34.50 Lakhs and the recurring cost (operation & maintenance) will be about Rs 25.6 Lakh per annum. The project will lead to employment for 29 persons as direct. Industry proposes to allocate Rs 20 Lakh @ of 2.5 % towards Corporate Social Responsibility. There are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Goblaj Lake is at a distance of 1.3km in South.

Ambient air quality monitoring was carried out at 10 locations during March-19 to May-19 and the baseline data indicates the ranges of concentrations as: PM10 (52.41-85.56.µg/m^3), PM2.5 (19.37- 34.64 µg/m^3), SO2 (5.12- 12.68µg/m^3) and NO2 (8.3-20.1µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.29 µg/m^3, 0.1281 µg/m3 and 0.06 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 14.2 cum/day of which fresh water requirement of 14.2 cum/day will be met from Borewell. Effluent of 4.8 quantity will be treated through ETP

followed by MEE and Centrifuge/ATFD. The plant will be based on Zero Liquid discharge system.

Power requirement will be 317 kVA and will be met from Uttar Gujarat Vij Company Ltd. (UGVCL). Unit will have 1 DG sets of 250 kVA capacity, which will be used as standby during power failure. Stack (height 5m) will be provided as per CPCB norms to the proposed DG sets.

Unit will install 1 TPH imported coal fired boiler. Bag filter with a stack of height of 31 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

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

S. No	Name of Hazardous Waste	Category	Quantity Generation (MT/ Year)	Method of Disposal
1.	ETP sludge/ Residue salts	35.3	12.0 MT	Collection, storage, Transportation and sent to TSDF/Co-processing.
2.	Used Oil	5.1	0.1 MT	Collection, Storage, Transportation, Use as self-lubrication or sold to registered refiners.
3.	Discarded Containers/Bags/ Liners	33.1	18 MT	Collection, Storage, Decontamination and reuse/return to supplier/sold to authorized vendors.
4.	Softener Resin/ Process waste	23.1	1 MT	Collection, Storage, Transportation and dispose to CHWIF/ co-processing

Public hearing for the project has been conducted by the State Pollution Control Board on 9th January, 2020, which was presided over by District Revenue Officer and Additional District Magistrate. The main issues raised during the public hearing are related to employment and planning of the activities related to education for Kanera Village. The Committee deliberated the action plan and found in order. No litigation is pending against the proposal.

The details of products and capacity as under:

S. No	**Product Details**	**Quantity (MT/Month)**
1)	Alkyl Phenol Ethoxylate	400
2)	Fatty Alcohol Ethoxylate	200
3)	Oxo Alcohol Ethoxylate	400
4)	Vegetable Oil Base Ethoxylate	100
5)	PEG Ethoxylate	300
6)	De-Emulsifier Ethoxylate	100
7)	TWEEN SeriesEthoxylate	100

8)	EO PO Block Co- Polymer	100
9)	Amphoterics	50
10)	Binder	50
11)	Softener	100
	TOTAL	**1,900**

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. The Committee noted that the project proponent has obtained necessary permission for industrial usage of the land and found to be satisfactory.

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

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

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). Total fresh water requirement shall not exceed 14.2 cum/day, proposed to be met from ground water. Necessary permission obtained in this regard shall be renewed from time to time. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(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. Rainwater harvesting system shall be developed in the project area and collected water shall be used in the process/utilities of the unit.

(x). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xi). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be

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

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

(xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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 nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xv). Briquette shall be used as fuel in the boiler.

(xvi). All the Commitments made during public hearing shall be implemented in a timely manner. Preference shall be given to local villagers (70-80%) for employment in the unit

(xvii). As proposed 2% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.

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

Agenda No.21.6

Proposed pesticides technical and pesticides intermediates manufacturing plant at Plot No. DO - 154, GIDC- Chemical zone, Saykha-II, Tal: Vagra, Dist: Bharuch, Gujarat by M/s DHARMAJ CROP GUARD LTD. (UNIT-II)- Consideration of Environment Clearance

[IA/GJ/IND2/131417/2019, IA-J-11011/419/2019-IA-II(I)]

PP vide email dated 27.06.2020 requested that they could not attend the meeting. Based on the request of PP, the EAC therefore decided to **defer** the proposal.

Agenda No. 21.7

Proposed expansion of Monochloro Acetic Acid (MCA) plant at Village Atul, District Valsad, Gujarat by M/s Anaven LLP - Reconsideration of Environmental Clearance

[IA/GJ/IND2/79197/2018, IA-J-11011/286/2018-IA-II(I)]

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

The proposal was earlier considered by the EAC in its meeting held during 20-22 November, 2019, 21-23 January, 2020 and 11-13 May, 2020, wherein the EAC observation was as under:

(i). The *revised output data is not correct and* Risk Assessment for accidental release of Chlorine, Hydrogen and Acetic Acid not done in proper manner.
(ii). Consequence data mentioned in Table 7.7 of EIA report is not correct. Chlorine is a heavy gas and its accidental release will result in ground hugging dispersion resulting in toxic damage to human health. The receptors were not identified and the impact was not assessed properly.
(iii). Hazard identified as pool fire due to hydrogen leak is not correct (Table 7.7).
(iv). Acetic acid is a corrosive liquid. The consequence of an accidental spillage during the storage and handling which may result in damage to human health and contamination of surface and ground water and soil not described in RA.

In response of the same the project proponent has submitted the point wise reply as under:

S. No.	Observation of EAC	Reply submitted by the project proponent
1.	Consequence data mentioned in Table 7.7 of EIA report is not correct. Chlorine isa heavy gas and its accidental release will result in ground hugging dispersion resulting in toxic damage to human health. The receptors were not identified and	In EIA report, consequence of hazardous chemicals were done for credible and worst case scenario. For Chlorine gas also, we did consequence analysis for 1mm leak, 5 mm leak and catastrophic rupture of Chlorine pipeline. In Table 7.10 of EIA Report, we mentioned distance of ERPG1, ERPG2, ERPG3, IDLH due to chlorine leak for various scenario. Hence, effect on human health coming in particular distance of ERPG1, ERPG2, ERPG3, IDLH were considered. Effect of toxic release i.e. ERPG1, ERPG2, ERPG3, IDLH is given in section 7.2.2 of EIA Report.

	the impact was not assessed properly.	
2.	Hazard identified as pool fire due to hydrogen leak is not correct (Table 7.7).	In Table 7.7, PP has mentioned various consequence studied. However, in the results table we have mentioned only those consequences which were actually occurring as per modelling. This does not include pool fire.
3.	Acetic acid is a corrosive liquid. The consequence of an accidental spillage duringthe storage and handling which may result in damage to human health and contamination of surface and ground water and soil not described in RA.	Acetic acid is flammable, corrosive and toxic liquid. Hence, in consequence analysis radiation effect, over pressure distance and toxic distance were mentioned. MSDS for acetic acid submitted as a CD with hard copy of EIA Report, which contains all the information requested. A reading of the MSDS reveals the following information: In section 11: Toxicological information is given In section 12.4: Mobility in Soil is given

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Monochloro Acetic Acid (MCA) manufacturing unit from 5100 TPA to 32000 TPA by M/s Anaven LLP in an area of 6630.32 sqm at Village Atul, District Valsad, Gujarat.

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The details of products and capacity as under:

S. No.	Name of Products	Production capacity in MTPA		
		Existing	Proposed	Total
1	Monochloro acetic acid	5100	26900	32000
2	36% HCl	6630	34970	41600
3	HE- Di-chloro and Tri-chloro acetic acid	71.4	376.6	448.0

The standard ToR for the project was granted on 28th October, 2018. Public hearing for the project was conducted by the State Pollution Control Board on 25th June 2019. The Public hearing was chaired by the District Magistrate. The main issues raised during the public hearing are related to employment, air pollution and management of hazardous waste.

Existing land area is 6630.32 sqm. Industry has already developed greenbelt in an area of 9.8 % i.e., 647 sqm. out of total area of the project. Additional 24% greenbelt is developed at Atul Village. The estimated project cost is Rs. 187.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 2048.24 Lacs

and the Recurring cost (operation and maintenance) will be about Rs. 647.95 Lacs per annum. Total Employment will be ~72 persons as direct &indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. River Par flows at a distance of 0.42 km in South West.

Ambient air quality monitoring was carried out at 8 locations during October, 2018 to December, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (32-93 µg/m3), PM2.5 (14-45 µg/m3), SO2 (6-11 µg/m3), NOx (12- 23 µg/m3) & CO (1,000 µg/m3). Revised AAQ modeling study for point emissions sources indicates that the incremental GLCs after the proposed project would be 0.95 µg/m^3, 5.23 µg/m^3, 22.3 µg/m^3& 101.98 µg/$m^3$with respect to $PM_{2.5}$, SO_2, NO_x & CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 499.4 m3/day including existing requirement of 84.3 KLD of which fresh water requirement of 186.1m3/day will be met from river Par. Effluent of 318 KLD quantity will be treated through ETP from that 313.3 KLD will recycled back from RO- MEE. The plant will be Zero Liquid discharge. Power requirement after expansion will be 1360 KVA (86,10,000 kW/Annum) including existing 217 KVA and will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has No DG set, additionally 1 DG set of 500 kVA is used as standby during power failure. Stack (height 10m) will be provided as per CPCB norms to the proposed DG sets.

Process emission management will include Process vents attached to chlorinator, Hydrogenerator, Vacuum pump, Flakers, Storage tanks (HCl & Acetic acid).

S. No.	Stack Attached to	Nos. of Stacks	Stack Height in m	Pollutants Emitted	Air Pollution Control Measures Attached	Scrubbing Media
Existing						
1	Chlorinator	1	35 m	Cl_2, HCl	Water and Caustic Scrubber	Water followed by caustic
Proposed						
2	Hydrogenerator	1	35 m	Hydrogen+ HCl	Water Scrubber	Water
3	Vacuum pump	1	38 m	HCl	Water Scrubber	Water
4	Flakers	1	45 m	Traces of HCl	Water Scrubber	Water
5	HCl storage tank	1	18 m	Traces of HCl	Water Scrubber	Water
6	Acetic acid storage tank	1	15 m	Traces of Acetic acid	Water Scrubber	Water

Details of Solid waste/ Hazardous waste generation and its management are as follows:

S. No	Type of Waste	Hazardous Waste Category	Quantity MT per Year			Source	Method of Collection	Treatment / Disposal
			Existing	Proposed	Total			
1	Spent Catalyst	17.2	0.15	0.81	0.96	Process	Bins	Sent to Regenerator
2	ETP Sludge	35.3	178.5	941.5	1120	Wastewater Treatment	Collection	Sent to authorized TSDF
3	Liners and Used containers	33.1	0.5	2.64	3.14	Packaging	Manual	Decontaminate and discard to authorised vendor
4	Used Oil	5.1	1	5.27	6.27	DG set, Gear boxes	Drums	Disposal to authorised vendor
Other Waste								
1	Salt (NaCl) from MEE/MVR	-	0	1551	1551	MEE/ MVR	Bag	Sell to authorized vendor or TSDF

PP reported that permission was granted to M/s Atul Ltd before EIA notification came into existence and later CCA was split and transferred to Anaven LLP in April 2018. Unit has received CTO from GPCB vide dated 23rd April, 2018. The expenditure towards CER for the project would be Rs. 3.31 crores of the project cost as committed by the project proponent. As the unit is operating on CTO, there is no requirement of certified compliance report.

The EAC during deliberation observed that the Consultant M/s Kadam Environmental Consultants should own responsibilities for the error in the EIA report submitted due to which the additional meetings for the project was arranged. In this regard the consultant has submitted apology letter stating that there is no delay due to the EAC. The project proponent has also submitted the details of emission from vehicular traffic as per ARAI standards, Chlorine pipeline leak scenario and control measures of Acetic acid. The project proponent has also confirmed that they will monitor the ambient air predominant downwind direction.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

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

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

(i) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.

(iii) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.

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

(v) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(vi) To control source and the fugitive emissions (at 99.997%), suitable and adequate pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

(vii) Rainwater harvesting system shall be developed in the project area and collected water shall be used in the process/utilities of the unit.

(viii) Total fresh water requirement shall not exceed 186.1 cum/day, proposed to be met from river Par. Necessary permission shall be obtained in this regard from concerned regulatory authority. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.

(x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.

(xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

(xii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 33% out of the total project area.

(xiv) All the Commitments made during public hearing shall be implemented in a timely manner. Preference shall be given to local villagers (70-80%) for employment in the unit

(xv) As proposed Rs.16 lakhs shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including Drinking water facility/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.

(xvi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

(xvii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xviii) 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.

(xix) Project Proponent is to do the monitoring within the zone of influence (within 2 km West, SW, and east direction) of the plant boundary in downwind directions. The results shall be submitted in six-monthly EC compliance report to the RO-MoEFCC.

Amendment in Environmental Clearance

Agenda No.21.8

Expansion of agrochemical & agrochemical intermediates by M/s Tagros Chemical India Ltd at Plot No. 43/1, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat) - Amendment in EC

[IA/GJ/IND2/153356/2020, J-11011/122/2016- IA II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 25th February 2019 for the project of Expansion of agrochemical & agrochemical intermediates at Plot No. 43/1, GIDC Dahej, Tal. Vagra, Dist: Bharuch 392130, Gujarat of M/s. Tagros Chemical India Ltd. vide letter no. J-11011/122/2016–IA II (I) and its amendment obtained vide letter no. J-11011/122/2016–IA II (I) dated 25th February, 2020 to M/s Tagros Chemicals India Pvt. Ltd.

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

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/Reasons
1	**Subject**	Expansion of agrochemical & agrochemical intermediate by M/s Tagros Chemical India Ltd at **Plot No.43/1**, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat) -Environmental Clearance - reg.	Expansion of agrochemical & agrochemical intermediate by M/s Tagros Chemicals India Pvt. Ltd. at **Plot No.43/1 & 43/3**, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat) - Environmental Clearance - reg.	GIDC has allotted Plot No. 43/3, GIDC, Dahej, Taluka: Vagra, Dist: Bharuch 394 116, Gujarat to Tagros Chemicals India Pvt. Ltd. which is adjoining to Existing Manufacturing Unit having Plot No 43/1, GIDC, Dahej, Taluka: Vagra, Dist: Bharuch 394 116, Gujarat. So, Company want to merge adjoining Plot No. 43/3 with Existing Manufacturing Unit Plot No. 43/1, GIDC, Dahej, Taluka: Vagra, Dist: Bharuch 394 116, Gujarat of M/s. Tagros Chemicals India Pvt. Ltd. Detail Merger of both plots are given and deliberated by the EAC
2	**Condition No. 2 (Page 1 of 7)**	The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental	The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the	As both the plots will be merged total land area will be 102126.81 sqm. Existing Plot Area (Plot No. 43/1) = 71720.42 sqm.

		clearance to the project for expansion of agrochemicals & agrochemical intermediates from 1265 TPM to 2350 TPM (15 nos of products) by M/s Tagros Chemical India Ltd in an area of **71359 sqm at plot No.43/1,** GIDC Dahej, Village Dahej, Taluka Vagra, District Bharuch (Gujarat). The proposed expansion also envisages increase in production of inorganic compounds from the present capacity of 2685.3 TPM to 4267.7 TPM.	project for expansion of agrochemicals & agrochemical intermediates from 1265 TPM to 2350 TPM (15 nos of products) by M/s Tagros Chemical India Ltd. in an area of **102126.81 (71720.42 + 30406.398) sqm. at plot No.43/1 & 43/3**, GIDC Dahej, Village Dahej, Taluka Vagra, District Bharuch (Gujarat). The proposed expansion also envisages increase in production of inorganic compounds from the present capacity of 2685.3 TPM to 4267.7 TPM.	Additional Plot Area (Plot No. 43/3) = 30406.398 sqm. Total Plot Area = 102126.81 sqm.
3.	**Condition No. 4 (Page 2 of 7)**	Existing land area is **71359 sqm**. No additional land shall be required for the proposed expansion. Greenbelt will be developed in an area of **21359 m2**, covering 30% of the total project area. The estimated project cost is Rs.164.81 crore including existing investment of Rs.92.42 crore.	Total land area is **102126.81 (71720.42 sqm: Plot No 43/1 + 30406.398: Plot No 43/3) sqm Greenbelt will be developed in an area of 33937 sqm (21713 sqm: Plot No 43/1 + 12224 sqm: Plot No 43/3)**, covering 33.23% of the total project area. **The estimated project cost is Rs.164.81 crore + Rs. 6.6 crore**	As both the plots will be merged total land area as well as greenbelt area will also get increased: Existing Plot Area (Plot No. 43/1) = 71720.42 sqm. Additional Plot Area (Plot No. 43/3) = 30406.398 sqm. Total Plot Area = 102126.81 sqm. Existing Greenbelt Area (Plot No. 43/1) = 21713 sqm. Additional Greenbelt (Plot

		Total capital cost earmarked towards environmental pollution control measures is Rs.15.07 crore and the recurring cost (O&M) will be about Rs.9.3 crore per annum.	**(Additional cost of new plot i.e. 43/3) = Rs. 171.41 crore** including existing investment of Rs.92.42 crore. Total capital cost earmarked towards environmental pollution control measures is Rs.15.07 crore and the recurring cost (O&M) will be about Rs.9.3 crore per annum.	No. 43/3) = 12224 sqm. Total Green Belt = 33937 sqm. (33.23% of Total Plot Area) Total project is also increased due to addition of new plot i.e. 43/3: Cost of Existing Project i.e. Plot No. 43/1 = Rs. 164.81 crores Cost of Additional Land i.e. Plot No. 43/3 = Rs. 6.6 crores Total Project Cost = Rs. 171.41 Crores

The EAC during deliberations noted that the project proponent wants to add the adjacent plot No. 43/3 as GIDC has already allotted the said Plot in 2018 and there is no increase in the production capacity. The Committee, after detailed deliberations, **recommended** the proposal for amendment in EC as mentioned above.

DAY 2: 15th July 2020 (Wednesday)

Consideration of Environmental Clearance

Agenda No. 21.9

Expansion of manufacturing drugs and drug intermediates, fermentation based products and custom synthesis of organic compounds both from R & D and pilot plant by M/s Anthem Biosciences Private Ltd at Plot No 49, F1 & F2, KIADB Industrial Area, Bommasandra, Bengaluru (Karnataka)- Consideration of Environment Clearance

[IA/KA/IND2/155602/2013, IA-J-11011/148/2020-IA-II(I)]

The project proponent and their accredited consultant /s. Environmental Health and Safety Consultants Pvt Ltd made a detailed presentation on the salient features of the project through Video Conferencing (VC).

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Expansion of manufacturing drugs and drug intermediates, fermentation based products and custom synthesis of organic compounds both from R & D and pilot plant by M/s Anthem

Biosciences Private Ltd at Plot No 49, F1 & F2, KIADB Industrial Area, Bommasandra, Bengaluru (Karnataka).

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

S. No	Product Details	Existing Quantity, (kg/month)	Proposed Quantity (kg/month)	Total Quantity (kg/month)
1	Custom synthesis of organic compounds from pilot plant	1000	1560	2560
2	Custom synthesis of organic compounds from R&D	15	35	50
3	Gamma Glutamyl Cysteine	500	-495	5
4	Ibuprofen Piconol	200	-200	0
5	L-Methyl Folate Calcium	50	0	50
6	Levocloperastine Fendizoate	500	-500	0
7	MK-4	25	-20	5
8	Vitamin K2-7 (Menaquinone-7)	10	10	20
9	Phenoxy Benzyl Amine HCl	10	0	10
10	PIMOZIDE	10	0	10
11	Pyridoxal-5-Phosphate(P5P)	500	-400	100
12	Valganciclovir Hydrochloride	100	-50	50
13	Tolcopone	100	-50	50
14	Antabine	150	-150	0
15	PRO Q 10	500	-500	0
16	Resargin	100	-75	25
17	Calcium Folinate	Nil	25	25
18	Ormeloxifene Hydrochloride	Nil	50	50
19	Bempedoic acid	Nil	50	50
20	Pyrroloquinoline Quinone Bis Sodium (PQQ)	Nil	50	50
21	Cabergoline	Nil	5	5
22	Tocotrienol	Nil	50	50
23	Isomyosamine	Nil	25	25
24	Pioglitazone hydrochloride	Nil	100	100
25	EnQ 10	Nil	100	100
26	Maxfol	Nil	25	25
27	S-Equol	Nil	25	25
28	Voglibose	Nil	100	100
29	Pemetrexed disodium heptahydrate	Nil	50	50
30	Bortezomib I. P	Nil	1	1
Fermentation based products				
31	Trastuzumab	Nil	5	5

32	Rituximab	Nil	5	5
33	Adalimumab	Nil	5	5
34	Bevacizumab	Nil	5	5
35	Bacillus Mesentericus	Nil	10	10
36	Bascillus Claussi	Nil	100	100
37	Lactobascillus Acidophillus	Nil	10	10
38	Lactobascillus Rhamnosus	Nil	10	10
39	Bifidobacterium Longum	Nil	10	10
40	Bifidobacterium Bifidum	Nil	10	10
41	Bifidobacterium Lactis	Nil	10	10
	Production capacity (Kgs/month)	**3770**		**3771**
			Production capacity	**3.771 MT/Month**

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

Earlier State Environment Impact Assessment Authority, Karnataka had issued EC vide letter dated 3rd October, 2013 to the existing project "Expansion of the existing R&D unit and production of drugs, dietary supplements & custom synthesis of organic compounds both from R&D and pilot plant at Plot No. 49, Bommasandra Industrial Area Phase-I, Hosur Road, Bangalore in favour of M/s. Anthem Biosciences Pvt. Ltd

The terms of references (TORs) was granted by the SEIAA vide letter dated 21st May, 2019. Existing land area is 20,222 sqm and no additional land is required for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e.,6672.68 sqm out of 20,222 sqm of area of the project. 7% additional greenbelt development i.e., 1416 sqm is proposed within 2 km radius of project site in consultation with Forest Department. The estimated project cost is Rs. 65 Crores including existing investment of Rs.60 Crores. For the proposed expansion, total capital cost earmarked towards environmental pollution control measures is Rs.1.62 Crores and the recurring cost (operation and maintenance) will be about Rs.45.87 Lakhs per annum. Total employment will be1000 nos. Industry proposes to allocate Rs.10.00Lakhs@ 2.0 % towards Corporate Environmental Responsibility.

There are no wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc., within 10 kms distance from the project site. Bannerghatta National Park located at a distance of 9.56 km in SW. Kammasandra Lake is at a distance of 1.25kms in NE direction.

Ambient air quality monitoring was carried out at 8locations during March 2019 to May 2019 and submitted baseline data indicates that ranges of concentrations of PM10(57.9

µg/m3- 91.3µg/m3), PM2.5(21.6µg/m3–41.4µg/m3), SO2(8.27µg/m3-20.32µg/m3) and NO2(13.91µg/m3-28µg/m3) respectively. AAQ modelling study for the point source emissions indicates that the maximum incremental GLC after the proposed project would be 0.087 µg/m3,8.481µg/m3and16.942 µg/m3with respect to PM10, SO2and NO2 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 179 KLD and of which fresh water requirement of 144 m3/day will be met from KIADB & Tanker water. Low TDS Effluent of 15KLD will be treated in the existing ETP of capacity 25 KLD. In the present proposal, it is planned to transport excess 95 KLD (20 KLD HTDS and 75 KLD LTDS) to M/s Anthem Biosciences Pvt Ltd., (Unit II), Harohalli Industrial area, Kanakpura Taluk, Ramanagar District due to the space constraint within the existing industry. The ETP in Unit –II is a Zero Liquid Discharge (ZLD) plant.

The Committee noted that as the project location comes under critically polluted area and PP is not proposing the complete ZLD. As per provisions of OM dated 31.10.2019 (CPA), the PP should come with the compliances of the said OM. PP want to transfer the effluent through tankers. Further, Committee noted that PP is proposing green belt outside of the unit. As per provisions of OM dated 31.10.2019 (CPA), the PP should come with the 40 % of green belt. The Committee observed that the land area is not enough for proposed expansion, greenbelt and to achieve ZLD.

The EAC, after detailed deliberation, suggested that PP shall first conduct an alternate site analysis or to choose another location for the project as in this small plot such project does not seem feasible. The Committee has also not agreed for the transportation of waste water through tanker. The EAC therefore **deferred** the proposal.

Agenda No. 21.10

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

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

The proposal was earlier considered by the EAC in its meeting held on 30-31 December, 2019 & 1st January, 2020. The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The Committee also took serious note on the quality of the EIA/EMP report prepared by the consultant and underrated the consultant. The Committee desired that the Ministry/QCI shall take action as appropriate on the matter against the consultant for providing wrong and inconsistent information the EIA and presentation. The EAC, after detailed deliberations decided to return the proposal in its present form and has asked for clarification/inputs, in respect of the following:-

(i) EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.

(ii) EAC noted that PP has not submitted adequately TOR compliance and PP needs to be resubmit the TOR Compliance adequately.

(iii) The Committee noted that there are various deficiencies in Form 2 uploaded by the PP and accordingly Revised Form 2 shall be submitted incorporating all the information related to the project.

(iv) The Committee observed that the water quality analysis reported submitted by Consultant is wrong. The value of TDS was less than the total cation/anion in the sample [EIA Report Page no. 123 (SW123) & Page No. 130 (GW). Consultant need to conduct root cause analysis and examine the issues why such mistakes reported in the report. Consultant to take again sample and re-analyze the samples. Report the results.

(v) In EIA Report (Page No. 184), there are Schedule I species reported, however in Form 2 (S.No. 28), NIL information is mentioned. PP needs to examine the application properly before uploading the information on Parivesh Portal.

(vi) Details of EC/CTO for present project. Product details shall be revised to have consistency with the existing, proposed and the total products and capacity, in a single tabular format. Commitment for not producing any banned pesticides.

(vii) Revised layout plan with 33% greenbelt area along with budget needs to be submitted.

(viii) Onsite emergency plan as per MSIHC Rules and detailed occupational health plan.

(ix) Commitment for not using Furnace oil.

(x) Revised water balance with details of total water and fresh water requirement, source of water etc. Effluent treatment mechanism with plan for Zero Liquid Discharge, having MEE/ATFD/RO.

(xi) Details of protected areas within 10 km of the study area. Status of recommendation of Standing Committee of NBWL on the project.

(xii) Revised one season AAQ monitoring and prediction of GLC due to the proposed project.

(xiii) Plan for Corporate Environmental Responsibility.

(xiv) PP/Consultant has submitted the undertaking for owning the draft EIA Report. The consultant has not applied his mind during uploading the information on portal. The Committee was very disappointed by this act of consultant.

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

The proposal is for environmental clearance to the project for Expansion of Pharmaceuticals, Speciality and Agrochemical intermediates manufacturing at Plot No.

B-26,27 & B-14,15, Malkapur MIDC, Dasarkhed, Taluka: Malkapur, District: Buldhana, Maharashtra by M/s Benzo Chem Industries Pvt Ltd.

The ToR has been issued by Ministry vide letter dated 18 June 2019. The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' and item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Existing land area is 33350 m^2, no additional land will be required for proposed expansion. Industry has already developed 3340 $m^2$and will develop remaining greenbelt area of 7679 m^2 To make 33% i.e., 11019 m^2 out of total area of the project. The estimated project cost is Rs. 28.22 Crore including existing investment of Rs. 16.22 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 5.35 Crore and the Recurring cost (operation and maintenance) will be about Rs. 1.09 Crore per annum. Total Employment will be 242 Nos. persons after expansion. Industry proposes to allocate Rs. 12 Lakhs @ 1 % of the project cost towards Corporate Environmental Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Purna River is flowing at a distance of 4.24 km in North direction.

Ambient air quality monitoring was carried out at 8 locations during 1st February 2020 to 15th March 2020 and the baseline data indicates the ranges of concentrations as: PM10 (55.7 to89.0 µg/m^3), PM2.5 (20.0 to 55.0 µg/m^3), SO2 (14.3 to 38.0µg/m^3) and NO2 (17.3 to 52.7µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.67µg/m^3, 4.6 µg/$m^3$and 1.074µg/$m^3$with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 424.9 m^3/day of which fresh water requirement of 220.9 m^3/day will be met from Malkapur M.I.D.C. water supply. Effluent of 69.7 CMD quantity will be treated through ETP, MEE, Stripper & RO; 64 CMD will be reused. The plant will be based on Zero Liquid discharge system.

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

Existing unit has 6 TPH Coal/Agro waste fired boiler&6.0 Lakh Kilo Calorie/Hr Thermic Fluid Heater. Additionally,10 TPH Coal/Agro waste fired boiler & 6.0 Lakh Kilo Calorie/Hr Coal/Agro wastefired&2 Lakh Kilo Calorie/Hr LSHS fired Thermic Fluid Heaters will be installed. Multi cyclone separator& bag filter with a stack of height of 30.5 m will be installed for controlling the particulate emissions within the statutory

limit of 115 mg/Nm3 for the proposed boilers & Stack of 11 m height will be provided along with Bag filter& Oil/air pre heater to maintain emission concentrations within the statutory limit of 150 mg/Nm3 for the proposed thermic fluid heaters.

Gases and vapors from manufacturing process are identified source of emission, which will be passed through2 Nos.of existing scrubbers (HCL/Cl2& Ammonia). Additional 1 No. of scrubber (HBr) will be installed to mitigate the process emissions from expansion activity. The scrubbed gases from manufacturing process will be released through 3 stacks each with a 12 meter height.

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

Details of Hazardous waste:

Type of waste	Category of HW	UOM	Quantity (MT/A)			Mode of Disposal
			Existing	Proposed	Total	
Distillation Residue	20.3	MT/A	6	210	216	CHWTSDF
Chemical Sludge From Waste Water Treatment	35.3	MT/A	6	30	36	CHWTSDF
Evaporation Residue	37.3	MT/A	-	840	840	CHWTSDF
Waste Oil	5.1	MT/A	-	0.24	0.24	Authorised recycler /CHWTSDF
Empty Containers/ Barrels	33.1	MT/A	-	11.52	11.52	Authorised recycler /CHWTSDF
Spent Solvent	20.2	MT/A	-	36	36	CHWTSDF
Contaminated Cotton Rags or Other Cleaning Material	33.2	MT/A	-	0.12	0.12	CHWTSDF

Details of E Waste:

Particulars	E Waste Category	Existing	Proposed Kg/A	Total	Method of Disposal
Personal Computers (Central Processing Unit with input and output devices)	ITEW2	--	40	40	Sale to MPCB authorised recycler / returned to manufacturer / supplier
Personal Computing: Laptop Computers (Central Processing Unit with input and output devices)	ITEW3	--	20	20	
Printers including cartridges	ITEW6	--	20	20	
Telephones	ITEW12	--	10	10	

Details of Battery Waste:

Particulars	Battery waste Category	Existing	Proposed Kg/A	Total	Method of Disposal

Lead batteries from D.G. Sets, UPS system	--	--	30 Nos./A	30 Nos./A	Returned to supplier

Details of Bio Medical Waste:

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

Public hearing is exempted as the project site is located in the notified Industrial area. It is reported that no Litigation is Pending against the proposal.

The details of products and capacity as under:

Sr. No.	Category of products	Existing Quantity (MT/M)	Proposed (MT/M)	Total (MT/M)
1	**Agrochemical Intermediate:** **Existing:** • 2,5 Di Methyl Phenyl Acetyl Chloride, • 2,4 Di Chloro Benzaldehyde, • Ortho Chloro Phenyl Acetic Acid, • 2,4,6 Tri Methyl Phenyl Acetyl Chloride, • Para Chloro Phenyl Acetic Acid, • 2,4 Di Chloro Phenyl Acetic Acid, • Para Chloro Benzyl Cyanide, • 2,4 Di Chloro Phenyl Acetyl Chloride, • Para Chloro Benzo Tri Chloride, • Para Chloro Benzyl Chloride, • Ortho Methyl Benzyl Chloride, • 2,5 Di Methyl Phenyl Acetic Acid, **Proposed:** • Isopropyl (4-Chlorophenyl) acetyl chloride (CPIC), • 1-Napthyl Acetonitrile, • α,α,α',α' Tetra Chloro Ortho Xylene • Para Chloro α-isopropyl Phenyl Acetic Acid (CPIA) • Para Chloro Benzyl Cyanide 75% Solution in N-Butyl Acetate,	35	102	137
2	**Pharmaceutical Intermediates:**	20	60	80

	Existing: • Para Chloro Benzaldehyde, • Meta Chloro Benzyl Chloride; • Meta Chloro Benzyl Cyanide, • Meta Chloro Phenyl Acetic Acid, • Meta Chloro Benzaldehyde, • 2,4 Di Chloro Benzyl Cyanide; • 2,4 Di Chloro Benzyl Chloride, • Ortho Methyl Benzyl Cyanide, • Ortho Methyl Phenyl Acetic Acid, • Ortho Chloro Benzyl Chloride, • Ortho Chloro Benzyl Cyanide, • Ortho Chloro Benzaldehyde, • Methyl 2-Chloro Phenyl Acetate, **Proposed:** • 2-Phenyl Acetyl Chloride, • 2-Bromo Benzyl Cyanide, • 4-Bromo Benzyl Cyanide • 3,4 Di Chloro Benzyl Cyanide • Para Methyl Benzyl Chloride • Para Methyl Benzyl Cyanide • Para Methyl Phenyl Acetic Acid			
3	**<u>Speciality Chemical Intermediate:</u>** **Existing:** • Benzaldehyde 2,4 Di Sulphonic Acid Di Sodium Salt (Powder), • Benzaldehyde 2,4 Di Sulphonic Acid Di Sodium Salt (Liquid), • Benzaldehyde Ortho Sulphonic Acid Sodium Salt **Proposed:** • Ortho Anisoyl Chloride 75% Solution in Ethylene Dichloride, • αα Di Chloro Para Xylene, • Para Hydroxy Benzaldehyde	3	10	13
	Total	**58**	**172**	**230**

The EAC, during deliberations noted that the project proponent has not provided adequate information as desired by the EAC in its earlier meeting. **The Committee is of the opinion that the strict action shall be taken against the Consultant for not providing correct information in the EIA report. The Ministry may take necessary action against the Consultant.**

The EAC, after detailed has asked first comply with the suggestions/observations of its decision in earlier meeting, and for clarification/inputs, in respect of the following:-

(i). Detailed reply on earlier EAC's comments, response and action plan.

(ii). Opinion of the regulatory authority (ICMR, CDSCO, etc.) regarding manufacture of pharmaceutical products and agrochemicals in the same premises shall be submitted within 3 months.

(iii). Detailed layout plan.

(iv). Safety and risk assessment study.

The proposal was **DEFERRED** for the needful.

Agenda No. 21.11

Expansion of Molasses based distillery from 100 KLPD to 130 KLPD by modernization and efficiency improvement within existing plant at Dwarikesh Nagar, Village Bundki, Tehsil Nagina, District Bijnor, UP by M/s DWARIKESH SUGAR INDUSTRIES LIMITED- Consideration of Environment Clearance

[IA/UP/IND2/156430/2020, IA-J-11011/147/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s J M EnviroNet 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 Molasses based distillery from 100 KLPD to 130 KLPD by modernization and efficiency improvement within existing plant at Dwarikesh Nagar, Village Bundki, Tehsil Nagina, District Bijnor, Uttar Pradesh by M/s Dwarikesh Sugar Industries Limited.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry. The proposal has been submitted under para 7 (ii) of the EIA Notification, 2006 requesting exemption from ToR, public hearing and EIA report.

Existing land area is 9.9 Ha (24.5 Acres/99000 m2). The proposed expansion will be done within the existing plant premises so no additional land is required. Industry has already developed greenbelt in an area of 33 % i.e.3.3 ha (8 Acres/33000 m2) of the total area of the project. The estimated project cost is Rs.6 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 0.5 Crores (Modernization) and the Recurring cost (operation and maintenance) will be about Rs. 50 Lakhs per annum. Total Employment will be 200 persons (Permanent 110 & temporary 90) during operation phase after expansion. The company has decided to invest Rs. 12 Lakhs (2% of total project cost i.e. Rs. 6 Crores) towards Corporate Environment Responsibility.

There are no National Parks, wildlife sanctuaries, biosphere reserves, Tiger/ Elephant Reserves, wildlife corridors etc., within 10km distance from the plant site. Pelkhala Nadi is flowing at a distance of 2 km in North direction, Nagina Canal is flowing at a distance of 2.5 km in SE direction, Gangan Nadi is flowing at a distance of 3 km in WNW

direction, Khoh River is flowing at a distance of 7 km in East direction.

Existing fresh water requirement is 740 KLD (717 KLPD for distillery & Co-generation power plant + 23 KLPD for domestic & others). After expansion net fresh water requirement will be same i.e. 740 KLPD (715 KLPD for distillery & co-generation power plant+ 18 KLPD for proposed bottling unit & 7 KLPD for domestic & others). Specific fresh water requirement per KL of alcohol produced will reduce from 7.2 KL/KL to 5.5 KL/KL of alcohol production. Permission for ground water extraction has been obtained from CGWA.

Effluent of 1188 KLD quantity after expansion will be treated through state of art ETP (Anaerobic, aerobic, Filters, UV &RO treatment) of capacity1450 m3/day and recycled within the process. The plant is being/will be based on Zero Liquid discharge system.

Power requirement after expansion will be 3.0 MW which is same as existing and is being/will be met from existing 5.0 MW Co-generation Power Plant& D.G. Sets (for emergency). Existing unit has 2 DG sets of capacity 600 KVA which are used as standby during power failure. Stack (Height –5 m) has been provided as per CPCB norms to the existing DG sets. No additional DG set is proposed.

Existing unit has 40 TPH Concentrated spent wash & bagasse/rice husk/coal fired boiler. No additional boiler will be installed. Bag filter with a stack height of 72 m is already installed for controlling the particulate emissions within the statutory limit for the existing boiler. Bag filter with stack of adequate height (72 m) is already installed with the Incineration boiler to control the particulate and gaseous emissions, as per CPCB guidelines. No new boiler is proposed as the existing will cater to the needs after expansion by modernization also. CO_2 generated during the fermentation process is being/will be recovered by CO_2 scrubbers and may be sold to beverage & packaging industry. Online Stack Monitoring System has been installed as per CPCB guidelines.

Concentrated spent wash (407 TPD) is being/will be burnt in Incineration boiler along with auxiliary fuel. Ash (73 TPD) generated from the boiler is being/will be utilized for soil amendment. Sludge is being/will be dried and given to farmers to be used as soil manure. Used oil generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

The Ministry has issued EC earlier vide letter no. IA-J-11011/256/2015- IA II (I) dated 17th June, 2019 to the existing project in favor of M/s Dwarikesh Sugar Industries Limited. The company regularly submits Half yearly EC Compliance and Self certified Half Yearly Compliance Report for the period (October'19 to March'2020) has been submitted for the existing 100 KLPD molasses based distillery & 5.0 MW co-generation power plant to the Regional Office. The company requested RO, MOEFCC, Lucknow dated 14th February, 2020 and 2nd June, 2020 for the site visit and issuance of Certified compliance report, but due to unavoidable circumstances and COVID-19 pandemic, the authorities are unable to visit the site. The Committee noted that since the instant proposal has submitted under provisions of para 7 (ii) of the EIA Notification, 2006, therefore the Committee deliberated the compliance status of earlier

EC submitted by PP and found in order. There is no litigation pending against the project.

The details of products and capacity as under:

S. No.	Unit	Product	Existing	Proposed	Total
1.	Molasses based distillery	Ethanol/ Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS)/ Absolute Alcohol (AA)	100 KLPD	30 KLPD	130 KLPD
2.	Co-generation power plant	Power	5 MW	0	5 MW
3.	IMFL/CL blending & bottling unit	IMFL/CL bottles	0	3000 cases/day	3000 cases/day

During deliberations in the Committee, in response to Committees observations, the project proponent has also informed, as under:

S. No.	Desired information/documents	Reply
1.	The distillery should be completely based on Zero Effluent Discharge.	The company ensures the distillery is/will be completely based on Zero Effluent Discharge.
2.	Commitment for generation of solar power (maximum 15% of total power consumption).	The company commits to generate 15% solar power of the total power consumption. The same will be executed within the plant premises and other available land.
3.	Water consumption for the distillery to be reduced to 3 kl/kl.	After expansion, the fresh water requirement for 130 KLPD distillery as per 3 KL/KL will be 390 KLPD, for 5.0 MW Co-generation power Plant will be 257 KLPD, for IMFL/CL Bottling Plant will be 20 KLPD, for alcohol based sanitizer for Covid-19 will be 30 KLPD and for domestic usage, greenbelt and others will be 23 KLPD. Thus, total water requirement will be 720 KLPD.
4.	The company should promote rain water harvesting by constructing ponds for the storage of 1 million litres rainwater.	The company assures to construct and maintain rainwater harvesting ponds to harvest 1 million litre (1000 KL) rainwater.
5.	Revised Plant Layout of Molasses based distillery clearly depicting various areas like parking, molasses storage tank,	Revised Plant Layout of molasses-based distillery clearly depicting various areas like parking, molasses storage tank, alcohol storage, main gate etc. is submitted**.** Adjacent own sugar unit and other own utilities are also shown on a layout

	alcohol storage, main gate etc. Adjacent own sugar unit should also be shown on the layout.	and is enclosed. With the expansion additional 15 trucks will be added to the existing traffic scenario and the existing parking facilities are adequate to suffice the requirement.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with PFR report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The Committee has noted that the project shall achieve higher production in the unit with the improved technology. The process improvement in fermentation with better yeast strains and enzymes shall provide higher production. The PP has also agreed for reduction in fresh water requirement to 3KL/KL of alcohol produced. There shall be no additional land, water, storage, new boiler etc. There is no major impact envisaged on the environment due to the modernization of the plant.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the PFR report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the Form 1/PFR report is in compliance of the notification/guidelines/OMs issued by the Ministry for such projects, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The compliance of the existing EC conditions found to be satisfactory.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance as per para 7(ii) of the EIA Notification, 2006 exempting ToR, fresh public hearing and EIA report.

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

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

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). As proposed, total fresh water requirement shall be reduced from 740 cum/day to 720 cum/day, proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time.

(iv). The spent wash/other concentrates shall be incinerated.

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

(vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

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

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

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

Department. Records of tree canopy shall be monitored through remote sensing map.

(xii). As committed Rs. 12 lakhs shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized as proposed. The CER plan shall be completed before commissioning /expansion of the project.

(xiii). The project proponent shall develop solar power facilities (1 MW) and majority of the lighting facility in the unit shall be met from solar.

(xiv). The project proponent shall ensure rain water harvesting system (~1 million litre) in the project area and reduce dependency on ground water.

(xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

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

(xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

Agenda No.21.12

Expansion of Synthetic organic chemicals manufacturing unit by M/s Meghmani Dyes and Intermediates LLP at Plot No. 96,97,98,99,100,102 & 84, Phase-II, GIDC Vatva (Gujarat) - Consideration of Environment Clearance

[IA/GJ/IND2/149585/2008, IA-J-11011/454/2019-IA-II(I)]

The Project Proponent and their accredited Consultant M/s Anand Environmental Consultants Pvt Ltd, gave a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for expansion of Synthetic organic chemicals manufacturing unit from 125 TPM to 1725 TPM by M/s Meghmani Dyes And Intermediates LLP in an area of 16,802 sqm at Plot No. 96,97,98,99,100,102 & 84, Phase-II, GIDC Vatva (Gujarat).

All Synthetic Organic Chemicals Industry **(**Dyes & Dye Intermediates; Bulk Drugs and Intermediates Excluding Drug Formulations; Synthetic Rubbers; Basic Organic Chemicals, Other Synthetic Organic Chemicals and Chemical Intermediates**)** are listed in S.N. 5**(f)** of Schedule of Environment Impact Assessment (EIA) Notification under

category 'B' to be appraised at State level. However, being the project is located inside the critically polluted area, the project appraised at Central level in the Ministry.

Earlier SEIAA had issued EC vide letter No. F.No. SEIAA/GUJ/EC/5(f)/40/2009; dated 9th April, 2009 for additional product in the existing unit in favour of M/s. Meghmani Dyes & Intermediates Ltd. This EC was valid for 5 years from the date of issue but at that time Vatva was a Critically Polluted Area (CPA) and therefore the project could not proceed with production of those products. Subsequently, the validity of EC expired on 8th April 2014.

The Standard ToR has been issued by the Ministry vide letter dated 24th February, 2020. Existing land area is 16,802 sqm. Proposed expansion will be carried out within the existing premises. Green belt will be developed in an area of 40 % i.e. 6,721 sqm out of total area of the project. The total estimated cost of the proposed expansion is Rs.16 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.1.85 crores and the recurring cost (operation & maintenance) will be about Rs. 3.25 crores per annum. Total Employment will be 135 persons as direct as well as other indirect employees after expansion. Industry proposes to allocate Rs 32 Lakh which is 2 % of the project cost towards Corporate Environmental Responsibility (CER).

There are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Ambient air quality monitoring was carried out at 8 locations during April 2019 to June 2019 and the baseline data indicates the ranges of concentrations as: PM10 (49 – 88 µg/m³), PM2.5 (22 – 52 µg/m³), SO_2 (19 - 46 µg/m³) and NO_2 (15 - 44µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.06 µg/m³, 0.95 µg/m³ and 0.95 µg/m³ with respect to PM10, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 505 m³/day (1st day requirement which will be reduced to 166 from 2nd day onwards) of which 2nd day fresh water requirement of 339 m³/day, proposed to be met from GIDC. Domestic waste water (14 m³/day) will be treated in Sewage Treatment Plant while, industrial process wastewater (123 m³/day) will be treated in Effluent Treatment Plant, Industrial utility wastewater (133 m³/day) will be treated in RO System and 20 m³/day process wastewater with 29 m³/day RO Reject will be treated in MEE System. ETP treated water (123 m³/day) will be sent to CETP, Vatva. While other treated wastewater from RO & MEE (48 m³/day+ 104 m³/day) will be reused in washing, cooling, boiler operations and in process. The committee suggested not to send the waste water outside the premises and to achieve the ZLD. In response of the same the project proponent has informed that proposed expansion project will be based on ZLD, however the existing wastewater of quantity 123 cum/day will be send to CETP. The Committee deliberated the issue.

Power requirement after expansion will be 1000 KW proposed to be met from Torrent Power Ltd. Existing unit has DG sets of 1000 kVA capacity which will be used as standby during power failure/ emergency. Stack (height 11 m) will be provided as per

CPCB norms to the proposed D.G. Set. Existing unit has 2 TPH of natural gas fired boiler. Additionally one number of 4 TPH Imported coal/Agro waste fired boilers will be installed with APCM of Cyclone separator & bag filter with a stack height of 40 m will be installed for controlling particulate emissions within the statutory limit for proposed boiler, Two number of Hot Air Generator (20 Lac Kcal) will be installed with APCM of Cyclone separator & bag filter with a stack of height of 40 m will be installed for controlling particulate emissions within the statutory limit and also one number of Hot Air Generator (11 Lac Kcal) will be installed with APCM of Cyclone separator & bag filter with a stack of height of 35 m will be installed for controlling particulate emissions within the statutory limit.

Details of process emissions generation and its management is as under:-

S. N.	Stack attached to	Stack height (m)	Types of Pollutant	Air Pollution Control Measures
	Existing stack attached to			
1.	Spray Dryer (2 Nos.)	22	PM<150 mg/Nm^3	Cyclone Separator followed by Water Scrubber
	Proposed stack attached to			
2.	Spin Flash Dryer (PNG based-In Built HAG)	15	PM<150 mg/Nm^3	Cyclone Separator followed by Bag Filter in closed system
3.	Spin Flash Dryer (PNG based-In Built HAG)	15		Cyclone Separator followed by Bag Filter in closed system
4.	Spray dryer (PNG based-In Built HAG)	21		Cyclone Separator followed by Bag Filter in closed system
5.	Spray dryer (2 Nos.)	25		Cyclone Separator followed by two stage Water Scrubber

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

S. No.	Type of waste	Category	Generation per Month			Mode of Treatment & Disposal
			Existing*	Proposed	Total after Expansion	
1	ETP sludge	Sch-I Cat-35.3	50 MT	90 MT	140 MT	Will be collected, stored, transported and disposed at GPCB approved TSDF site.
2	MEE Salt		---	30 MT	30 MT	
3	Used Oil	5.1 (Sch-I)	0.2 MT	0.3 MT	0.5 MT	Will be collected, stored and

						disposed by selling it to registered recyclers/ refiners.
4	Discarded carboys/ drums/ cylinders	Sch-I Cat-33.1	8,100 Nos.	10,000 Nos.	18,100 Nos.	Will be collected, stored and disposed by selling it to registered vendors.
5	Spent ion exchange Resin	Sch-I Cat-35.2	___	8.4 Kgs	8.4 Kgs	Will be collected, stored, transported and disposed at GPCB approved TSDF site.

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

The Certified compliance report is not applicable as the Environmental Clearance dated 9th April 2009 was not commenced due to moratorium was placed and the EC was expired on 8th April, 2014. The Committee deliberated the issues.

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

S. No.	Name of Product	Quantity of Product (MT/Month)		
		Existing	Proposed	Total/ CAS No.
EXISTING PRODUCT				
1 to 100	• REACTIVE RED 3BX, E4BA, ME6BL - 6BX, BORDEAUX, HE3B, HE7B, ME3GL, BB, M8B - C & B, BX – R, BX- NEW – RB, 23, PB, 5-B-R, P3B – R, 7BX – R, M5B-C5B, H8B, BSX, RR, HE8BA, C2G, 81, DIRECT RED 227(ROSE FR), ACID RED 57, 131, ACID SCARLET 4 BS, • REACTIVE ORANGE 2 RX, 3 R, HER, H2R, M2R, 78, • REACTIVE BROWN GR, MIX, • REACTIVE GREEN B-HE4BD, • REACTIVE MAGENTA HB, MB, • REACTIVE VIOLET 5R, M4R-C4R,	125	--	125

	• REACTIVE TURQ BLUE G, H5G, HA, • REACTIVE BLUE 5 RH-H5R, HER, 3 R, BRF, 4 GX-F2G-RB, HERD, BB, 38-GREEN HE6BL, 199, R, M2R, MR-2B, GG-H H2GL, M4GD, RR, MX7RX, ACID BLUE 45 • REACTIVE NAVY BLUE RGB, HE2R-HR, RX-BFN, RNX-3GX, • REACTIVE PURPLE H3R, • REACTIVE YELLOW 3RX, ME4GL-4GL, H4G, FG, RNL, GR, M4R, HE4G, GL, HE6G, M8G, RJ, RL, GCH, SWT, GN, ACID YELLOW H2, REACTIVE GOLDEN YELLOW HR, HER-HE4R-HEXL, MR, • REACTIVE BLACK B, GR-HFGR, GRD-RD, GF-B-N, RL, GRP, HN, MIX, GL, PL, BB, ACID BLACK 107, 194, 52, DIRECT BLACK B				
	Existing 100 Products Total (A)	**125**	**--**	**125**	
PROPOSED PRODUCT					
1.	**REACTIVE BLACK**	--	500	500	--
	a. REACTIVE BLACK B				17095-24-8
	b. REACTIVE BLACK MIX – WNN/R/G/XLW/DN/GHF/CL5/GR/GF/ MNM/MNG				--
2.	**REACTIVE YELLOW**	--	220	220	--
	a. REACTIVE YELLOW 3RX				80156-97-4
	b. REACTIVE YELLOW 4GL				84000-63-5
	c. REACTIVE YELLOW XL				780759-89-9
	d. REACTIVE YELLOW WNN				607724-40-3
	e. REACTIVE YELLOW MIX – MGB/HB/ULTRA YELLOW MGB/ HW/ S3R				--
3.	**REACTIVE ORANGE**	--	45	45	--
	a. REACTIVE ORANGE H2R				12225-85-3
	b. REACTIVE ORANGE 2RX				79809-27-1
	c. REACTIVE ORANGE 3R (RR)				12225-83-1

	d. REACTIVE ORANGE WNN (XLR)				71902-15-3
	e. REACTIVE ORANGE CD				292827-64-6
	f. REACTIVE ORANGE HER				--
	g. REACTIVE ORANGE MIX				--
4.	**REACTIVE RED**				--
	a. REACTIVE RED CD				12226-12-9
	b. REACTIVE RED 5BX				111211-40-6
	c. REACTIVE RED 3GX				80019-42-7
	d. REACTIVE RED 3BX				93050-79-4
	e. REACTIVE RED CRIMSON HEXL				71002-20-5
	f. REACTIVE RED RUBIN XL	--	150	150	125830-50-4
	g. REACTIVE RED BS				94158-79-9
	h. REACTIVE RED RB				125830-50-4
	i. REACTIVE RED 2GX				93051-42-4
	j. REACTIVE RED CAR				--
	k. REACTIVE RED MIX – XL3B/MGB/MD/MGB/XL/XL4B/K3B S/ RGB				--
5.	**REACTIVE BLUE**				--
	a. REACTIVE NAVY BLUE RGB 100				93951-21-4
	b. REACTIVE NAVY BLUE GG				84229-70-9
	c. REACTIVE BLUE BB				90341-71-2
	d. REACTIVE BLUE 3GX	--	75	75	80315-17-9
	e. REACTIVE BLUE BRX				86024-59-1
	f. REACTIVE BLUE HEGN				--
	g. REACTIVE BLUE MIX – XL/Navy Blue XL/MGB/SG/BLRB/BFN				--
	Total (B)	**--**	**990**	**990**	--
6.	OPTICAL BRIGHTENING AGENT – 2 B	--	10	10	27344-06-5

7.	OPTICAL BRIGHTENING AGENT – BSU	--	30	30	68971-49-3
8.	OPTICAL BRIGHTENING AGENT – DMX	--	250	250	16090-02-1
9.	OPTICAL BRIGHTENING AGENT – BBU	--	35	35	16470-24-9
10.	OPTICAL BRIGHTENING AGENT – BA	--	40	40	4193-55-9
11.	OPTICAL BRIGHTENING AGENT – 4BB	--	225	225	4404-43-7
12.	OPTICAL BRIGHTENING AGENT – DT	--	20	20	27344-41-8
Total (C)		**--**	**610**	**610**	**--**
TOTAL (A + B + C)		**125**	**1600**	**1725**	**--**

The Member Secretary informed to the Committee that project is located inside the critically polluted area and as per provisions of the OM dated 31.10.2019, PP has to implement the various provisions of this instant OM (viz. Zero Liquid Discharge, 40% green belt and Double the CER and other mitigation measures as suggested in the mechanism). However, in this instant proposal present discharge is through CETP.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards.

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

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or

standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii) The existing waste water of 123 cum/day shall be sent to CETP Vatva after conform to the standards prescribed under the Environment (Protection) Rules, 1986, for further treatment. However, the unit shall achieve Zero Liquid Discharge for expansion proposal.

(iii) Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iv) Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v) Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii) Total fresh water requirement shall not exceed 339 cum/day, proposed to be met from GIDC supply. Necessary permission obtained in this regard shall be renewed from time to time. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(ix) Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(x) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

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

(xiii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 40% out of the total project area.

(xv) As proposed 2.5% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.

(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.

(xvii) Briquette shall be used as fuel in the boiler.

Agenda No. 21.13

Synthetic Organic Chemicals manufacturing unit at 2662/61, Village- Bhujela, Tehsil-Pindwara Dist: Sirohi, Rajasthan by M/s R J Industries - Consideration of Environment Clearance

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

The project proponent and the accredited consultant M/s Earthood Services Pvt Ltd has Made a detailed presentation of the project and informed the following:

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

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

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

The Mount Abu Wildlife Sanctuary is located almost 4.4 km in west direction from the project site.

Baseline data was collected from 1st March 2019 to 31st May 2019. AAQM was carried out in 7 locations on 24 hourly average basis as per guidelines of CPCB and NAAQS within 10 km radius of the study area. PM10 and PM2.5 was found in the range of 60 to 68 µg/ m3 and 30 to 36 µg/ m3 respectively. SO2 found in the range of BDL to 31.54 µg/ m3 and NOx: 10 to 22 µg/ m3. VOC and CO were found BDL. The PM10, PM2.5, SO2 &NOx parameters are found within the permissible limit as per NAAQS level. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.8 µg/m3, 3.63 µg/m3 and 23.8 µg/m3 with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total fresh water requirement during the operation phase for the proposed project will be 28.91 (m3/day). Main source of water supply ifs from Bore well and Tanker water supply. The total waste water generation after proposed project from Industrial will be 15.0 m3/day effluent will be treated in ETP. 1 KLD Domestic effluents shall be disposed through septic tank& soak pit. The plant will be based on Zero Liquid discharge system.

Total power requirement of plant is 175 kW met through Jodhpur Vidyut Vitran Nigam Ltd. To meet the power requirement in the event of grid power failure, R.J Industries has proposed DG sets of 125 KVA capacities to meet the power requirement of the plant during power failure. Total steam requirement at full production of R.J. industries will be about 07 MT, which is meet through Coal or agro waste fired boiler. Fuel consumption for this boiler is 1ton/day coal or agro waste. Stack emissions from coal or agro waste fired 0.8 TPH boiler. Stack emissions from DG Sets having capacity 125 KVA. Bag filter are used for stack emission from 0.8 TPH boiler. Encaustic enclosure stack emissions from DG Sets.

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

Public hearing was conducted on 13th March 2020. The major points are raised during Public Consultation area, Job opportunity, arrangement of solar lightings, Industrial training, Strom water management, Impact on Socio Economic development of the area etc.

Details of products are as under:

S. No.	Name of Product/Nature	M.W(g/mol) Nature	CAS No.	Use of Product	Quantity (MT/Month)
1	Metanilic Acid	173.19	121-47-1	Dyestuff & Dyestuff Intermediate	4
2	BDSA (Benzen Di SulPhonic Acid)	344	117-61-3	Dyestuff & Dyestuff Intermediate	5
3	MPDSA (Meta Phenyl Di Amine Sulphonic Acid)	188	88-63-1	Dyestuff Intermediate	10
4	SPVS (Sulphopara Vinyl Sulphon Ester)	361	42986-22-1	Dyestuff Intermediate for Direct Dyes	12

5	PAABSA (Pera Amino Azo Benzene 4 Sulfanic Acid)	277.32	104-23-4	Dyestuff Intermediate	10
Total					**41**

The Committee during deliberations noted that the quality of the EIA report prepared by the consultant and its presentation in the meeting was of very poor quality and not providing any scientific and technical inputs. The Committee after examining financial allocation for various items including for EMP was of the view that the cost is under estimated. The Committee was of the opinion that the project is small and needs to be encouraged considering the national interest. The Committee after detailed deliberations has desired for following additional information/inputs in respect of the following:

(i) Detailed/revised project estimate including for EMP

(ii) Status of NBWL clearance of the project

(iii) Conservation plan for schedule 1 species with budget

(iv) Detailed ZLD plan

(v) Alternate source of water

(vi) Issues raised during public hearing, response and CER plan to address the same.

The proposal was accordingly **DEFERRED** for the needful.

Agenda No.21.14

Expansion of Sugar and Cogeneration power plant by M/s EID Parry (India) Limited at villages Hullatti and Alloli, Taluk Haliyal, District Uttara Kannada (Karnataka) - Consideration of Environmental Clearance

[IA/KA/IND2/155504/2016, IA-J-11011/382/2016-IA-II(I)]

The project proponent and their accredited consultant M/s Pioneer Enviro Laboratories & Consultants Pvt Ltd, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held on 13-15 April, 2020, wherein the EAC, during deliberation observed that proposed project comes under category 'B' of EIA Notification, 2006 (as amended from time to time) and requires appraisal at SEAC/SEIAA and suggested that the proposal may be transfer to SEIAA, Karnataka for further consideration. The Committee, therefore, return the proposal in present form.

Now the project proponent has again submitted the proposal and informed that the proposed activity i.e. Thermal power plant comes under category 'A' i.e. $\geq$ 50 MW (all other fuel except biomass). In this regard the project proponent has also submitted an affidavit. The EAC noted that as earlier EC was granted by the Ministry on 4th February, 2015 for expansion of integrated sugar complex (Sugar, Distillery and Cogeneration power plant). The EAC accordingly, as an integrated complex, decided to consider the project under category 'A' at Central level in the Ministry.

The proposal is for environmental clearance to the project for of sugar manufacturing unit from 6,000 TCD to 11,500 TCD and cogeneration power plant from 37 MW to 57 MW by M/s EID Parry (India) Limited in an area of 226 acres at villages Hullatti and Alloli, Taluk Haliyal, District Uttara Kannada, Karnataka.

All Sugar Industry are listed in S.N. 5**(j)** of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and all Thermal Power Plants ($\geq$ 50 MW based on all other fuel except biomass) are listed in S.N. 1**(d)** of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and requires appraisal/ approval at State level.

The ToR was granted by the Ministry vide letter dated 28th March, 2017. The Ministry had issued EC earlier vide letter No. J-11011/47/2007–IA II (I) dated 18th October, 2007 & J-11011/336/2012-IA II (I) dated 4th February, 2015 to the existing project Sugar – 6000 TCD, Co-generation power – 37 MW & Distillery – 90 KLD in favour of M/s E.I.D. - Parry India Limited.

PP reported that existing land area is 226 acres (9,14,589.16 Sq.m) and no additional land will be required for proposed expansion project. Industry has already developed greenbelt in an area of 37.6% i.e. 3,43,982.8 Sq.m (85 acres). Total greenbelt will be developed in 95 acres (3,84,451.4 sq.m) i.e. 42% of total land. Total cost of the plant after expansion is Rs.413.5 crores. Total cost of existing plant is Rs.263.5 crores. The estimated expansion project cost is Rs.150 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.15 crores (for proposed expansion) and the recurring cost (operation & maintenance) will be about Rs.2 crores per annum. Total Employment will be 441 persons as direct & 300 persons indirect after proposed expansion. Industry proposes to allocate Rs. 1.38 Crores towards Corporate Environment Responsibility (CER). There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger / Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Tattihala River flows at 1.6 Km in west.

Ambient air quality monitoring has been carried out at 8 locations during December, 2017 to February, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (28.8 to 52.6 µg/m3), PM2.5 (18.8 to 31.7 µg/m3), SO2 (8.5 to 14.2 µg/m3) and NOx (10.3 to 19.2 µg/m3), CO (320 to 650 µg/m3). AAQ modelling study for emissions indicates that the maximum incremental GLCs after the proposed project would be 1.6 µg/m3, 9.7 µg/m3 and 13.3 µg/m3, 2.4 µg/m3 with respect to PM10, SOx NOx and CO. The resultant concentrations during operation of the expansion project are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after expansion will be 4686 cum/day and out of which the fresh water requirement will be 3491 cum/day and will be sourced from the Kali River. Water drawl permission obtained for 45.11 MCFT which is adequate after expansion also. Hence no further water drawl permission is required. Effluent of 2,494 KLD quantity will be treated through Sugar plant ETP, Cogeneration ETP and Distillery plant ETP. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 6,000 kVA including existing 5,000 kVA and will be sourced from Captive power plant. Existing unit has DG sets of 1000 kVA & 500 kVA capacity, which are used as standby during power failure. Stack height of 3 m above the building height as per CPCB norms to the proposed DG sets. Existing unit has 120 TPH coal / bagasse fired boiler, 45 TPH bagasse fired boiler & 15 TPH Concentrated spent wash fired boiler. Additionally, 100 TPH bagasse fired boiler will be installed. Electro static precipitator with a stack of height of 70 m will be installed for bringing down the particulate emissions to within the statutory limit of 50 mg/Nm3 for the proposed 100 TPH boiler. There will not be any other process emissions from the Sugar & Co-generation power plant. Bagasse generated from the Sugar plant will be used as raw material in Co-generation power plant, Molasses generated will be used as raw material in Distillery unit, Filter cake generated will be given to framers as manure, ETP sludge generated will be used as manure in our own cane farm, Fly ash generated will be used as manure, Yeast sludge will be mixed with spent wash and incinerated in boiler, ash generated from burning of spent wash will be given group fertilizer unit.

Public Hearing for the expansion project has been conducted by Karnataka Pollution Control Board on 18th December, 2019, which was presided over by the Additional Deputy Commissioner. The main issues raised during the public hearing are related to dust generation due to the plant and priority in harvesting cane of local people.

The certified EC compliance report has been obtained by RO, MOEFCC, Bangalore vide letter no. E.P / 12.1 / 16 / 2014-15 / KAR / 2013 dated 25-01-2017 & EP / 12.1 / 640 / KAR & EP / 12.1 / 2014-15 / 16 / KAR dated 11-03-2020 and date of site visit was 3rd March, 2020. The EAC found the compliance report to be satisfactory. No Litigation is pending against the proposal.

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

S. No	Product	Existing	Proposed	Total
1.	Sugar	6,000 TCD	5,500TCD	11,500 TCD
2.	Co-gen Power plant	34 MW	20 MW	54 MW
3.	Distillery	90 KLPD	--	90 KLPD
4.	Power from incineration boiler	3 MW	--	3 MW

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. The certified compliance report also found to be satisfactory.

Additional information submitted by the project proponent found to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance.

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

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

(i) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

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

(iii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

(iv) Total fresh water requirement shall not exceed 3491 cum/day proposed to be met from Kali River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and shall be renewed from time to time.

(v) As proposed, spent wash shall be incinerated. Fly ash generated from the boiler shall be made as ash granules, to be used/sold as fertilizer.

(vi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

(vii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

(viii) The Project Proponent 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.

(ix) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

(x) As committed, at least 20% of power requirement shall be met from solar power.

(xi) All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.

(xii) The project proponent shall provide employment to the villagers residing in the local area.

(xiii) As proposed Rs. 1.38 Crores shall be allocated for Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for education facilities, skill development of farmers and for issued raised during public consultation/hearing.

(xiv) The project proponent shall ensure rain water harvesting system in the project area and reduce dependency on surface water.

(xv) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

(xvi) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xvii) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

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

(xix) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No.21.15

Setting up Malt based distillery Unit of capacity 30 KLD by M/s Microbrew Bistro Private Limited at Khasra No. 933, 934, 936, 937, 938, 940, village Mahuakheraganj, Tehsil Kashipur, District Udham Singh Nagar, (Uttarakhand) - Reconsideration of Environmental Clearance

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

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

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

S. No.	Query Raised in earlier EAC meeting	Query Reply Given by PP	Observation of EAC

1.	Alternate source of fresh water needs to be submitted and commitment not to use ground water	Application for obtaining assurance of water supply from Jal Sansthan, Uttarakhand has been submitted.	The EAC found the reply submitted by Consultant/PP is not satisfactory and suggested to submit any surface water source and details of how the fresh water will be drawn. Details of pipeline and its costing. Also cost of the pipeline, its impact and mitigation measure and cost of water shall also be included in the project cost.
2.	Revised water balance with details of total water and fresh water requirement and reduction in fresh water demand as per 5 KL/kl of production. Also plan to construct RCC tank to collect rain water from the roof top	As instructed by Hon'ble EAC, fresh water requirement of the project has been reduced from 578 KLD to338 KLD (250 KLD).	The EAC found the reply not satisfactory and suggested to submit revised reply as per the observation of the EAC.
3.	Clarification for high PM 10 values recorded during and plan to control/reduce	The high PM_{10} values was recorded mainly due to road dust, emissions from vehicles, construction activities, burning of fossil fuel, burning of solid waste, Transportation of construction materials such as sand, soil etc. without covering and emissions from brick kilns located around Kashipur. The project proponent has also submitted the management plan to reduce the emission levels.	The EAC found the reply to be satisfactory.
4.	Detailed scheme for treatment spent wash need to be submitted	Spent wash generated in the production will be directed to ETP, RO followed by MEE to	The EAC found the reply not satisfactory and suggested to submit the detailed treatment scheme and details of MEE.

		achieve zero liquid discharge.	
5.	Revised prediction of GLC due to the proposed project.	Revised prediction of GLC due to the proposed project has been done.	The EAC found the reply to be satisfactory.
6.	Commitment not to use composting and submit plan for incineration to achieve ZLD	The project proponent has submitted the commitment for not using composting and submitted plan for incineration to achieve ZLD	The EAC found the reply to be satisfactory.
7.	Commitment to not use coal as fuel in boiler	Commitment not to use composting and not usecoal as fuel in boiler	The EAC found the reply to be satisfactory.

The EAC during deliberation observed that the reply submitted by the project proponent in respect of alternate source of water, revised water balance with the details of MEE and details of treatment of spent wash are not in line with the observation of the EAC. The EAC also observed that the consultant was not fully prepared and was unable to give the reply. **The Committee is of the opinion that the Consultant shall come before the EAC with all preparation so that project is not delayed. The EAC suggested to re-examine/rework and submit the revised reply in respect of the following: -**

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

(ii) Revised water balance with details of total water and fresh water requirement and reduction in fresh water demand as per 5 KL/kl of production. Also plan to construct RCC tank to collect rain water from the roof top

(iii) Complete flowsheet for treatment of waste water and its management needs to be submitted.

(iv) Plan for management of CO2.

(v) Truck parking plan to be submitted.

The proposal is therefore **deferred**.

Amendment in Environment Clearance

Agenda No.21.16

Manufacturing Pesticides Technical, Pesticide Specific Intermediates, Speciality Chemicals by M/s UPL Ltd at Plot No.D-3/6, Dahej- III, GIDC, Village Kadodara, Taluka Vagra, District Bharuch (Gujarat) –Amendment in EC

[IA/GJ/IND2/151637/2020, J-11011/306/2016-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter No J-11011/306/2016-IA-II(I) dated 1st March, 2019 for the project Manufacturing Pesticide Technical, Pesticide Specific Intermediates, Intermediates & Speciality Chemicals and Captive Power Plant Located at Plot No D-3/6, Notified Industrial Estate, GIDC, Dahej , District Bharuch (Gujarat) in Favour of M/s UPL Ltd.

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

<table>
<tr><th>S. No</th><th>Para of EC issued by MoEF&CC</th><th>Details as per EC</th><th>To be Revised / Read as</th><th>Justification (Reasons)</th></tr>
<tr><td>1</td><td>EC Condition No 3 –</td><td>Details of Products in Granted EC are:-

<table>
<tr><th>Product Sr. No (Condition No 3) as per Granted EC</th><th>Product</th><th>Capacity (TPA)</th></tr>
<tr><td colspan="3">EXISTING APPROVED EC DETAILS</td></tr>
<tr><td>23.1</td><td>Sodium Cyanide</td><td>5,000</td></tr>
<tr><td>23.2</td><td>Potassium Cyanide</td><td>500</td></tr>
<tr><td>23.3</td><td>Cyanuric Chlori</td><td>15,000</td></tr>
</table></td><td>Request for Amendment As Follows:-

<table>
<tr><th>Product Sr. No (Condition No 3) as per Granted EC</th><th>Product</th><th>Capacity (TPA)</th></tr>
<tr><td colspan="3">PROPOSED AMENDMENT</td></tr>
<tr><td>23.1</td><td>Sodium Cyanide</td><td rowspan="2">20,500 (Combined Capacity)</td></tr>
<tr><td>23.2</td><td>Potassium Cyanide</td></tr>
</table></td><td>• Due to coronavirus, the demand dynamics has been changed. Hence, we need this minor amendment without increase in pollution load.
• The market scenario in the speciality chemicals segment is dynamic and the market</td></tr>
</table>

		de	23.3 Cyanuric Chloride	situation is keeps on changing • We like To Amend EC Condition No 3 for Sr. No 23.1 To 23.3 Products as a combined capacity To Cater market demand. • We will ensure strict adherence to all EC granted conditions and there is no increase in pollution load. • This flexibility in production of speciality chemicals will enable us to survive in a competitive market & dependency on import of chemicals will be curtailed.
2	*EC Condition No* 10 (XVII)	As Committed, Funds Allocation for the Corporate Environment Responsibility (CER) shall be Rs. 100 Crores i.e. 4.18% of the total project cost. Item-wise details along with time bound action plan shall be prepared and	As Committed, Funds Allocation for the Corporate Environment Responsibility (CER) shall be 0.5% of the total project cost. Item-wise details along with time bound action plan shall be	Presently • The overall business scenario is depressed with recession being

		submitted to Ministry's Regional Office.	prepared and submitted to Ministry's Regional Office.	projected in most business situation. • Demand worldwide is declining and this puts pressure on the viability of the product • Due to decrease in price and highly competitive environment there is pressure on margins • Covid-19 situation has further aggravated the financial viability • Hence the request to kindly consider lower CER.

The EAC during deliberation observed that as per the Ministry's Notification dated 23rd November, 2016**,** any change in product-mix, change in quantities within products or number of products in the same category for which environmental clearance has been granted shall be exempt from the requirement of prior environmental clearance provided that there is no change in the total capacity sanctioned in prior environmental clearance granted earlier under this notification and there is no increase in pollution load. The Committee accepted the request of PP.

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

The Committee after detailed deliberations and justifications submitted by the project proponent has **recommended** the **above mentioned amendments, as below:**

(i) The revised list of products as requested in Table above is amended; and

(ii) Para 10(xvii) of EC w.r.t. shall be read as, "As Committed, Funds Allocation for the Corporate Environment Responsibility (CER) shall be 0.5 % of the total project cost as per Slabs mentioned in the Ministry's OM dated 01.05.2018. Item-wise details along with time bound action plan shall be implemented and submitted to Ministry's Regional Office".

Agenda No.21.17

Expansion of sugar cane crushing capacity (10000 TCD to 20000 TCD), Co-generation Power Plant (44 to 75 MW), Scrapping of 30 KLPD Distillery Unit and Setting up of a new Distillery unit of 155 KLPD in the existing premises at Village Ugar khurd, Taluk Athani, District Belgaum (Karnataka) by M/s The Ugar Sugar Works Ltd - Amendment in EC

[IA/KA/IND2/109487/2019, J-11011/315/2012-IA.II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No J-11011/315/2012-IA-II(I) dated 15th June, 2017 for the project Expansion of sugar cane crushing capacity (10000 TCD to 20000 TCD), Co- generation Power Plant (44 to 75 MW), Scrapping of 30 KLPD Distillery Unit and Setting up of a new Distillery unit of 155 KLPD in the existing premises at Village Ugar khurd, Taluk Athani, District Belgaum, Karnataka in favour of M/s The Ugar Sugar Works Ltd.

The project proponent has now requested for amendment in the EC in respect of spent wash treatment and disposal by allowing for change in the earlier method of concentration followed by incineration ***to*** concentration followed by drying to make spent wash powder.

The Committee, after detailed deliberations and justifications submitted by the project proponent has **recommended** that amendment may be made in the EC

- Para 6 shall be read as:
- .....Spent wash from the proposed distillery will be concentrated in MEE and concentrated spent wash will be dried to make spent wash powder.
- All other terms and conditions shall remain unchanged.

DAY 3: 16th July, 2020 (Thursday)

Consideration of Environmental Clearance

Agenda No. 21.18

Expansion of Existing Technical grade Pesticides Manufacturing Unit at Plot No- C-6, 7 & 8, UPSIDC Industrial area, Phase-II Gajraula, J.P. Nagar (Amroha) UP by M/s BEST CROP SCIENCE LLP- Consideration of Environmental Clearance

[IA/UP/IND2/54796/2016, J-11011/165/2016- IA II(I)]

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

The proposal is for environmental clearance to the project for Expansion of Technical Grade Pesticide Manufacturing Unit at Plot no. C-6,7 & 8, UPSIDC Industrial Area, Phase-2, Gajraula, J P Nagar, Uttar Pradesh by M/s Best Crop Science LLP.

The project proposal was issued Standard Terms of Reference (TOR) by the Ministry vide letter dated 18.03.2019. The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

PP reported that the existing land area is 54,891.39 m^2 and expansion is proposed within the existing land. Industry has already developed greenbelt in an area of 34.97% i.e., 19,200 m^2 out of total area of the project. The estimated project cost of expansion is Rs 100 Crores.

Total capital cost earmarked towards environmental pollution control measures is Rs 4.36 Crores and the Recurring cost (operation and maintenance) will be about Rs 87.23 Lacs per annum. Total Employment will be 255 persons as direct & indirect after expansion. Industry proposes to allocate Rs. 2 Crores towards Corporate Environmental Responsibility.

The Hastinapur Wildlife sanctuary and two reserve forests (at distance 8.30 Km & 8.45 Km) are located within 10 km distance from the project site. Ganga River is flowing at a distance of 8 Km in West 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: PM10 (71-109 µg/m3), PM2.5 (41-59 µg/m3), SO2 (9.8-13.4 µg/m3) and NO2 (23.9-33.2 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 10.9 µg/m^3,1.32 µg/m^3 and 0.761 µg/m^3 with respect to PM10, SOx and NOx. PM10 is higher at two locations out of eight with respect to NAAQS and rest parameter concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total freshwater requirement after expansion will be 300 m^3/day and will be met from ground water (97 m^3/day) and Dairy India Ltd. (203 m^3/day). Effluent of 174 m^3/day

will be treated through MEE, ETP and RO. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 5000 KVA including existing 1000 KVA and will be met from UP Power Corporation Limited State power distribution corporation limited (UPCL). Existing unit has DG sets of 2 x 380 KVA capacity, additionally 500 KVA DG sets will be used as standby during power failure. Stack (height- 25 m) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 3.0 TPH & 0.8 TPH agro-waste briquette fired boiler. Additionally, 2 x 4 TPH agro-waste briquette fired boiler will be installed. Multi cyclone separator with a stack of height of 32 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers.

Details of Process emissions generation and its management is mentioned below

S.NO.	PRODUCT	GAS EMISSION QTY. (KG/TONNE)		MODE OF TREATMENT
HERBICIDE				
1	Diuron	HCl	310	To scrubber
2	Tembotrione	HCl	50	To scrubber
		SO2 GAS	75	To scrubber
3	Pinoxaden	HCl	76	To scrubber
4	Dimethachlor	HCl	286	To scrubber
5	Hexazinone	HCl	144	To scrubber
6	Isoxaben	SO2	214	To scrubber
		HCl	122	To scrubber
INSECTICIDE				
7	Spirotetramat	HCl	200	To scrubber
		SO2	175	To scrubber
8	Spiromesifen	CO2	25	Let into atmosphere
9	Diazinon	HCl	120	To scrubber
10	Transfluthrin	HCl	100	To scrubber
FUNGICIDE				
11	Captan	CHLORINE	25	To scrubber
12	Probenazole	HCl	395	To scrubber
		SO2 GAS	340	To scrubber
13	Fludioxonil	AMMONIA	68	To scrubber
14	Imibenconazole	HCl	110	To scrubber
		CO2 LIBERATED	200	Let into atmosphere
15	Kresoxim Methyl	HCl	125	To scrubber
		SO2 GAS	220	To scrubber
INTERMEDIATE				
16	Cyclopropyl Acetylene	CO2 GAS	761	

Solid hazardous wastes will be sent to TSDF site while other solid wastes will be segregated in salable and non-salable waste. Salable waste will be sold off. Nonsalable

waste will be sent to land fill. Existing waste generation is ~ 9.33 MT/annum. This quantity is likely to increase to ~ 23 MT/annum

Public Hearing is exempted as the project site is located in the notified Industrial area. Certified compliance report was issued by RO, MoEF&CC vide IV/ENV/UP/Ind-148/431/2017/25 dated 15.04.2019. Ministry had issued EC earlier vide letter no. J-11011/165/2016-IA.II(I) dated 30.08.2017 to the existing project "Technical Grade Pesticide Manufacturing unit of capacity 4800 MTPA" in favour of M/s Best Crop Science LLP. The Committee deliberated the compliance report and found adequate. No litigation is pending against the proposal.

The details of products and capacity as under:

Products	**Existing (TPA)**	**Proposed (TPA)**	**After Expansion (TPA)**	**Details of Phase Wise Production (Additional Product- 25000 TPA)**		
				Phase I (TPA)	**Phase II (TPA)**	**Phase III (TPA)**
Herbicide	1100	5700	6800	900	2400	2400
Insecticide	2500	13100	15600	2100	5500	5500
Fungicide	900	4700	5600	700	2000	2000
PGR	100	350	450	50	150	150
R & D	200	950	1150	150	400	400
Intermediate	0	5000	5000	800	2100	2100
Total	**4800**	**25000**	**29800**	**3586**	**10707**	**10707**

The EAC during deliberations noted that the total freshwater requirement for the project is proposed to be met from ground water and from M/s Dairy India Ltd. The Committee is of the view that the project is located in the ground water over exploited area and project proponent shall find out alternate source of water. The Committee has been informed that the project being in over exploited area, as per Hon'ble NGT order, NOC for ground water may not being renewed by the CGWA. The Committee has also noted that the project is located in the CPA. The Committee after detailed deliberations desired for following addition information/inputs in respect of the following:

(i) Details of pollution load due to the project and the action plan for mitigation measures.
(ii) Alternate source of fresh water.
(iii) Details of agreement with M/s Dairy India Ltd for fresh water/treated water procurement. NOC of M/s Dairy India Ltd for ground water extraction.
(iv) Commitment for not using banned products/production of banned pesticides.
(v) Status of NBWL recommendations, if any, for the project. Details of ESZ notified, if any, and undertaking that the project site is not located in the ESZ.
(vi) Conservation plan for schedule I species;
(vii) Complete individual product details under the proposed major category

The proposal was accordingly **DEFERRED** for the needful.

Agenda No.21.19

Expansion of existing unit by addition of synthetic organic chemicals and chemical intermediates by M/s UPL Ltd. located at Plot No. D3/6, Notified Industrial Estate, GIDC Dahej - III, Village Kadodara, Taluka Vagra, District Bharuch, Gujarat - Consideration of Environmental Clearance

[IA/GJ/IND2/58497/2016, J-11011/306/2016- IA II(I)]

The Project Proponent and their accredited Consultant M/s Eco Chem Sales & Services, gave a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for expansion of existing unit by addition of synthetic organic chemicals and chemical intermediates by M/s UPL Ltd. located at Plot No. D3/6, Notified Industrial Estate, GIDC Dahej - III, Village Kadodara, Taluka Vagra, District Bharuch (Gujarat).

The Ministry had issued EC earlier vide letter No. J-11011/306/2016-IA (II); dated 1st March, 2019 to the existing project for manufacturing Pesticides Technical, Pesticide Specific Intermediates, Intermediates & Speciality Chemicals and Captive Thermal Power plant in favour of M/s UPL Limited at Plot No D-3/6, GIDC Industrial Estate, Dahej III, Village Kadodara, Taluka Vagra, District Bharuch (Gujarat)

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' and of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at State level. However, as existing EC was granted by the Ministry for Pesticide technical under item 5(b), the proposal appraised at Central level in the Ministry.

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

S. No.	Products	EC Granted Capacity, (TPA)	Expansions Proposed in Existing EC Granted Products MT/Annum	New Products Proposed in MT/Annum	Total Capacity in MT/Annum
Pesticides (Technical)					
1	S Metolachlor (a mixture of (S)-2-chloro-N-2(Ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) Acetamide and (R)-2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-Methoxy-1-Methylphenyl) Acetamide in the proportion 80 –	5000	0	0	5000

	100 % to 20 – 0 %				
2	Dicamba (3,6-dichloro-2-methoxybenzoic acid)	5000	0	0	5000
3	Propanil (3',4'-dichloroproionanilide)	10000	0	0	10000
4	Clodinafop (R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy] phenoxy] propanic acid	2000	0	0	2000
5	Asulam (methyl[(4-aminophenyl) sylfonyl]carbamate)	4000	0	0	4000
6	Azoxystrobin (methyl (E) -2-[[6-2(cynophenoxy) pyrimidinyl] oxy] –a- (Methoxy methylene) benzeneacetate)	2000	0	0	2000
7	Acephate (N-[methoxy (methylthio) phosphinoyl] acetamide	30000	0	0	30000
8	Pilot Plant /Multi-Purpose Plant (MPP) (As Azoxystrobin)	1000	0	0	1000
	(methyl (E) -2-[[6-2(cynophenoxy) pyrimidinyl] oxy] –a- (Methoxy methylene) benzeneacetate)		0	0	0
9	Atrazine (6-chloro-N-ethyl-N'-1(1-methylethyl)-1,3,5-triazine-2,4-diamine)	5000	0	0	5000
10	Glufosinate (ammonium (+) -2-amino-4- (hydroxyl methyl phosphinyl) butanoate	10000	0	0	10000
11	Sulphur WDG (Wettable Dispersible Granule)(Sulfur)	30000	0	0	30000
Total		**104000**	**0**	**0**	**104000**
Pesticide Specific Intermediates					
12	Dimethyl Phosphoroamidothioate (DMPAT)	30000	**0**	**0**	**30000**
	(O,O-Dimethyl phosphoramidothioate)				
13	**Chloroformates**				
	13.1 Phenyl ChloroFormate Or/ and Chloroformic Acid phenyl Ester	20000 (Either or and Combined Capacity)	**0**	**0**	**20000**
	13.2 Benzophenone (Diphenyl Ketone)				
14	Tri Methyl Phosphite (TMP) /	5000	0	0	5000

	(Trimethoxyphosphine)				
	Tri Ethyl Phosphite (TEP) (Tri Ethoxy Phosphine)				
15	Di Methyl Sulfoxide (Dimethyl Sulfoxide)	10000	0	0	10000
16	Acrolein (2-Propenal)	2000	0	0	2000
Total		**67000**	**0**	**0**	**67000**
CAPTIVE POWER PLANT					
17	Captive Power Plant (3 Nos)	55 MWPH (Phase 1 (20)+ Phase 2 (20) + Phase 3 (15) MWPH)	0	0	55 MWPH (Phase 1 (20)+ Phase 2 (20) + Phase 3 (15) MWPH)
Pesticide Formulations					
18	Liquid Formulations	20000	0	0	20000
19	Solid Formulations	20000	0	0	20000
Total (Products not requiring EC)		**40000**	0	0	**40000**
Intermediate and Speciality Chemicals					
20	Ethylenediamine (EDA) (1,2-Diaminoethane)	30000	0	0	30000
21	Meta Phenoxy Benzaldehyde (MPBAD) (3-phenoxy benzaldehyde)	3000	0	0	3000
22	Methoxy Methyl Acrylate (MAM) (Methyl 3-methoxyacrylate)	1000	0	0	1000
23	Aminoacetonitrile Sulfate (AANS) (Aminoacetonitrile bisulfate)	1000	0	0	1000
24	***Acid Chloride***				
	24.1 Chloroacetyl Chloride (Monochloroacetyl chloride)	3000	0	0	3000
	24.2 Methoxyacetyl Chloride (Methoxyacetyl chloride)	400	0	0	400
	24.3 2-Chloro-3, 3-tri fluoropropen-1,2 dimethylcyclopropane Carbonyl chloride (cyclopropanecarbonyl chloride, 3-[(1z)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-,(1r,3s))	600	0	0	600
	24.4 DV Acid Chloride	1000	0	0	1000
	(3-(2,2-dichlorovinyl)-2,2-		0	0	

		dimethylcyclopropanecarbonyl Chloride)				
25	***CS2 Based Product***					
	25.1	Potassium Ethyl Xanthate (Potassium Ethyl Xanthate)	5000 (Either Or/and Combined Capacity)	0	0	5000
		Sodium Isopropyl Xanthate (Sodium isopropyl xanthate)		0	0	
		Potassium Isopropyl Xanthate (Isopropylxanthic Acid Potassium Salt)		0	0	
		Potassium Amyl Xanthate (Dithiocarbonic Acid)		0	0	
	25.2	Dimethyl Cyanoiminodithiocarbonate (CCITM) (N-Cyano-S,S-dimethyldithioimidocarbonate)	1000	0	0	1000
	25.3	1,6-Bis (N,N-dibenzylthiocarbamyldithio) hexane (N-Cyano-S,S-dimethyldithioimidocarbonate)	2000	0	0	2000
	25.4	1-Methylamino-1-Methylthio-2 Nitroethene (n-methyl-1-(methylthio)-2-nitrovinylamine)	2000	0	0	2000
26	**26.1**	**NaCN (Sodium Cyanide)**	**5000**	**20000**	**0**	**25000**
	26.2	Potassium Cyanide (Potassium Cyanide)	500	0	0	500
	26.3	**Cyanuric Chloride**	**15000**	**25000**	**0**	**40000**
	26.4	DL-Methionine (DL-2-Amino-4-(methylthio)butyric acid)	10000	0	0	10000
27	UPDT (UPL, Drought Technology. (Starch based Super absorbent Polymer)		0	0	50000	50000
28	Glacial Acetic Acid		0	0	30000	30000
29	CCMP (2 Chloro 5 Chloro Methyl Pyridine)		0	0	10000	10000
30	TPPI (Tri Phenyl Phosphite)		0	0	10000	10000
31	DPMP (Diphenyl Methyl Phosphonate)		0	0	12000	12000
32	EDTA (Ethylene Di-Amine Tetra Acetic Acid)		0	0	20000	20000
33	Indigo Blue		0	0	5000	5000

34	HMTBA (Hydroxy MethylthioButanoic Acid)		0	0	50000	50000
35	RP (Red Phosphorus)		0	0	5000	5000
36	MAAN (Methyl Amino Aceto Nitrile)		0	0	2000	2000
37	Sodium Ferrocyanide		0	0	2000	2000
38	Sulpherised Iso Butylene		0	0	5000	5000
39	Thiophene		0	0	1000	1000
40	Cytosine		0	0	5000	5000
41	***NaSH based derivatives***					
	41.1	Cysteamine hydrochloride Or	0	0	40000	40000
	41.2	Na2S (Sodium Sulphide with Na2SO4 Route)	0			
42	Triethyl orthoformate (TEOF)		0	0	5000	5000
43	Trimethyl orthoformate (TMOF)		0	0	5000	5000
44	***CS2 Based Derivative***					
	44.1	Methyl isothiocyanate (MITC)	0	0	5000	5000
45	***Phosgene Derivatives****					
	45.1	Secondary Butyl Chloroformate (SBCF) Or	0	0	6800	6800
	45.2	2-Ethyl Hexyl Chloroformate (EHCF) Or	0			
	45.3	Di-Cyclo Hexyl carbodiimide (DCC)	0			
46	Cyclo Propyl Acetylene (CPA)		0	0	1000	1000
47	ZnDTP (Zinc Di Thio Phosphate)		0	0	12000	12000
48	Glutaraldehyde		0	0	5000	5000
TOTAL			**80500**	**45000**	**286800**	**412300**

*Note: *Phosgene Is in-situ generated and used in captive manufacturing, there is no storage or selling is proposed*.

The details of existing by-products is as under:-

S. No.	By-Products	EC approved Capacity in MTPA	Source	End Use
1	Piperazine (PIP)	9510	Ethylene Di amine (EDA)	Internal/UPL Other units or Sold
2	Diethylenetriamine (DETA) - (95-99%)	3300		Internal/UPL Other units or Sold
3	Amino Ethyl Piperazine (AEP) - (95-99%)	1650		Internal/UPL Other units or Sold

4	Amino Ethyl Ethanol Amine (AEEA) - (95-99%)	990		Internal/UPL Other units or Sold
5	Hydroxy Ethyl Piperazine (HEP) - 98%	660		Internal/UPL Other units or Sold
6	Ammonium Sulphate Solution-10-20%	18435		Internal/UPL Other units or Sold
7	Ammonia Solution – 10%	5980		Internal/UPL Other units or Sold
8	Aluminum Hydroxide	580	Benzophenone	Internal/UPL Other units or Sold
9	Potassium Chloride (25-30%)	1750	Dicamba	Internal/UPL Other units or Sold
10	Methyl acetate - (95-99%)	3810	Azoxistrobin - Pilot Plan	Internal/UPL Other units or Sold
11	Methanol (98-99 %)	1266	Azoxystrobin Azoxystrobin - Pilot Plan	Internal/UPL Other units or Sold
12	Anhydrous Ammonia or	2075	Tri Methyl Phosphite(TMP) / Tri Ethyl Phosphite (TEP)	Internal/UPL Other units or Sold
13	20% aqs. Ammonia	10379		Internal/UPL Other units or Sold
14	Ammonium Chloride soln - 15-20%	43521		Internal/UPL Other units or Sold
15	Calcium chloride solution 30% or	24000		Internal/UPL Other units or Sold
16	Calcium Chloride powder	8000		Internal/UPL Other units or Sold
17	Di Calcium Phosphate (DCP) Sludge	540		Internal/UPL Other units or Sold
18	Aluminum Chloride solution – (20-25%)	8454	Meta Phenoxy Benzaldehyde (MPBAD)	Internal/UPL Other units or Sold
19	Meta Bromo Benzaldehyde - (95-99%)	1290		Internal/UPL Other units or Sold
20	Aqs. Potassium Chloride (20-25%)	7770		Internal/UPL Other units or Sold
21	Dimethoxy methane - (95-99%)	722	Aminoacetonitrile Sulfate (AANS)	Internal/UPL Other units or Sold

22	Ammonium acetate (28-35%)or	70680	Acephate	Internal/UPL Other units or Sold
23	Acetic Acid & Ammonium sulphate - (95-99%)	83400		Internal/UPL Other units or Sold
24	Ammonium sulphate & Sodium Acetate (30%)	106560		Internal/UPL Other units or Sold
25	Hydrochloric Acid sol. (28-32%)	65818	Hexa methylene diisocyanate	Internal/UPL Other units or Sold
26	Methyl Mercaptan	710	1-Methylamino-1-Methylthio-2-Nitroethene	Internal/UPL Other units or Sold
27	Steam	1382400	Power Plant	Internal/UPL Other units or Sold
28	30% Hydrochloric Acid Solution	3156	Chloroacetyl Chloride	Internal/UPL Other units or Sold
29	30% Hydrochloric Acid Solution	440	Methoxyacetyl Chloride	Internal/UPL Other units or Sold
30	30% Hydrochloric Acid Solution	276	2-Chloro-3, 3-tri fluoropropen-1,2 dimethylcyclopropane Carbonyl chloride	Internal/UPL Other units or Sold
31	30% Hydrochloric Acid Solution	527	Acid Chloride Scrubbing of SO_2	Internal/UPL Other units or Sold
32	31% Sodium Sulphite Solution	14378		Internal/UPL Other units or Sold
33	Ethyl Acetate sol. (90-95%)	6000	Glufosinate	Internal/UPL Other units or Sold
34	Ammonia sol.-20%	600		Internal/UPL Other units or Sold
35	Ammonnium Chloride	26560		Internal/UPL Other units or Sold
36	Magnesium Chloride Sol. (25-28%) OR	33160		Internal/UPL Other units or Sold
37	Magnesium chlorate -50%	33160		Internal/UPL Other units or Sold
38	40% Ammonium sulphate	1061	Sodium Cyanide	Internal/UPL Other units or Sold
39	40% Ammonium sulphate	80	Potassium Cyanide	Internal/UPL Other units or Sold
40	40% Ammonium	2415	Cyanuric chloride	Internal/UPL Other

	sulphate			units or Sold
41	30% Hydrochloric Acid solution	29676		Internal/UPL Other units or Sold

The details of proposed by-Product generation from expansion & new products (Intermediate and Speciality Chemicals) is as under:-

S. No.	By-Products	Proposed Capacity, MTPA	Source	End Use
1	30% HCL	12010	TPPI	Internal/UPL Other units or To Sale
		13362	DCC	
	Total	**25372**		
2	Aq. Ammonia	42680	EDTA	Internal/UPL Other units or To Sale
		2730	Indigo Blue	
	Total	**45410**		
3	Ammonium Sulphate	1172	EDTA	Internal/UPL Other units or To Sale
		750	Indigo Blue	
		97750	HMTBA	
		386	TEOF	
		220	TMOF	
		4600	NaCN	
	Total	**104878**		
4	NaCl Soln	3360	EDTA	Internal Use
5	Sodium HydrosulphideNaSH	350	Sul Iso	For Sale
		153600	Cysteamine Hydrochloride	
		350	MITC	
		3600	ZnDTP	
	Total	**157900**		
6	Methanol	1440	Cytosine	Internal/UPL Other units or To Sale
		800	Glutaraldehyde	
	Total	**2240**		
7	Caustic Soda (NaOH)	1795	Cytosine	Internal Use
8	Ammonium Chloride	1816	TEOF	For Sale
		2540	TMOF	
		4930	DCC	
	Total	**9286**		
9	Potassium Chloride	399	TEOF	For Sale

S. No.	By-Products	Proposed Capacity, MTPA	Source	End Use
	(KCl)	276	TMOF	
	Total	**675**		
10	Sulphur	3040	MITC	For Sale
11	30% Sodium Cyanide	7660	NaCN	For Sale / Internal UPL Consumption

The standard ToR for the project was granted on 14th November, 2019. Existing land area is 755495.16m2, no additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 33 % i.e.,263005.16 m2 out of total area of the project. The estimated project cost for expansion is Rs. 1491.85 crores excluding existing ongoing investment of Rs. 2388.19 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 204.50 crores and the recurring cost (operation & maintenance) will be about Rs. 11.88 crores per annum. Total employment will be 600 persons as direct & 900persons indirect after expansion. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Bhukhi River flows at a distance of ~14.0 km in South-East.

Ambient air quality monitoring was carried out at 8 locations during 1st October 2019 to 31stDecember, 2019 and the baseline data indicates the ranges of concentrations as: PM10 (63.2-88.1µg/m3), PM2.5 (33.1 – 47.4µg/m3), SO2 (9.1 – 16.4µg/m3) and NO2 (14.5 –21.4µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 8.04µg/m3, 7.18µg/m3 and 8.99µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 25377 cum/day of which fresh water requirement of 12996 cum/day proposed to be met from GIDC water supply. Effluent of 10044.20 cum/day quantity will be treated through existing ETP followed by RO and MEE. The total effluent of 2891.92 cum/day (2006 m3/day Existing + 885.92 m3/day Additional) will be discharge through GIDC drainage system for deep sea disposal.

Power requirement after expansion will be ~35MW including existing 4MW and will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has 5 DG sets of 4x2000 kVA& 1x50 kVA capacity, additionally 2x1,200 kVA DG sets will be used as standby during power failure. Stack (height30 m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 2 X 130 TPH, 1 X 100 TPH, 2 X 31 TPH, 2 X 20 TPH, 2 X 40 TPH, 10 X 2 TPH capacity natural gas/ coal and FO fired boilers. Additionally,7x40 TPH & 7 x 10 TPH capacity natural gas fired boiler will be installed. Water Scrubber with a stack of

height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the proposed boilers.

Details of Solid waste/ Hazardous waste generation and its management are as follows:

S. No.	Type of Waste	Category (As Per Sch-2016)	Existing (MTPA)	Proposed MTPA	Total After Expansion (MTPA)	Source of Generation	Mode of Storage & treatment	Mode of Disposal
1	ETP sludge/STP Sludge	35.3	5180	2590	7770	From ETP/STP	Store in imperious storage area with roofing near ETP / STP	Sent to common TSDF for landfilling
2	Used Oil	5.1	240	120	360	Machinery	Store in drums in H.W. storage area (with shed and imperious flooring)	Sale to CPCB registered re-processor / recycler
3	Discarded containers / bags / liners	33.1	Containers – 21556 Nos. (425 MT) / Bags – 21366 Nos. (207 MT) / Container Liners – 21566 Nos. (425 MT)	Containers – 20000 Nos. (400 MT) / Bags – 20000 Nos. (200 MT) / Container Liners – 21000 Nos. (400 MT)	Containers- 41556 Nos. (825 MT)/ Bags- 41366 No. (407 MT)/ Container Liners - 42566 Nos. (825 MT)	Raw material 82ontainer / bags	Collection, decontamination and store in imperious storage area with roofing	Recycle/reuse into process or sale to GPCB authorized dealers and scrap processors or contaminated drums to approved decontamination facility

4	Organic Residue	29.1	52062	41213	97518	From process	Store in drums / Tanks in H.W. storage area (with shed and imperious flooring)	Sent to Cement Industry for co processing / CHWIF site for Incineration/ Captive Incineration
5	Aqueous Waste	29.1	4243			From process	Store in drums / Tanks in H.W. storage area (with shed and imperious flooring)	Sent to Cement Industry for co processing / CHWIF site for Incineration / Captive Incineration
6	Inorganic Salts from Evaporation / Process	35.3	127863	117774	245637	From process and MEE	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Send to common TSDF site for landfilling
7	Date – expired and off specification pesticides	29.3	145	0	145	From process	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	CHWIF site for Incineration /Captive Incineration
8	Spent filter Material	36.2	118	134	252	From process	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Sent to CHWIF site for Incineration / Captive Incineration

9	Spent solvent	29.4	6500	8575	15075	From process	Stored in drums / tanks in H.W. storage area (with shed and imperious flooring)	Recovery / sale to GPCB approved recyclers / Send to CHWIF for Incineration / captive incineration
10	Contaminated cotton waste	33.2	29	33	62	From process plant	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Sent to common TSDF site for landfilling / Send to CHWIF site for Incineration /Captive Incineration
11	Insulation Waste	33.1	39	44	83	From Equipment	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Send to common TSDF site for landfilling
12	Non-recyclable Plastic waste	33.1	44	50	94	Raw material 84ontainer / bags	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Send to common TSDF site for landfilling
13	Used PPE	33.1	10	11	21	From process plant	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Send to common TSDF site for landfilling

14	Incineration ash	37.2	4000	0	4000	From incinerator	Packed in HDPE bags and stored in designated place (with shed and imperious flooring)	Send to common TSDF site for landfilling
15	Spent Catalyst	29.5	49	55.8	104.8	From process	Stored in Bags/drums in designated place (with shed and imperious flooring)	Send to CHWIF site for Incineration
16	HCl sol. (28-32%)	29.6	99894	25372	125266	From Process	To be stored in tanks	By selling to actual user.
17	Fe (OH)2 Sludge	35.3	0	157	157	From Process	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Sent to common TSDF site for landfilling
18	Iron Residue	36.1	0	251	251	From Process	Stored in drums / bags in H.W. storage area (with shed and imperious flooring)	Sent to common TSDF site for landfilling

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

The certified EC compliance report has been obtained by RO, MOEFCC, Bhopal vide File No. 5-65/2019(ENV)/312 dated 27th May, 2020 and date of site visit was 9th January, 2020. The Committee deliberated the compliance status of earlier EC conditions and found to be satisfactory. The summary of compliance is as under:

Sr. No.	J-11011/306/2016-IA-II(I); dated 1st March, 2019	Compliance
1.	No of Conditions fully Complied	19
2.	No of Conditions Agreed To Comply	18
3.	No of Conditions Partially Complied	01
4	No of Conditions Noted	01
TOTAL NO OF CONDITIONS		39

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The certified compliance report also found to be satisfactory.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

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

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

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

(i) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii) The treated waste water of 2891.92 cum/day shall be discharge through GIDC drainage system for deep sea disposal after conform to the standards prescribed under the Environment (Protection) Rules, 1986.

(iii) The Sodium Cyanide manufactured by the unit shall not be used as insecticidal purpose nor it shall be used for manufacturing of banned pesticide mentioned in the Notification issued on 18th August, 2018 by the Ministry of Agriculture & Farmers Welfare.

(iv) Total fresh water requirement shall not exceed 12996 cum/day, proposed to be met from GIDC water supply. Necessary permission obtained in this regard shall be renewed from time to time. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(v) As proposed 0.25% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for education including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR. Preference shall be given to local villagers for employment in the unit.

(vi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

(vii) Implementation of outcome of Process safety and risk assessment studies using 3D CFD Consequence Analysis and its mitigating measures shall be implemented accordingly.

(viii) 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.

(ix) Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(x) Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xi) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(xiii) 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.

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

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

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

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

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

Agenda No.21.20

Setting up of Synthetic organic chemical manufacturing unit by M/s Creative Carbon Pvt Ltd at Survey No. 688, 689, 691 & 698, located at Village Kanera, Taluka Kheda, District Kheda (Gujarat)- Consideration of Environment Clearance

[IA/GJ/IND2/108760/2019, IA-J-11011/211/2019-IA-II(I)]

The Project Proponent and their accredited Consultant M/s. Green Circle Inc, gave a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up of Synthetic organic chemical manufacturing unit of capacity 3557 TPM by M/s Creative Carbon Pvt Ltd in an area of 8903 sqm. at Survey No. 688, 689, 691 & 698, Village Kanera, Taluka Kheda, District Kheda (Gujarat).

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

The proposal was earlier considered by the EAC in its meeting held during 13-15 April, 2020, wherein the EAC return the proposal in present form.

The Standard ToR has been issued by the Ministry vide letter dated 1st August, 2019. The land area available for the project is 8903 sqm. Industry will develop greenbelt in an area of 35.96 % i.e., 3202 sqm out of total area of the project. The estimated project cost is Rs. 10 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.38 Lakh and the recurring cost (operation & maintenance) will be about Rs. 26 Lakh per annum. Total Employment will be 60 persons as direct. There are no any National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Goblaj Lake is at a distance of 1.31 km in south.

Ambient air quality monitoring was carried out at 10 locations during March-19 to May-19 and the baseline data indicates the ranges of concentrations as: PM10 (52.41- 85.56 $\mu g/m^3$), PM2.5 (19.37- 34.64 $\mu g/m^3$), SO2 (5.12- 12.68$\mu g/m^3$) and NO2 (8.3-20.1$\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.9 $\mu g/m^3$, 0.2199 µg/m3 and 0.4387 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 27.7 m3/day proposed to be met from Borewell. Effluent of 34.81 KLD quantity will be treated through ETP followed by MEE+ Centrifuge/ATFD. The plant will be based on Zero Liquid discharge system.

Power requirement will be 500 kVA and will be met from Uttar Gujarat Vij Company Ltd. (UGVCL). Unit will have 1 DG sets of 500 kVA capacity, which will be used as standby during power failure. Stack (height 5m) will be provided as per CPCB norms to the proposed DG sets. Unit will have6TPH coal/imported coal/Bio coal/lignite fired boiler and thermic fluid heater (15 lac Kcal) will be installed. Stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

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

Sr. No.	Name of Hazardous Waste	Quantity (MT/Annum)	Method of Disposal
1.	Discarded Containers / Bags / Liners	100	Collection, Storage, Decontamination and reused/ return to supplier / sold to authorized vendors
2.	ETP Sludge/ Evaporation Residue	12	Collection, Storage, Transportation & Dispose to co-processing / at TSDF site.
3.	Used Oil	0.5	Collection, Storage, Decontamination and reused/ return to supplier / sold to authorized recyclers.
4.	Process Residue	2	Collection, Storage, Transportation & Dispose to co-processing / at CHWIF site.

Public hearing for the project has been conducted by the State Pollution Control Board on 10th January, 2020, which was presided over by Additional District Magistrate. The main issues raised during the public hearing are related to employment and development of surrounding Villages. The Committee deliberated the action plan and found adequate. No litigation is pending against the proposal.

The details of products and capacity as under:

Sr. No.	Name of Product	Capacity (MT/Month)
1.	Phenol Formaldehyde Resin	1,872
2.	Melamine Formaldehyde Resin	585
3.	Phenol Urea Formaldehyde Resin	300
4.	Urea Formaldehyde Resin	300
5.	Epoxy Resin	30
6.	Polyester Resin	70
7.	Phenol Formaldehyde Moulding Powder	200
8.	Phenol Formaldehyde Moulded Articles	200
	TOTAL	**3557**
NON-EC PRODUCT		
1.	Laminate Sheet (NEC)	800 (4 lakh nos.)

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his

knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. The Committee noted that the project proponent has obtained necessary permission for industrial usage of the land and found to be satisfactory.

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

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

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

(i) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.

(iii) Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.

(e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(iv) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(v) To control source and the fugitive emissions (at 99.997%), suitable and adequate pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

(vi) Rainwater harvesting system shall be developed in the project area and collected water shall be used in the process/utilities of the unit.

(vii) Total fresh water requirement shall not exceed 27.7 cum/day, proposed to be met from ground water. Necessary permission obtained in this regard shall be renewed from time to time. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(viii) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.

(ix) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leak proof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.

(x) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

(xi) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.

(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) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with

the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 33% out of the total project area.

(xiv) All the Commitments made during public hearing shall be implemented in a timely manner. Preference shall be given to local villagers (70-80%) for employment in the unit

(xv) As proposed 2% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.

(xvi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

(xvii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xviii) Briquette/bio coal shall be used as fuel in the boiler.

(xix) 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.

Agenda No. 21.21

Setting up of Synthetic organic chemicals manufacturing unit by M/s Shree Sulphurics Pvt Ltd at Plot No. 2801/A+B+C/2, GIDC Estate, Ankleshwar, District Bharuch (Gujarat) - Consideration of Environment Clearance

[IA/GJ/IND2/125089/2019, IA-J-11011/340/2019-IA-II(I)]

The Project Proponent and their Consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd (High Court Stay), gave a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up of Synthetic organic chemicals manufacturing unit by M/s Shree Sulphurics Pvt. Ltd., located at Plot No. 2801/A+B+C/2, GIDC Estate, Ankleshwar, District Bharuch (Gujarat).

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

The Standard ToR has been issued by the Ministry vide letter dated 20th December, 2019. The land area available for the project is 23580 sqm. Industry will develop greenbelt in an area of 40% i.e. 9440 sqm out of total area of the project. The estimated project cost is Rs. 34.74 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.9.18 crores and the recurring cost (operation and maintenance) will be about Rs. 0.50 Crores per annum. Total Employment will be 85 persons as direct & indirect for project. There are no any National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 9 locations during March 2019 to May, 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (79.12– 96.12 µg/m3), PM2.5 (44.29–58.1 µg/m3), SO2 (16.92–20.84 µg/m3) and NO2 (17.52–22.90 µg/m3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.02802 µg/m3, 0.14894 µg/m3, and 0.01756 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 933 cum/day of which fresh water requirement of 626 cum/day and will be met from GIDC Water Supply. Total wastewater generation will be 110 cum/day normal effluent, 67 cum/day high TDS effluent & 18 cum/day domestic effluent. 110 cum/day of normal effluent will be treated in proposed primary, secondary & tertiary treatment in ETP followed by RO & MEE. RO permit 77 KL/day will be recycled and reject 33 KL/day will be sent to MEE followed by ATFD. 67 KL/day of High TDS effluent will be treated in stripper & MEE followed by ATFD. Condensate from MEE 50 KL/day will be treated in ETP. MEE salt will be disposed to TSDF site.18 KL/day will be treated in proposed STP of 20 KL/day capacity. The unit will be based on Zero Liquid Discharge.

Power requirement for proposed project will be 3000 KVA and will be met from DGVCL. 2 Nos. DG set of 750 KVA capacity shall be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets of 750 KVA which will be used as standby during power failure. Unit shall have 2 Nos. of 8 TPH capacity Boilers with fuel cons. Natural Gas: 900 SCM/hr, 1 Nos. of 4 Lakh Kcal/Hr capacity Thermic Fluid Heater with fuel cons. Oil: 60 L/hr, 2 Nos. of 750 KVA capacity D.G Set with fuel cons. Diesel: 250 L/hr. Adequate Stack height will be provided. Stack with 15 m height will be provided for boiler and Thermic Fluid Heater & stack with 11 m height will be provided to DG set for controlling the Particulate emissions (within statutory limit of 150 mg/Nm3) respectively.

Details of Process emissions generation and its management.

1) Flue Gas Stack

Sr. No.	Stack attached to	Type of fuel	Fuel Cons.	Stack Ht., m	APCM	Emission Parameter	Unit	Permissible limit
1	Steam Boiler, 8 TPH x 2	Natural Gas	900 SCM/hr	15	Stack with adequate ht.	Particulate Matter	mg/NM3	150
						SO2	ppm	100
						NO_x	ppm	50
2	Thermic fluid heater, 4 lac Kcal/hr	Oil	60 L/hr	15	Stack with adequate ht.	Particulate Matter	mg/NM3	150
						SO2	ppm	100
						NO_x	ppm	50
3	DG set, 750 KVA x 2	Diesel	250 L/hr	11	Stack with adequate ht.	Particulate Matter	mg/NM3	150
						SO2	ppm	100
						NO_x	ppm	50

2) Process Stack

Sr. No.	Stack attached to	Stack ht., m	Air Pollution Control Measure	Parameters	Permissible limit	unit	Remarks
1	Vent of HCl & SO2 gas scrubbing system of Acid chloride reactor	15	Water scrubber followed by acid scrubber	HCl	20	mg/NM3	Common stack
				SO2	40	mg/NM3	
2	Vent of SO2 liquifaction system & tanks		Three stage Alkali scrubber	SO2	40	mg/NM3	
3	Vent of HCl storage tank, Spent acid storage tank & SBS solution tank		Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	
				SO2	40	mg/NM3	
4	Vent of TC storage tank & TC day tank		Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	
				SO2	40	mg/NM3	
5	Vent of all Reactor vent, product tank, crude tank,		Water followed by Two stage alkali	HCl	20	mg/NM3	
				SO2	40	mg/NM3	

	fraction tank, holding tank & Residue tank		scrubber				
6	Vent of safety valve/Rupture disk on reactors (Emergency vent)		Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	
				SO2	40	mg/NM3	
7	Vents of RM storage tanks of Acid chloride plant		Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	
				SO2	40	mg/NM3	
8	Vents of Finished product storage tank of Acid chloride plant		Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	
				SO2	40	mg/NM3	
9	Vent of BSCl reactor	15	Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	
10	Vents of CSA storage tank & CSA day tank		Water followed by Two stage alkali scrubber	HCl	20	mg/NM3	Common stack
11	Vent of SMBS reactor	15	Three stage Alkali scrubber	SO2	40	mg/NM3	
12	Vent of SBS Dryer		Water followed by Two stage alkali scrubber	PM	150	mg/NM3	Common stack
13	Vent of Liquid SO2 plant	15	Three stage Alkali scrubber	SO2	40	mg/NM3	

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

Sr. No.	Particulars	Unit	Category	Quantity per year	Hazardous waste disposal/Management
1	Sulphur sludge	MT/year	17.1	7.00	Collection, Storage, Transportation, disposal at TSDF- BEIL

2	ETP Sludge	MT/year	34.3	160.00	Collection, Storage, Transportation, disposal at TSDF- BEIL
3	Used oil	MT/year	5.1	0.42	Collection, Storage, Transportation sell to registered refiner
4	Spent carbon	MT/year	18.2	9.00	Collection, Storage, Transportation disposal by incineration at CHWIF,BEIL
5	Discarded containers Bags/liners	MT/year	33.3	7.50	Collection, Storage, Transportation decontamination & sell to registered recycler
6	Evaporated salt	MT/year	26.2	1870.00	Collection, Storage, Transportation, disposal at TSDF- BEIL
7	Insulation waste	MT/year		1.60	Collection, Storage, Transportation, disposal at TSDF- BEIL
8	Distillation residue	MT/year	36.4	1000.00	Collection, Storage, Transportation disposal by incineration at CHWIF,BEIL
9	Spent HCl (30%)	MT/year		23400	Sell to actual end user having authorization under Rule 9
10	Spent acid (sulphuric acid)	MT/year		6790	Sell to actual end user having authorization under Rule 9
11	Liquid SO2	MT/year		9450	Sell to actual end user having authorization under Rule 9 or Captive consumption
12	Sodium Bisulphite (20%) solution	MT/year		950	Sell to actual end user having authorization under Rule 9 or Captive consumption

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

The details of products and capacity as under:

S. No.	Name of Products	Production Capacity		Remarks	CAS No.	End use
		MT/month	MT/year			
1	Pivaloyl Chloride	1250	15000	Either of the product shall be manufacture	3282-30-2	Intermediate in agricultural products manufacturing

2	2-Ethylhexanoyl Chloride			d and production shall not be exceed 1250 MT/month or 15000 MT/year	760-67-8	Intermediate in agricultural products manufacturing
3	Isononanoyl Chloride				36727-29-4	Production of organic peroxides, pharmaceuticals, pesticides, Dyes, Textile auxiliaries, emulsifiers
4	Neodecanoyl Chloride				40292-82-8	Active intermediate in organic peroxide initiators.
5	N-Octyl chloride				111-85-3	Manufacturing of organometallic compound synthesis and other chemicals
6	Isobutyryl Chloride				79-30-1	Intermediate in API manufacturing
7	Valeroyl Chloride				638-29-9	Used in organic chemical synthesis
8	n-Octanoyl Chloride				111-64-8	Used as therapeutic agent
9	2-Methoxy Benzoyl Chloride				21615-34-9	Used in preparation of Friedel Crafts reaction
10	3-Methoxy Benzoyl Chloride				1711-05-3	Used in synthesis of pharmaceuticals derivatives
11	4-Methoxy Benzoyl Chloride				100-07-2	Intermediates of liquid crystals
12	Isophthaloyl Chloride				99-63-8	Used as stabilizer in polymer manufacturing
13	Terphthaloyl				100-20-9	Used as

	Chloride					stabilizer in polymer manufacturing
14	Methoxy Acetyl Chloride				38870-89-2	Used for preparation of esters and amides
15	Cyclopropane Carbonoyl Chloride				4023-34-1	Intermediate in pharmaceuticals and agrochemical products manufacturing
16	Benzoyl Chloride				98-88-4	Used as a reagent in production of Dyes, Resins, Perfumes and pharmaceuticals
17	Lauroyl Chloride				112-16-3	Used as personal care chemical products and surfactants
18	3,5-Dimethyl Benzoyl Chloride				6613-44-1	Used as additives in binary solvents
19	P-Toluyol Chloride				874-60-2	Used in preparation of antigen
20	Decanoyl Chloride				112-13-0	Production of organic peroxides, pharmaceuticals, pesticides, Dyes
21	Stearoyl Chloride				112-76-5	Production of fine chemicals, Agrochemicals and pharmaceuticals, Intermediate for Dyes & Textile auxiliaries
22	Neoheptanoyl Chloride				84788-19-2	Used as intermediate to

						prepare Carboxylic acids derivatives, anhydrides, esters and amides.
23	Pentanoyl Chloride				638-29-9	Used in organic chemical synthesis
24	4-Chloro butyryl Chloride				4635-59-0	Used as intermediate in API manufacturing
25	Myristoyl Chloride				112-64-1	Used in synthesis of semi crystalline ether-slide derivatives
Acid chloride		**1250**	**15000**			
26	Benzene Sulphonyl Chloride	300	3600		98-09-9	Used to prepare sulphonamides and sulfonate esters
27	Di Phenyl Sulfone	230	2760		127-63-9	Used as high temperature solvent to dissolve rigid polymers
28	Sodium Meta Bi Sulphite	900	10800		7681-57-4	Used as bleaching agent in pulp and textile industries and reducing agent in pharmaceuticals
29	Sodium Sulphite	150	1800		7757-83-7	Used in pulp and paper industry and water treatment
30	Liquid SO_2	1000	12000		7446-09-05	Used as bleaching agent, fuming agent, making

						of sulphuric acid
	Total Production	**3830.00**	**45,960**			

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The certified compliance report also found to be satisfactory.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

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

The Committee also deliberated the compliances of the Ministry's OM dated 31.10.2019 (Critically Polluted Areas) and accordingly stipulated the conditions. The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to submission of action plan to control the particulate matter and to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

(i) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.

(iii) Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iv) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(v) Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(vi) Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(viii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix) Total fresh water requirement shall not exceed 626 cum/day, proposed to be met from GIDC water supply. Necessary permission obtained in this regard shall be renewed from time to time. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(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. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

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

(xiv) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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) As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 40% out of the total project area.

(xvi) As proposed 2% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including education/skill development/solar lights, etc., and shall be completed within 5 years. The amount proposed in CER shall be spent during execution of the project and shall not be linked with the CSR.

(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.

(xviii) The Project Proponent agreed to install Solar Power Unit of 20% of the connected Power / Electricity Load.

Agenda No.21.22

Setting up of Dyes and Dyes Intermediates manufacturing unit by M/s Shree Mahakali Dyes and Chemicals at Plot No. C1/413, 412, GIDC Estate, Ankleshwar, District Bharuch (Gujarat) - Consideration of Environment Clearance

[IA/GJ/IND2/139258/2018,

The Project Proponent and their Consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd (High Court Stay), gave a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for setting up of Dyes and Dyes Intermediates manufacturing unit of capacity 270 TPM in existing inorganic chemical manufacturing unit (1125 TPM) by M/s Shree Mahakali Dyes and Chemicals in an area of 1407.9 sqm at Plot No. C1/413, 412, GIDC Estate, Ankleshwar, District Bharuch (Gujarat).

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

The ToR has been issued by Ministry vide letter No. SEIAA/GUJ/TOR/5(f)/553/2018; dated 31st May, 2018. The land area available for the project is 1407.9 sqm. Industry will develop greenbelt in an area of 40% i.e. 564 sqm out of total area of the project. The estimated project cost is Rs. 2.98 Crores including existing investment of Rs. 0.98 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 0.78 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.79 Crores per annum. Total Employment will be 30 persons as direct & indirect for project. There are no any National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 9 locations during March, 2019 to May, 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (79.12 – 96.12 µg/m3), PM2.5 (44.29 – 58.10 µg/m3), SO2 (16.92 – 20.84 µg/m3) and NOx (17.52 – 22.90 µg/m3) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.015 µg/m3, 0.028 µg/m3, and 0.010 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 41.0 m3/day of which fresh water requirement of 25.5 m3/day will be met from GIDC Water Supply Authority. Total wastewater generation will be 19.0 KL/day (Industrial: 17.0 KL/day + Domestic: 2.0 KL/day). 17 KL/Day Industrial effluents after primary treatment will be treated in in-house stripper, MEE,

ATFD and 15.5 KL/Day MEE Condensate will be re-used within premises for Boiler & Cooling purpose. Power requirement for proposed project will be 120 KVA and will be met from DGVCL. 1 No. DG set of 1250 KVA capacity shall be used as standby during power failure. Stack (height 9 m) will be provided as per CPCB norms to the proposed DG set of 125 KVA which will be used as standby during power failure. Existing unit has 0.1 TPH Wood fired boiler but unit will use Natural gas as fuel in proposed expansion scenario. Additionally, 0.6 TPH Natural Gas fired boiler and 1.5 TPH Natural Gas fired boiler will be installed. Adequate Stack Height with a stack of height of 11 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm3) respectively.

Details of Process emissions generation and its management.
Flue Gas Stack

Sr. No.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
Existing						
1	Baby boiler (100 kg/hour)	9.0	Wood	800 kgs/ day	PM SO2 NOX	Adequate Stack Height
Total Proposed						
1	Baby boiler (100 kg/hour)	9.0	Natural Gas	200 SM3/day	PM SO2 NOX	Adequate Stack Height
2	Steam boiler (600 kg/hour)	11.0	Natural Gas	300 SM3/day	PM SO2 NOX	Adequate Stack Height
3	Steam boiler (1500 kg/hour)	11.0	Natural Gas	500 SM3/day	PM SO2 NOX	Adequate Stack Height
4	D.G. Set (125 KVA)	9	Diesel	12L/ hr.	PM SO2 NOX	Adequate Stack Height

Details of Solid waste/ Hazardous waste generation and its management: 6 Categories of Hazardous/Solid Wastes shall be generated from this Unit. ETP Sludge @ 120 MT/Annum, Inorganic Process Waste @ 600 MT/Annum and MEE Salt @ 165 MT/Annum will be Collected, Stored, Transported and Disposal at nearest common TSDF site. Used Oil/ Spent Oil @ 0.6 MT/Annum will be Collected, Stored, Transported & sell to authorized reprocessors. Discarded Containers/ Bags/ Liners @ 290.4 MT/Annum will be Collected, Stored, Decontaminated & Sell to authorized vendor.

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

The details of products and capacity as under:-

S. no.	Name of the Products	CAS no. / CI no.	Quantity MT/Month			End-use of the products
			Existing	Proposed	Total	
1	Rubber Product	--	125	-125	0	--
2	Ammonium Sulphate	7783-20-2	1000	0	1000	Dyes Industries
3	Potassium Sulphate	7778-80-5				Dyes Industries
4	Sodium Nitrate	7631-99-4				Dyes Industries
5	Potassium Chloride	7447-40-7				Dyes Industries
6	2,4 Dinitro Aniline	97-02-9	--	50	50	Pigment orange -5
7	2-Ethyl Pyridone	28141-13-1	--	15	15	Yellow-4G
8	Butyl Pyridone	39108-47-9				Yellow-11G
9	Methyl Pyridone	--				Yellow-114
10	N-Cyanoethyl Aniline	1075-76-9	--	50	50	N-cyano ethyl N- acetoxy ethyl aniline
11	Salicylic Acid	69-72-7	--	5	5	Brown MR
12	M-1 (N,N –Di[2-Hydroxyethyl]-M-Chloro Aniline)	92-00-2	--	50	50	Brown-4
13	M-2 (N,N-Di[2-Hydroxyethyl]M-Toludine)	91-99-6				Red-17
14	M-3 (N,N-Di Hydroxy ethyl Meta Amino Acetanllide (52.79%))	--				N,N Diacetoxy ethyl Meta Amino Acetanilide
15	M – 3 A (N,N Di 2-Acetoxy Ethyl Meta Amino Acetanilide)	27059-08-1				Red-167
16	M-4 (N,N-Di Hydroxy Ethyl Aniline)	120-07-0				Paint & wax stripper
17	M-5 (3, N, N-Di Acetoxy Ethyl Amono 4-Methoxy Acetanilide)	23128-51-0				Blue-79
18	M-5A (3 N,N-Di Hydroxy Ethyl Amino	24530-67-4				3,NNDiacetoxy ethyl Amino

	4- Methoxy Acetanilide)					4-Methoxy Acetanilide
19	M-6 (3,N[2-Cyanoethyl]-N-[2-Acetoxyethyl]-Amino-4- Methoxy Acetanilide)	--				Navy Blue
20	M-7A (N-Cyano – Ethyl N-Hydroxy Ethyl Aniline)	92-64-8				N-cyano ethyl N- acetoxy ethyl aniline
21	M-8 (N-Ethyl N-Cyanoethyl Aniline)	148-87-8				Orange-28
22	M-10 (3,N,N-Diethyl Amino 4-Methoxy Acetanilide)	19433-93-3				Blue-291
23	M-14 (N- [2 Acetoxyethyl] -N-[2-Cyanoethyl]-M-Amino Acetanilide)	--				Red-202
24	M-15 (N-Ethyl – N – [2-Hydroxyethyl] Aniline)	92-50-2				Red-15 Red- 1
25	M-22 (N, N- BIS Cyanoethyl Aniline)	1555-66-4				Orange -44
26	M-23 (N – Ethyl - N – Cyanoethyl Meta Toluidine)	148-69-6				Yellow-163
27	M-23A (N,N – Di – [2- Cyanoethyl]-M-Touidine)	--				N,N Di Cyano Ethyl Meta Toludine
28	M-24 (3,N,N-Diallyl-Amino – 4 – Methoxy-Acetanilide)	51868-45-2				Blue – 291
29	M-38 (N-Cyano Ethyl N-Benzyl Aniline)	--				Orange -288
30	M-38A (N – Cyano Ethyl M- Toluidine)	27618-25-3				N-Cyano Ethyl N-benzyl Aniline
31	M-2A (N,N Di Acetoxyethyl Meta Toludine)	21615-36-1				N,N Diacetoxy Ethyl Meta Toludine
32	CEEMA (N Cyano Ethyl Meta Amino Acetanilide)	21678-63-7				N-cyano Ethyl N-Acetoxy Ethyl Meta Amino Acetanilide
33	DILUTING AGENT	--	--	100	100	Oil field

	007 (Carboxy methylation of Guar Gum) (AMCOL 100)					drilling
Total			**1125**	**(270-125) = 145**	**1270**	

Existing unit is inorganic chemical manufacturing unit and for the same, prior EC is not required, so certification of monitoring report of EC report is not applicable. No Litigation Pending against the proposal.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The certified compliance report also found to be satisfactory.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

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

The Committee also deliberated the compliances of the Ministry's OM dated 31.10.2019 (Critically Polluted Areas) and accordingly stipulated the conditions. The

EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to submission of action plan to control the particulate matter and to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). Total fresh water requirement shall not exceed 25.5 cum/day, proposed to be met from GIDC water supply. Necessary permission obtained in this regard shall be renewed from time to time. The fresh water demand shall be reduced by 10% using rain water harvesting system.

(ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(x). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

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

(xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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). As proposed green belt of at least 10-20 m width shall be developed mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. As committed by the project proponent, the greenbelt area shall be developed and maintained in an area of 40% out of the total project area.

(xv). As committed 4% of the total project cost shall be allocated towards Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues. The CER plan shall be completed before commissioning /expansion of the project. Preference shall be given to local villagers for employment in the unit.

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

(xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No.21.23

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

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

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up of Pesticides and Synthetic organic chemical manufacturing unit by M/s Jeevan Chemicals Pvt Ltd in an area of 19,453.58 sqm at Plot No. D-2/CH-51, GIDC Dahej – II, Village Dahej, Taluka Vagra, District Bharuch (Gujarat).

The details of products and capacity as under:

S. No.	Name of Products	Quantity (TPA)
	PESTICIDE PRODUCTS	
1	Metribuzin	50
2	Tebuconazole	50
3	Paclobutrazole	50
4	Hexaconazole	50
5	Pendimethalin	50
6	Propiconazole	50
7	Sodium-N-Methyl-N-Oleyl-Taurate	50
8	Diafenoconazole	50
9	Diafenthiuron	50
10	4-Hydroxyacetophenone & 2-Hydroxyacetophenone	50
11	[4- Amino-6-Tert-Butyl-3-Mercapto-1, 2, 4-Triazin-5(4H)]-One Triazinone	50
	SYNTHETIC ORGANIC PRODUCTS	
12	2-Ethyl Hexyl Glyceryl Ether	150
13	1,2-Hexanediol	400
14	1,2-Octanediol	150
15	1,2-Dodecanediol	50
16	1,2-Decanediol	50
	INTERMEDIATES FOR PESTICIDE AND SYNTHETIC ORGANIC CHEMICALS	
17	2-Cyanophenol	50
18	4-Cyanophenol	50
19	Phenyl Glycidyl Ether	50
20	O-Cresyl Glycidyl Ether	50

21	Butyl Glycidyl Ether	50
22	Poly Glycerol Glycidyl Ether	50
23	Poly Glycol Ethylene (PGE) Di Glycidyl Ether	50
24	Iso Propyl Alcohol (IPA) Glycidyl Glycidyl Ether	50
25	Tetra Methyl Bis Phenol F (TMBP F)	50
26	Tetra Methyl Bis Phenol A (TMBP A)	50
27	Tetra Methyl Bis Phenol (TMBP)	50
28	2,4- Dihydroxybenzophenone	50
29	Benzophenone-3	50
30	Benzophenone-4	50
31	Allyl Glycidyl Ether	50
32	Bisphenol-F	50
33	Bisphenol-S	50
34	1,2-Pentanediol & 1,5-Pentanediol	50
35	Propiophenone & Diethyl Ketone	50
36	Pinacolone	50
	TOTAL	**2350**

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

The standard terms of references (TORs) for the Project was granted by the Ministry on 20th September, 2019.

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

(i) Effluent treatment mechanism with plan for Zero Liquid Discharge.
(ii) Revised water balance with details of total water and fresh water requirement and details of water recycling and reuse.
(iii) Plan for storage of rain water.

The EAC therefore **deferred** the proposal.

Reconsideration of Environment Clearance.

Agenda No.21.24

Expansion of Fertilizer manufacturing unit by M/s Paradeep Phosphate Limited at PPL Township, District Jagatsinghpur (Orissa) - Consideration of Environmental Clearance

[IA/OR/IND2/77891/2018, J-11011/370/2009-IA-II(I)]

The project proponent and their accredited consultant M/s EQMS India Pvt Ltd. made a detailed presentation on the salient features of the project though Video Conferencing (VC).

The proposal is for environmental clearance to the project for expansion of Fertilizer manufacturing unit by M/s Paradeep Phosphate Limited in an area of 92,36,545 sqm at PPL Township, District Jagatsinghpur (Orissa).

The proposal was earlier considered by the EAC in its meeting held during 26-28 February, 2019. The additional information desired by the Committee and response from the project proponent is as under:

S. No.	Query Raised	Query Reply Given by PP
1.	*Considering air quality of the region, comments of SPCB to allow the proposed expansion of fertilizer plant.*	SPCB Comments to allow the proposed expansion of fertilizer plant has been received vide letter no. 2783/IND-II-NOC-MISC-182 Dated 11.03.2020. Letter states "Paradeep area is coming under Severely Polluted Area (SPA). The MoEF&CC Vide O.M No. F.No. 22-23/2018-IA.III(Pt) dtd. 31st October 2019 has formulated a mechanism for environmental management of critically and severely polluted areas and consideration of activities/projects in such area as per the order passed by the Hon'ble NGT in O.A No 1038/2018. In view of the above the MoEF&CC, Govt. of India may consider for grant of Environmental Clearance to expansion proposal of M/s. Paradeep Phosphate Ltd., Paradeep based on the above air quality of the area as well as mechanism formulated for Severely Polluted Area (SPA). The Committee deliberated the issues.
2.	*Additional one month baseline data for the air quality.*	Additional one-month ambient air quality baseline data was carried out for month of March 2019 by Sun Consultancy and Services an NABL Approved lab. The Committee deliberated the issues.
3.	*Complete details of different existing and the proposed products.*	Complete list of existing and proposed products with total Quantity has been submitted. The Committee deliberated the issues.
4.	*Compliance status of the conditions in the EC dated 5th October, 2010 forwarded by the concerned Regional*	The Certified compliance report has already submitted. The Compliance of the action taken on the observation report of 13.11.2017 were submitted on the 11.12.2017. The Committee deliberated the issues.

	Office of the Ministry.	
5.	*Revised water balance plan with reduction in fresh water requirement by 20%, and the detailed effluent management plan to achieve ZLD*	As per revised water balance plan the fresh water requirement for the proposed Expansion proposal shall be 843 m3/hr (21% less than the original proposed) instead of originally proposed 1063.97 m3/hr. The project proponent has submitted the ZLD plan. The committee suggested to reduce the fresh water requirement upto 500 cum/hr for the proposed expansion. The PP was agreed with the same. The Committee deliberated the issues.
6.	*Emission management plan and details of pollution control measures to achieve 99.9% emissions control*	To reduce the emission concentration from the proposed project, the project proponent has submitted the *emission management plan and details of pollution control measures*
7.	*Safety and risk assessment with advanced models*	Safety and Risk assessment with advance model has been initiated**.** We hereby agree to follow the recommendation that will be given from the assessment.
8.	*Details of Corporate Environment Responsibility during last 5 years and the proposal to cater to the proposed expansion*	The CER amount of Rs.27.65 crores allocated by the project proponent to be carried out in period of 7 years. Accordingly the project proponent has revised the CER amount to be carried out in 5 years as under:- • Development of Fishery industries. • Development /advancement of primary school in the area. • Development of medical healthcare facility in the area. • Supporting local business/ farmers in the area. • Renewable energy and plantation in the area.

The project/activity is covered under category A of item 5(a) 'Chemical Fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.

The details of products and capacity as under:

S.No.	**Products Details**	**Quantity in MMTPA**			
		Existing Quantity	**Expansion Quantity**	**Proposed Quantity**	**Total Quantity**
1.	Sulphuric acid	1.452	-	-	1.452

2.	Phosphoric acid	0.462	-	-	0.462
3.	Di-Ammonium Phosphates	1.5	0.4 (capacity expansion of existing 4 DAP plants)	-	1.9
4.	Coal Hand. Plant	-	-	7	7
5.	Ammonia	-	-	2.178	2.178
6.	Urea		-	1.3	1.3
7.	Ammonium Nitrate	-	-	0.35	0.35 MMTPA
8.	Nitric Acid	-	-	0.33 (0.05 MMTPA Conc. Nit. Acid)	0.33 (0.05 MMTPA Conc. Nit. Acid)
9.	Granulated Single Super Phosphates (GSSP)	-	-	0.5	0.5
10.	Aluminium Fluoride	-	-	9500	9500

The standard ToR for the project was granted on 1st June, 2018. Public hearing for the project was conducted by the State Pollution Control Board on 19th May 2017. The Public hearing was chaired by the Additional District Magistrate. The main issues raised during the public hearing are related to pollution from the proposed plant and employment to local people.

The existing land area is 2282.4 acres, no additional land is required for the proposed project. Industry has developed greenbelt in an area of 854 acres covering 37% of total project area. The estimated project cost is Rs 9459 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 473 crores and the recurring cost (operation and maintenance) will be about Rs 100 crores per annum. Total employment opportunity will be for 1017 persons directly and 50 persons indirectly after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Mahanadi river is flowing at a distance of 5.02 km in North East.

Ambient air quality monitoring was carried out at 8 locations during March to May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (54-105 µg/m3), PM2.5 (22-49 µg/m3), SO2 (4.8-20.2 µg/m3) and NO2 (9.5-38 µg/m3). Additional One month Monitoring was carried out in March 2019 and the baseline data indicates the range of concentration as PM10 (68-94 µg/m3), PM2.5 (32-52 µg/m3), SO2 (9.4-21.6 µg/m3) and NO2 (20.8-44 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed

project would be 21.7 µg/m3,8.67µg/m3 , 4.002 µg/m3 , and 3.30 µg/m3 with respect to PM10, PM2.5, SOx and NOx. The resultant concentration exceeds the PM10 limit of the National Ambient Air Quality Standards (NAAQS). Rest are within the NAAQS.

Total water requirement is 2355.6 m3/hr of which freshwater requirement of 1619 m3/hr (existing-776 cum/hr proposed-843 cum/hr) will be met from Taladanda canal. The project proponent has submitted the ZLD plan. The committee suggested to reduce the fresh water requirement upto 500 cum/hr for the proposed expansion. The PP was agreed with the same. Accordingly, fresh water requirement will be 1276 cum/hr (existing-776 cum/hr proposed 500 cum/hr). Effluent of 736.6 m^3/hr (industrial) and 230 m3/hr (domestic) will be treated through ETP and STP. The plant will be based on Zero Liquid discharge system. Power requirement after expansion will be 273 MW including existing 34 MW and will be met from inhouse Captive Power Plant. Existing unit has one DG sets of 5 MVA and two number of 1 MVA DG Sets. DG sets will be used as standby during power failure. Stack is provided as per CPCB norms.

No boiler is proposed in the project. Details of Process emissions generation and its management is mentioned below:-

S.No.	Plant	Pollution Control equipment	Purpose
1	Di-Ammonium Phosphate	Cyclones, Pre-Scrubber, RG (Fumes) Scrubber, upgraded Mist Eliminators, Ventury scrubbers, upgraded fumes scrubber & fan, Upgraded Tail Gas Scrubber, Upgraded Dryer and Dust Scrubber, Upgraded Cooler Gas Scrubber, Upgraded Pre-Neutralizer. Online Ammonia Analyzers.	To control dust emission & gaseous emission.
2	Coal handling	Dry fog / ADS (Agglomerative dust suppression) & Bag filter systems	To control dust emission
3 /4	Ammonia / Urea	Dry gas seal for compressors	To prevent dust & Process gas emission
		Modified prill bucket.	Improving dust emission
		Urea hydrolyser stripper	To Recover ammonia and reusing in Urea plant
		MP condensate stripper	To recover ammonia and reusing the condensate in Cooling Tower as makeup
5	Ammonium Nitrate	Scrubbers (Vapor & Drying)	To control dust & gaseous emission

6	Nitric acid	Additional tail gas treatment system, Tail gas ammonia mixer and tail gas reactor	To control gaseous (NOx) emission
7	Granulated Single Super Phosphates (GSSP)	Venturi scrubbing followed by efficient wet scrubbing, Granulator scrubber , Bag filter, fluorine scrubber	To control fumes and gaseous emission
8	Aluminum Fluoride	Cyclones, Scrubbers.	To control fumes , Dust and gaseous emission

Details of Solid waste/ Hazardous waste generation and its management is as mentioned below

S. No.	Waste Description, Waste Stream, Waste Category and Schedule.	Source of Generation and Quantity	Method of Handling including Disposal
01	Spent Catalyst (Process Based)	Converters of SAP Quantity of Generation: It varies from year to year depending upon activity of the catalyst.	**Collection:** During annual shutdown deactivated catalyst is segregated. This deactivated catalyst is called Spent Catalyst. It is collected in plastic bags. **Storage:** Spent Catalyst so collected is taken to a designated Storage Site located at the ETP using tractor trolley. Storage areas well covered and protected from rain water. **Disposal:** PPL have located a party who has obtained authorization from its state Environment Conservation Board for collection, storage, treatment, transport and disposal of vanadium pentoxide spent catalyst. PPL have written to OSPCB for NOC for sale of spent catalyst to this party.
02	Sulphur Muck (Concentration Based)	Sulphur Filter cake at SAP	**Collection:** Filter cake is collected on the concrete flooring the SAP. **Storage:** The material is shifted to RMS (Raw Material Silo) of DAP Plant by using pay loaders. **Disposal:** The total quantity of Sulphur muck generated is used in house as filler in DAP production.
03	Acid Residue During Cleaning of Acid Storage Tanks	H_2SO_4&H_3PO_4 Storage Tanks at off sites	**a. Sludge from H_2SO_4 Storage Tank at offsite**:Storage Tank of H_2SO_4 is made up of carbon steel. The threshold concentration of sulphuric acid for possibilities of corrosion and generation of

	(Process Based)		sludge is 88% or below. PPL maintains the concentration >98% as a process requirement. Sludge generation due to lime treatment fromH2SO4 Storage Tank during cleaning is used in DAP. **b. Sludge from H_3PO_4 Storage** Tank at offsite. **Collection:** Phosphoric acid is stored in MSRL tanks at offsite. The fine particles of gypsum present in acid settles in the tank bottom. When the level of bottom sludge increases to a considerable height it is cleaned. The clear acid form top is pumped out. Next the sludge is collected in a sump by a slurry pump. From the sump it is pumped to Gypsum Slurry Tank in PAP. **Disposal:** The sludge along with gypsum slurry is pumped from the Gypsum Slurry Tank to the Gypsum Pond. **Note: 1.** Residues are generated only during tank cleaning. **2.** We have not yet discarded any of the storage tanks.
04	Discarded Containers/ Liners used for Hazardous Waste/ Chemicals	Discarded Container	**Collection:** It is collected at individual plant. **Storage:** Presently all empty barrels are shifted to a designated storage room near Labour Canteen by tractor trolley. **Disposal:** Mostly these are used for storing spent oils and disposed off to authorized re-processor along with spent oil.
05	Sludge from Wet Scrubber (Phos Acid Process Based),	Scrubber Settling Pit of PAP	**Collection& Storage:** In PAP the Fume Scrubber is used for scrubbing fumes coming from various sections of the plant. Scrubbing is done using the Gypsum Pond Recirculation water. Sludge from the scrubber accumulates in a sump. **Disposal:** Sludge from this sump is taken to the Reclaim Pit from where it is flushed to the Gypsum Pond along with the Gypsum Slurry for disposal.
06	Drain & ETP Sludge Generated from sump,	Effluent Drains, Sump and ETP	**Collection:** It is collected manually, kept aside along the drain/ ETP Sludge Drying Bed. Once dried the material is shifted to RMS (Raw Material Storage) by tractor trolley. **Storage:** It is stored in the RMS. **Disposal:** It is used as filler in DAP Plant.

07	Cooling Tower Sludge (Concentration Based)	Cooling Tower Sump of PAP	**Collection:** Sludge of cooling tower sump of PAP is gypsum in slurry form. The sludge removal is done after dewatering the cooling tower pit. Then the material is shifted to Reclaim Pit. **Disposal:** From Reclaim Pit it is flushed to gypsum pond along with gypsum slurry.
08	Spent Resin from DM Plant (Process Based)	DMPlant of CPP	**Collection:**Spent resin in DM plant is generated only at the time of replacement with fresh resin. The spent resin is collected manually in barrels. **Storage:**Around 400 Ltrs are kept inside the DM plant. **Disposal:** The material is not yet disposed off outside the premises or sold to any external agency. It is kept in a safe condition at the above-mentioned area.
09	Used Oil or Spent Oil (Process Based),	SAP, PAP, DAP, CPP & Off sites	**Collection:** It is collected at individual plant in barrels. **Storage:** Used oil is stored in barrels. Temporary storage is at the generating plants from where it is shifted to the designated storage room near canteen by tractor trolley from time to time. **Disposal:** Disposed off to authorized reprocessor.
10	Waste containing Oil (Process Based),	Mechanical Workshop and other departments such as CPP FO area, 5 MW DG room, Bagging Plant, DAP plant, Diesel store, SAP, PAP Mechanical Maintenance & Offsite FO Handling areas	**Collection:** It is collected in containers separately for oily sand/soil and oily cotton waste. **Storage:** Temporary storage is at the generating plants which are shifted to DAP plant by tractor trolley from time to time. **Disposal:** Oily sand/soil is used as filler in the plant. Whereas oily waste cotton is used as fuel in the DAP furnace.
11	Phospho gypsum (Both processes based, and concentration	Phosphoric Acid Plant	**Collection:** It is generated in PAP Reactor and separated in the filters. The filter cake is then collected by scroll drives and made slurry by adding return gypsum pond water. **Storage:** The gypsum slurry is pumped to

	based),		gypsum pond where the gypsum settles down and supernatant liquid decanted into the perimeter ditch. **Disposal:** Water from the perimeter ditch is re-circulated to PAP. From gypsum pond ordered quantity of phosphor gypsum is lifted and transported to Railway Siding by using excavator and dumpers. From Railway siding the said material is dispatched to the user agencies both by rail and road bulk and in bags. PPL is constructing a 0.7 Km. long covered shed for handling gypsum at the railway siding.

The Certified compliance report was issued by RO, MoEF&CC vide 101-626/EPE dated 13th November, 2017. The Compliance of the action taken on non/partial complied points were submitted to the Ministry's Regional office at Bhubaneswar on the 11th December, 2017. The EAC found the same to be satisfactory.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

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

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(iv). Total fresh water requirement shall not exceed 1276 cum/hr, proposed to be met from Taladanda canal. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(v). Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

(vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(ix). The Project Proponent 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.

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

(xi). As committed Rs.50 crore shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.

(xii). 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.

(xiii). The project proponent shall implement site specific conservation plan and wildlife management plan for the presence of Schedule-1 species in the study area. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.

(xiv). The Project Proponent has agreed to install 1MW Solar Power Unit.

Amendment in Environment Clearance

Agenda No. 21.25

Expansion of Sugar, Distillery and cogeneration power plant at Tal: Walwe, Dist: Sangli Maharashtra by M/s PADMABUSHAN KRANTIVEER DR NAGNATH ANNA NAYAKAWADI HUTATMA KISAN AHIR SAHAKARI SAKHAR KARKHANA LTD - Amendment in EC

[IA/MH/IND2/131553/2019, J-11011/197/2013-IA]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 27.11.2019 to the Integrated Project of Sugar Expansion (5000 To 7500 TCD), Ethanol Plant Expansion (30 To 100 KLPD) with Incineration Boiler/TG/ Auxiliaries for ZLD& Cogeneration Power Plant (44 MW) at Nagnathannanagar, Tal. Walwe, Dist. Sangli, Maharashtra in favour of M/s Padmabhushan Krantiveer Dr. Nagnathanna Nayakawadi Hutatma Kisan Ahir SSKL.

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

Para of EC issued by MoEF&CC	Details as per EC	To be revised/ read as	Justification/reason

Para 9(e)	Coal Shall not be used as boiler fuel	To use Low Sulphur (0.5 %) Coal as boiler fuel	• The Brix level goes down due to scaling in the MEE (Multiple Effect Evaporator) after few days of operation. Quality of concentrated spent wash after Multi Effect Evaporator varies from 45 to 60 % Brix, which does not meet the minimum NCV required for boiler operation. The NCV required for sustainable combustion in boiler is 7 MJ/kg. • In rainy season, moisture content in the agro based fuel, like bagasse will increase & self sustained combustion won't be established due to further reduction in minimum NCV required(7 MJ/kg),resulting in lesser availability of Spent wash fired boiler.. • Hence, small percentage of additional Fuel with high calorific value will be needed so as to achieve effective 7MJ/kg for stable combustion. Therefore, to meet the fuel requirement for sustainable uninterrupted combustion, Low Sulphur(0.5 %) Coal should be allowed to be used as support fuel • Seasonal biomass availability will also be the big question mark for use as a fuel. Bagasse availability with own sugar factory will not suffices requirement of boiler (Sugar 220 TPH and Incineration boiler 40 TPH).

The EAC during deliberations noted that as per the information provided by the project proponent there is shortage of bagasse availability and during rainy season moisture content in the fuel will be more, which reduce the combustion. The Committee after detailed deliberations has **recommended** for utilization of 50% coal and 50 % biomass as fuel in the unit, with all other terms and conditions remain unchanged. Accordingly, it is **RECOMMENDED** for amendment in the EC dated 27th November, 2019 as under:

Para 9(e): Coal (with sulphur <0.5%) and biomass shall be used as fuel (50:50) in the boiler.

Agenda 21.26

Setting up 2G Ethanol Bio-refinery Plant of capacity 100 KLPD located at Village Nasibpura, Tehsil Talwandi Sabo, Bathinda (Punjab) in favour of M/s Hindustan Petroleum Corporation Limited- Amendment in EC

[IA/PB/IND2/154665/2020; J-11011/221/2017-IA 11(1)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 14th August, 2018 to the project for Setting up 2G Ethanol Bio-refinery Plant of capacity 100 KLPD at Village Nasibpura, Tehsil Talwandi Sabo, Bathinda (Punjab) in favour of M/s Hindustan Petroleum Corporation Limited.

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

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	specific condition of EC point No.2	2G Ethanol Bio-refinery plant of capacity 100 KLPD in total area of 15.1 Ha.	The area of Bio-refinery is changed from 15.1 Ha to 20.9 Ha	The previous technology failed to meet the performance guarantees for water, power, consumables and ethanol yield. Further the technology had many gaps in BEDP and proprietary equipment hence, HPCL has to adopt new technology which is well proven at demonstration scale plant. All the changes are attributable to change in technology. The additional land of 5.8 Ha is under possession of HPCL since March'19 and was originally to be utilized for biomass storage.

<table>
<tr>
<td>2.</td>
<td>specific condition of EC point No.3</td>
<td>Details of by-products:
<table>
<tr><td>CO2 (raw)</td><td>80 TPD</td></tr>
<tr><td>Methanol</td><td>0.03 KLPD</td></tr>
<tr><td>Technical Alcohol</td><td>N/A</td></tr>
<tr><td>FO</td><td>0.3 KLPD</td></tr>
<tr><td>Ash</td><td>60 TPD</td></tr>
</table>
</td>
<td>Details of By-Product
<table>
<tr><td>CO2 (raw)</td><td>75-76 TPD</td></tr>
<tr><td>Methanol</td><td>N/A</td></tr>
<tr><td>Technical Alcohol</td><td>2 KLPD</td></tr>
<tr><td>FO</td><td>0.3 KLPD</td></tr>
<tr><td>Ash</td><td>115-125 TPD</td></tr>
</table>
</td>
<td>The change is due to change in technology for 100 KLPD bio-refinery to produce ethanol from Biomass. Extra Water at 225-250 M3/day and power as 550-600 KW/Hr will be required for the same as utility.</td>
</tr>
<tr>
<td>3.</td>
<td>specific condition of EC point No.4</td>
<td>• Greenbelt will be developed in 4.98 ha.
• Total Estimated cost is 850 Crores.
• Environmental pollution control measures will be Rs. 13.5 Crores.
• The recurring cost (O&M) will be about Rs. 123 Crores per annum.</td>
<td>• Greenbelt will be developed in 6.88 ha.
• Total Estimated cost is 1096.25 Crores.
• Environmental pollution control measures will be Rs. 38 Crores.
• The recurring cost (O&M) will be about Rs. 240.09 Crores per annum.</td>
<td>The previous technology failed to meet the performance guarantees for water, power, consumables and ethanol yield. Further the technology had many gaps in BEDP and proprietary equipment hence, HPCL has to adopt new technology which is well proven at demonstration scale plant.
Green belt is increased to meet condition of 33%. Capital cost and O&M cost has increased due to change in equipment and technology.</td>
</tr>
</table>

4.	specific condition of EC point No.6	• Fresh water requirement 1800 Cum/day. • Power requirement 10.5 MW • 2 X 500 KVA DG sets • Two rice straw/Cotton stalk fired boiler of 35 TPH	• Fresh water requirement 2280 Cum/day. • Power requirement 11.5 MW • 2 X 2000 KVA DG sets • Two rice straw/Cotton stalk fired boiler of 42 TPH	The previous technology failed to meet the performance guarantees for water, power, consumables and ethanol yield. Further the technology had many gaps in BEDP and proprietary equipment hence, HPCL has to adopt new technology which is well proven at demonstration scale plant. Changes are due to change in technology.

<table>
<tr>
<td>5.</td>
<td>specific condition of EC point No.7</td>
<td>Hazardous waste
<table><tr><td>Used Lubricants</td><td>0.5 MTM</td></tr><tr><td>Used Containers (Metal & Plastic)</td><td>1200 (Nos.)</td></tr><tr><td>HDPE/LDTE/ Gunny bags</td><td>800 (Nos.)</td></tr></table>Non Hazardous waste
<table><tr><td>Mud</td><td>8 TPD</td></tr><tr><td>Ash</td><td>79.2 TPD</td></tr><tr><td>Dewatered sludge</td><td>N/A</td></tr></table>Solid and Harzardous waste generated as:Used Lubricants 0.5 MTM , Used Container(Metal and Plastic) 1200, HDPE/LDTE/Gunny Bags 800
Non-Hazardous Waste Generated as: Mud 8 TPD, Ash 79.2 TPD</td>
<td>Hazardous waste
<table><tr><td>Used Lubricants</td><td>0.5-0.7 MTM</td></tr><tr><td>Used Containers (Metal & Plastic)</td><td>1300 (Nos.)</td></tr><tr><td>HDPE/LDTE/Gunny bags</td><td>1700 (Nos.)</td></tr></table>Non Hazardous waste
<table><tr><td>Mud</td><td>8-10 TPD</td></tr><tr><td>Ash</td><td>115-125 TPD</td></tr><tr><td>Dewatered sludge</td><td>8-9 TPD</td></tr></table>Solid and Harzardous waste generated as:Used Lubricants 0.5-0.7 MTM , Used Container(Metal and Plastic) 1300, HDPE/LDTE/Gunny Bags 1700
Non-Hazardous Waste Generated as: Mud 8-10 TPD, Ash 115-125 TPD and De-watered sludge 8-9 TPD</td>
<td>HPCL has to adopt new technology which is well proven at demonstration scale plant due failure of previous technology.
All the changes are attributable to change in technology.
8-9 TPD Sludge is nothing but microorganisms based biological sludge. The sludge is generated from different biological processes carried out to treat Process Condensate coming from Evaporation Section of 2G Ethanol Plant. The collected sludge is subjected to dewatering action in solid/liquid separation unit to increase the suspended solid concentration. This sludge is then sent to farms as manure.
Ash generated (115-125 TPD) Ash from the boiler is collected and conveyed into silo for the storage. This ash will be transported to Cement or Brick Manufacturing Unit by means of closed trucks.</td>
</tr>
</table>

6.	specific condition of EC point No.11 (f)	Total fresh water requirement shall not exceed 1800 Cum/day.	Total fresh water requirement shall not exceed 2280 Cum/day.	The previous technology failed to meet the performance guarantees for water, power, consumables and ethanol yield. Further the technology had many gaps in BEDP and proprietary equipment hence, HPCL has to adopt new technology which is well proven at demonstration scale plant. The change is attributable to change in technology

The EAC during deliberations noted that the amendment in EC is necessitated due to changes in technology adopted by the project proponent for the bio-refinery project to produce ethanol from Biomass.

The Member Secretary informed the Committee that the project proponent has informed that the existing technology has failed to meet their requirement and due to changes in the technology there are various changes proposed in the unit, viz. land area, fresh water requirement, power, project cost etc.

The Committee took serious note on the techno-economic viability of the project, and also huge requirement of fresh water and additional land. However, considering adverse impact of burning of paddy/rice straw (stubble burning) in the country and particularly in the NCR, significantly contributing to air pollution especially during winters, the Committee agreed to consider the proposal.

The EAC after detailed deliberations, considering the importance of the project, improvement in technology and R&D in the area, has of the view that such projects require encouragement and has accordingly **recommended** for amendment in EC as proposed by the project proponent.

Agenda No. 21.27: Any other items with the permission of the Chairman.

SPECIAL AGENDA ITEM: OPTIMIZATION OF EC CONDITIONS AS RECOMENDED BY THE EAC (INDUSTRY-2) IN ITS SPECIAL MEETING HELD ON 02.07.2020

The Member Secretary informed that the issues related to standardization/streamlining of EC conditions was deliberated in the Ministry and it has been decided that the EAC may deliberate the Standard and Specific EC conditions for all categories of the projects, for the Industry-2 Sector, as per schedule of the EIA Notification, 2006. The EC conditions shall be specific and monitorable in nature in time bound manner.

2. In this regard a meeting was held in the Ministry on May 19, 2020. The meeting was attended by the Chairmen & Member Secretaries of all the EAC constituted for various sector projects.

3. Dr J P Gupta, Chairman EAC (Industry 2) and Dr R B Lal, Member Secretary have attended the meeting and accordingly the matter was deliberated in the EAC held during June 15-17, 2020. The Committee deliberated the issues related to standardization of monitorable EC conditions and it was decided that a Zero Draft has to be prepared by the Member Secretary and circulate to the EAC for the comments and suggestions.

4. Further, a meeting was convened in the Ministry with Member Secretaries of all sectors and higher officials of the Ministry on 26th June, 2020. It was deliberated that the EC conditions shall be monitorable in nature to mitigate the impacts and further standardized/streamlined to ensure better environmental safeguards and compliance. The EC conditions shall be implemented in time bound manner. It was suggested that in-order to avoid duplicity and complexity of conditions, only such conditions shall be stipulated which are directly linked to the project and monitoring, and not covered under any other acts/rules/standards/guidelines etc..

5. In view of the above deliberations in the Ministry the EAC has deliberated the EC conditions, in its meeting held on June 15-17, 2020 and further Chairman has called a special meeting of the EAC (Industry-2) which was convened on 2nd July, 2020 for deliberations on standardization/streamlining of EC conditions.

6. The Committee has deliberated the following category of the project as per Schedule of the Notification, 2006 related to chemical sector projects, as below:

Sl. No.	Project / Activity listed in the Schedule of EIA Notification	
1.	4(d)	Chor – alkali Industry
2.	4(e)	Soda-ash industry
3.	5(a)	Chemical fertilizers
4.	5(b)	Pesticides industry and pesticide specific intermediates
5.	5(d)	Manmade fibre manufacturing
6.	5(f)	Synthetic organic chemicals industry
7.	5(g)	Distilleries
8.	5(h)	Integrated paint industries
9.	5(j)	Sugar industries

7. The Committee in its meeting held on 2nd July, 2020, after detailed deliberations **recommended** for following conditions, on a case to case basis, for consideration during appraisal and grant of environmental clearance, in addition to the project specific conditions required to be stipulated during the project appraisal by the Committee:

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

8. The Committee, in its meeting held on 2nd July, 2020, after detailed deliberations **recommended** that there may be three types of conditions, as summarized below:

A. Project Specific Condition: This type of conditions may be deliberated during the EAC based on the project type and its nature to safeguard of the Environment;

B. Process Category Specific Conditions: Theses conditions are deliberated by the EAC and recommended for inclusion in the recommendations **[Attached herewith categories wise].**

C. Generic Standard Conditions: It should be generic in nature **[Annexure]**

<u>Process Category Specific Conditions</u>

01. Chor – alkali Industry & Soda-ash industry

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(iv). Total fresh water requirement shall not exceed ------- cum/day, proposed to be met from surface water/ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.

(v). 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.

(vi). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(ix). 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.

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

(xi). To prevent air quality from deterioration fly ash shall be stored separately as per CPCB guidelines. Direct exposure of workers to fly ash & dust should be avoided.

(xii). The Project Proponent 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 nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xiv). As committed Rs. _____ shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.

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

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

02. <u>Chemical fertilizers</u>

(xv). 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.

(xvi). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xviii). Total fresh water requirement shall not exceed ------- cum/day, proposed to be met from surface water/ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.

(xix). 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.

(xx). Natural gas shall be used as fuel in all the boilers.

(xxi). 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.

(xxii). 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.

(xxiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xxiv). The Project Proponent 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.

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

(xxvi). As committed Rs. _____ shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.

(xxvii). 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.

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

03. Pesticides industry and pesticide specific intermediates

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(vii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

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

(ix). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.

(x). Total fresh water requirement shall not exceed ------- cum/day to be met from surface water/ground water. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA.

(xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of 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 nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xiv). As committed Rs. _____ shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project

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

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

04. Manmade fibre manufacturing

(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 99.997% with effective chillers/modern technology.

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). Total fresh water requirement shall not exceed ------- cum/day to be met from surface water/ground water. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA.

(v). 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.

(vi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(vii). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

(x). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

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

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

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

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

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

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

(xvi). As committed Rs. _____ shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.

(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.

05. <u>Synthetic organic chemicals industry</u>

(xviii). 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.

(xix). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(xx). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(xxi). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(xxii). 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.

(xxiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xxiv). 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.

(xxv). Total fresh water requirement shall not exceed ----- cum/day, proposed to be met from ----- surface water/ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.

(xviii). 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.

(xxvi). 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.

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

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

(xxix). 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.

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

(xxxi). As committed Rs. _____ shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.

(xxxii). Preference shall be given to local villagers for employment in the unit.

(xxxiii). 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.

06. Distilleries & Sugar Industries

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). Total fresh water requirement shall not exceed ---- cum/day proposed to be met from surface water/ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

(iv). The spent wash/other concentrates shall be incinerated as proposed.

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

(vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

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

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

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

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

(xiii). As committed Rs. _____ shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.

(xiv). The project proponent shall develop solar power facilities and majority of the lighting facility in the unit shall be met from solar.

(xv). 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.

(xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

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

(xviii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xix). 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.

GENERAL CONDITIONS/ANNEXURE

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

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

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

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

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

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

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

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

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

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

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

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ANNEXURE

GENERAL CONDITIONS

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

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

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

Annexure-I

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

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Shri R. K. Singh	Member
3.	Shri Ashok Agarwal	Member
4.	Shri S.C. Mann	Member
5.	Dr. Y.V. Rami Reddy	Member
6.	Dr. T. K. Joshi	Member
7.	Dr. J. S. Sharma	Member
8.	Dr. Saloni Goel	Member
9.	Dr. T. Indrasena Reddy	Member
10.	Dr. Uma Kapoor, CGWA	Member
11.	Shri Dinabandhu Gouda, CPCB	Member
12.	Sh. Sanjay Bist, IMD	Member
13.	Dr. R. B. Lal, Scientist 'E', MoEFCC	Member Secretary
MoEFCC		
14.	Dr Saurabh Upadhyay	Scientist 'C'
15.	Dr. E.P. Nobi	Research Officer

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From: jpglobalconsultinggroup@gmail.com
To: "Additional Director MoEFCC Dr R B LAL" <rb.lal@nic.in>
Sent: Monday, July 27, 2020 11:45:40 AM
Subject: Re: Draft Minutes of the 21th EAC (Industry 2 Chemical Sector) meeting held during July 14-16, 2020

Dear Dr. R.B. Lal,
The minutes stand approved.

Regards,
Dr. J.P. Gupta