

**MINUTES OF THE 29<sup>th</sup> MEETING OF  
THE STATE EXPERT APPRAISAL COMMITTEE (SEAC)  
CONVENED ON 15.03.2022 and 16.03.2022.**

The 29<sup>th</sup> meeting of SEAC was convened at the Department of Science, Technology and Environment, Anna Nagar, Puducherry under the Chairmanship of Dr. B. Kumaran. The list of members attended is enclosed as Annexure – I.

**Agenda Item No. I: Confirmation of the Minutes of the 28<sup>th</sup> Meeting of SEAC convened on 15.09.2021.**

The Committee confirmed the minutes of the 28<sup>th</sup> meeting of SEAC held on 15.09.2021.

**Agenda Item No. II: Examination of project proposals under the provisions of the EIA Notification, 2006 and its subsequent amendments for onward appraisal to SEIAA for further examination to consider issue of Environmental Clearance (EC) and Terms of Reference (TOR):**

**1. Proposal for Terms of Reference (TOR) submitted by M/s. Swathi Organics & Specialties Private Ltd, Puducherry for proposed Polymerization Plant within the existing facility.**

The project proponent and the accredited consultant made a detailed presentation on the salient features of the project proposal on 15.03.2022 and informed that they are seeking Terms of Reference for undertaking detail EIA studies for the purpose of obtaining Environmental Clearance for establishing a polymerization plant within the existing facility. The following representatives were present on behalf of the project proponent:

- i) Thiru. M. Natarajan, Executive Director, M/s. Swathi Organics & Specialties Private Ltd, Puducherry.
- ii) Thiru. K. Umasankar, Manager – Production, M/s. Swathi Organics & Specialties Private Ltd, Puducherry.
- iii) Dr. J.R. Moses, CEO, M/s. Hubert Enviro Care Systems (P) Ltd., Chennai.

Project details are as under:


Name of the Project	Proposed Polymerization Plant within the existing facility by M/s. Swathi Organics & Specialties Private Ltd, Puducherry.				
Project Location	Plot No. A35, A36 & Behind A33 part, A34 part, PIPDIC Industrial Estate, Mettupalayam, Oulgaret Municipality, Puducherry – 605009.				
Project Description – Product & Capacity	S. No.	Product	Existing (TPD)	Proposed (TPD)	After Expansion (TPD)
	1	Textile Chemicals & Formulation	36	-	36
	2	Textile softener	1	-	1
	3	Fat Liquor formulations	6	-	6



	4	Synthetic Tanning agent	6	-	6
	5	Blended dye stuff	1	-	1
	6	Plastic Injection moulding	5	-	5
	7	Repacking of Agromicro nutrient	1 (300 TPA)	-	1 (300 TPA)
	8	Hand Sanitizer	2	-	2
	9	Disinfectant	2	-	2
	10	Acrylic polymers	-	18	18
	11	Polyimide resin	-	5	5
		<b>Total</b>	<b>60</b>	<b>23</b>	<b>83</b>
Total land area	1.59 Acres				
Green belt area	0.52 Acres (32.30%)				
Manpower	87 (Existing - 72 & Proposed - 15)				
Power requirement	326 KVA (Existing - 256 & Proposed - 70)				
Source of power	Puducherry Electricity Department				
Power backup	Existing - 200 KVA DG Set Proposed - Nil				
Water Source	PIPDIC water supply				
<b>Water requirement</b>					
Total Water Requirement:					
<b>S. No.</b>	<b>Description</b>	<b>Existing KLD</b>	<b>Proposed KLD</b>	<b>After Expansion KLD</b>	
1	Freshwater requirement	21.115	10.005	31.120	
2	Recycled / Treated water	0.625	0.600	1.225	
<b>Total water requirement</b>		<b>21.740</b>	<b>10.605</b>	<b>32.345</b>	
Water Requirement Break-up:					
<b>S. No.</b>	<b>Purpose</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total after Expansion</b>	
1	Process	10.20	6.205	16.405	
2	Cooling	2.00	0.500	2.500	
3	Boiler	1.00	2.500	3.500	
4	Vessel washing	0.80	0.700	1.500	
5	Domestic Use	3.24	0.700	3.940	



6	Greenbelt	4.50	0.000	4.500	
<b>Total water requirement</b>		<b>21.74</b>	<b>10.605</b>	<b>32.345</b>	
<b>Waste Water Generation:</b>					
Waste water	Existing (KLD)	Proposed (KLD)	After Expansion (KLD)	Disposal methods	
Sewage	2.91	0.60	3.51	Septic tank and Soak Pit	
Effluent	1.25	1.20	2.45	ETP (Design capacity: Existing – 1.5 KLD After Expansion – 3 KLD)	
<b>Air Emissions</b>					
Description	Existing Capacity	Proposed Capacity	After Expansion Capacity	APC measures	Stack height (m)
Boiler	2 x 600 kg/hr (1 working & 1 stand by) Fuel used: HSD	Nil	No change	Stack	12
DG	200 KVA	Nil	No change	Stack	7
<b>Solid Waste</b>					
Waste	Quantity (kg/day)			Treatment / disposal Method	
	Existing	Proposed	After Expansion		
Organic	19.44	4.05	23.49	Organic solid waste is being composted and used as manure for greenbelt and same will be followed after expansion as well.	
Inorganic	12.96	2.7	15.66	Inorganic solid waste like scrap, paper and plastics are being segregated and sold for recycling. Other MSW wastes are being handing over to the Oulgaret Municipality and the same will be followed after expansion.	



<b>Hazardous Waste</b>					
<b>Category</b>	<b>Type of the Hazardous waste</b>	<b>Quantity (TPA)</b>			<b>Mode of Disposal</b>
		<b>Existing as per HWA</b>	<b>Proposed</b>	<b>After Expansion</b>	
5.1	Used oil	0.05	-	0.05	Stored in barrels and kept in concrete floor and disposed to the authorized recyclers.
5.2	Oil contaminated waste like waste cotton	0.05	-	0.05	Stored in barrels and kept in concrete floor and dispose to the authorized facility.
33.1	Discarded containers / barrels / liners contaminated with hazardous wastes /chemicals	72.00	-	72.00	Stored on concrete floor under roof and sold to authorized person.
20.2	Spent solvent	2.50	-	2.50	Stored in barrels and kept on concrete floor and dispose through authorized re-processor.
Hazardous waste generation quantities will not exceed the present quantities permitted in the HWA					
Project Cost	Rs. 5 Crores				
EMP Cost	Total Capital Cost - Rs. 25 Lakhs. Recurring Cost / month - Rs. 8 Lakhs. No additional EMP cost for proposed change in product mix.				

The project/activity is covered under Category 'B1' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule in the Environment Impact Assessment (EIA) Notification, 2006.

The SEAC inspected the industry on 16.03.2022 to assess the adequacy of existing operations and environmental safeguards.

The Committee observed that Standard TOR has already been issued for the project proposal in the Parivesh portal. After due deliberation, the committee decided to issue the following additional TORs for preparing the EIA report.

- i) The name of the product shall be clearly mentioned as "Acrylic polymers (Emulsion and Solution)".



- ii) Measures for harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated.
- iii) The unit shall provide sewage treatment plant of adequate capacity and the treated water shall be utilized for gardening.
- iv) Details of appropriate instrumentation for process control.
- v) Adequate training to be provided to the workers / employees on process safety, fire fighting measures and handling of hazardous chemicals. Details of training required and PPEs to be provided shall be mentioned in the EIA/EMP.
- vi) Rainwater harvesting structures to be designed and implemented as per standard norms.
- vii) All permissions, authorizations and consents submitted as supporting documents shall have due validity period.
- viii) 1% of the project cost shall be allocated for environment conservation and community welfare measures as per the MoEFCC OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, Details of activities to be undertaken and timelines shall be mentioned in the EMP.

**2. Proposal for Terms of Reference (TOR) submitted by Ramachandra Educational Trust, Puducherry for proposed expansion of M/s. Sri Venkateshwaraa Medical College Hospital and Research Centre (SVMCH&RC) under violation.**

The project proponent and the accredited consultant made a detailed presentation on the salient features of the project proposal on 15.03.2022 and informed that they are seeking Terms of Reference for undertaking detail EIA studies for the purpose of obtaining Environmental Clearance for construction of additional buildings in the existing Medical College premises. The following representatives were present on behalf of the project proponent:

- i) Thiru. A. Soundarajan, General Manager, M/s. Sri Venkateshwaraa Medical College Hospital and Research Centre.
- ii) Thiru. M.I. Bilal, Environment Manager, M/s. Sri Venkateshwaraa Medical College Hospital and Research Centre.
- iii) Dr. J.R. Moses, CEO, M/s. Hubert Enviro Care Systems (P) Ltd., Chennai.

Project details are as under:

Name of the Project	Proposed expansion of M/s. Sri Venkateshwaraa Medical College Hospital and Research Centre (SVMCH&RC) by Ramachandra Educational Trust, Puducherry.		
Project Location	R.S. No. 132/3, 148/1 & 2, 149/1,2,3,4,5 & 7, 150/2,3,4,5,6,7 & 8, 151/1,4 & 6, 152/1,2,3 & 5, 153/1,2,3,4 & 5, 154/1 & 2 and 155/1, 4 pt & 8pt., Ariyur Village, Villianur Taluk, Puducherry District, Puducherry.		
<b>Particulars</b>	<b>Existing</b>	<b>Proposed</b>	<b>After Expansion</b>
Total Site Area	1,30,673 Sq. m (32.29 Acre)	Nil	1,30,673 Sq.m. (32.29 Acre)



Ground coverage	30,745.49 Sq.m.	5956.00 Sq.m.	36,701.49 Sq.m.
Total built-up Area of hospital buildings	28,692.46 Sq.m.	21,952 Sq.m.	50644.46 Sq.m.
Total built-up Area of non-hospital buildings	1,17,745.83 Sq.m.	14,967 Sq.m.	1,32,712.83 Sq.m.
<b>Total built-up Area</b>	<b>1,46,438.29 Sq.m</b>	<b>36,919 Sq.m (under construction)</b>	<b>1,83,357.29 Sq.m</b>
Green belt Area	43653.51 (33.41%)	Nil	43653.51 (33.41%)
Power requirement	900 KVA	450 KVA	1350 KVA
Power backup KVA	1 x 725 KVA 1 x 1010 KVA	-	1 x 725 KVA 1 x 1010 KVA
Total Water requirement	863.37 KLD	380.025 KLD	1243.395 KLD
Fresh water requirement	713.37 KLD	330.025 KLD	1043.395 KLD
Recycled water	150 KLD	50 KLD	200 KLD
Fresh Water source	Ground water	Ground water	Ground water
Wastewater generation	596.88 KLD	279.01 KLD	875.89 KLD
Project cost	INR 36.98 Crores (Proposed Hospital – 28.27 Crores & Proposed Non Hospital – 8.71 Crores).		

The committee observed that the project proponent has earlier obtained EC on 17.03.2010 under Category 8(a) of the schedule of the EIA Notification 2006 – building and construction projects. Now the project falls under Category 8(b) – Area Development Projects since the total built-up area of the project is 1,83,357.29 Sq.mts.

The SEAC visited the project site on 16.03.2022 to assess the site condition. It was observed that the project proponent has already commenced construction of following buildings having 36919 Sq.mts. total built-up area without obtaining Environmental Clearance:

- i) Construction of Hospital extension block (G+8; 21952 Sq.mts.) - completed upto 6<sup>th</sup> Floor Roof.
- ii) Construction of Medical College extension block (G+4; 10663 Sq.mts.) – completed upto the roof level.
- iii) Construction of Medical College additional block in existing building (G+3; 4304 Sq.mts.) – completed upto the roof level.



During inspection the SEAC observed that the Bio Medical Waste storage needs improvement. BMW is stored along with other wastes in a separate room with partitions for BMW and other solid wastes. The BMW shall be stored in a separate shed or room with provision of safe, ventilated and secured location for storage of segregated biomedical waste as per the provisions of BMW Rules, 2016.

The project proponent has obtained certified compliance report of earlier EC from the Regional Office, MoEFCC, Chennai wherein 3 non compliances have been mentioned. The SEAC advised the project proponent to rectify the non-compliances and submit the action taken report and get it verified by the Regional Office, MoEFCC. Copy of the same shall be submitted to PPCC and SEIAA.

The SEAC observed that this is a violation case of the EIA Notification, 2006 and the project proponent has himself brought the violation to the knowledge of SEIAA in the TOR application. The project proponent stated that they had been sanctioned additional students strength for the Medical College admission which requires additional infrastructure facilities. Also, there was necessity to increase the number of beds in the hospital during the COVID emergency period. Hence, construction of the above buildings was commenced. In view of the COVID pandemic there was a delay in applying for Environmental Clearance in time.

SEAC observed that the construction of additional buildings has been carried out within the existing campus of PP. As this is not a green field project, the environment impacts would be minimal. MOEFCC has published SOP for regularization of violation projects that are otherwise permissible under EIA Notification, vide Office Memorandum dated 07<sup>th</sup> July 2021. This OM is presently stayed by the Hon'ble Madurai Bench of High Court of Madras vide Order dated 15.07.2021 in W.P. (MD) No. 11757 of 2021 titled Fatima Vs. Union of India. In view of the above, the SEAC decided to keep the application of the project proponent under abeyance until further directions.

**3. Proposal for Environmental Clearance (EC) submitted by M/s. Solara Active Pharma Sciences Limited, Puducherry for proposed change in Product Mix without increase in Total Production Capacity (4812 TPA).**

The project proponent and the accredited consultant made a detailed presentation on the salient features of the project proposal on 15.03.2022 and informed that the proposal is for consideration of environmental clearance for change in product mix of API without increase in total production quantity. The following representatives were present on behalf of the project proponent:

- i) Thiru. M. Mohan, Sr. Vice President, M/s. Solara Active Pharma Sciences Ltd., Puducherry.
- ii) Thiru. R. Ramesh, General Manager - EHS, M/s. Solara Active Pharma Sciences Ltd., Puducherry.
- iii) Dr. J.R. Moses, CEO, M/s. Hubert Enviro Care Systems (P) Ltd., Chennai.

Project details are as under:

Name of the Project	Change in product mix without increase in total production capacity (4812 TPA) by M/s. Solara Active Pharma Sciences Limited, Puducherry.
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Project Location	R.S. Nos. 30/4 PT, 32/1A, 32/2, 32/3, 33/1, 33/10, 33/11, 33/13, 33/2, 33/3, 33/4, 33/5, 33/6, 33/9, 34/1, 34/2, 34/3, 34/4, 34/5, 34/6, 34/7, 34/8, 35/4, 35/5, 35/6, 35/7, 36/5, Periyakalpet, Mathur Road, Puducherry.			
Project Description – Product & Capacity	<b>Product Name</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total after change in product mix</b>
	Ibuprofen	4308	-312	3996
	Ibuprofen DC	240	0	240
	Ibuprofen Lysinate	120	0	120
	Ibuprofen Sodium	20	0	20
	S+ Ibuprofen	100	0	100
	Pilot Scale R&D Operations	12	0	12
	Carisoprodol	12	-12	0
	Ammonium lactate	0	120	120
	Celecoxib	0	144	144
	Rebamipide	0	60	60
	<b>Total (TPA)</b>	<b>4812</b>	<b>0</b>	<b>4812</b>
Total land area	24.30 Acres (98338.93 Sq.m)			
Green belt area	8.42 Acres (34.65%)			
Manpower	789 (Existing - 789 & Proposed - Nil)			
Power requirement	3860 KVA (Existing - 3860 & Proposed - Nil)			
Source of power	Puducherry Electricity Department			
Power backup	Existing - 2 x 1500 and 2 x 1010 KVA DG Sets Proposed - Nil			
Water Source	Bore well and Treated Sewage water from PWD STP.			
<b>Water requirement</b>				
Total Water Requirement:				
<b>S. No.</b>	<b>Description</b>	<b>Existing</b>	<b>Proposed</b>	<b>After Change in product mix</b>
1	Freshwater requirement (A)	110	No Change	110
2	Recycled water (B)	652	No Change	652



3	Treated sewage from PWD (C)*	566	No Change	566
<b>Total (A+B)</b>		<b>762</b>	<b>-</b>	<b>762</b>

\*Note: Recycled water includes treated sewage water consumed from PWD STP: Approved treated sewage quantity by PWD is 590 KLD as per Water Consent.

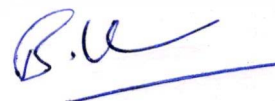
Water Requirement Break-up:

Water requirement	Existing (KLD)	Proposed (KLD)	After change in product mix (KLD)	Total Break-up	
				Fresh water	Treated Water
Process	80	Nil	80	80	-
Non-Process (DM Plant)	16	Nil	16	16	-
Process cooling tower	323	Nil	323	-	323
Cooling tower (ZLD)	150	Nil	150	-	150
Boiler Feed	154	Nil	154	-	154
Domestic	29	Nil	29	4	25
Green belt	10	Nil	10	10	-
<b>Total</b>	<b>762</b>	<b>Nil</b>	<b>762</b>	<b>110</b>	<b>652</b>

Waste Water Generation:

Description	Existing (KLD)	Proposed (KLD)	After Change in product mix (KLD)	Treatment Units	Final Disposal Points
HTDS (from process)	50	No change	50	MEE and ATFD	ZLD facility
Domestic	25	No change	25	Biological ETP followed by RO.	Reused for Non process application
Treated sewage water from PWD	566	No change	566		
Effluent from, Non process, Boiler, cooling tower blowdown	11	No change	11		

Process effluent from Strides pharma sciences Ltd – Formulation division (non-EC category)	43	No change	43				
<b>Total LTDS effluent</b>	<b>645</b>	<b>No change</b>	<b>645</b>				
<b>Total (HTDS + LTDS effluent)</b>	<b>695</b>	<b>No change</b>	<b>695</b>				
<b>Air Emissions</b>							
Details	Air Pollution Source			No. of Stacks			APC Measures
	Existing	Proposed	After change in product mix	Existing	Proposed	After change in product mix	
Stack Process	IBU	IBU + Celecoxib	IBU + Celecoxib	1	0	1	Existing Wet Scrubber/ Bag Filter
	S-IBU	S-IBU + Rebapimide	S-IBU + Rebapimide	0	0	0	Bag Filter
	IBU Lysine	IPCA + Ammonium lactate	IPCA + Ammonium lactate	0	0	0	Bag Filter
	IBU Sodium	IBU Lysine	IBU Lysine	0	0	0	Bag Filter
	DC-90	IBU Sodium	IBU Sodium	0	0	0	Bag Filter
	IPCA	DC-90	DC-90	0	0	0	Bag Filter
	Stack – Non Process (DG)	2 x 1500 KVA 2 x 1010 KVA	No change	2 x 1500 KVA 2 x 1010 KVA	4	0	4
Boiler – Bio Mass Briquette	2 x 16TPH boiler (1 in standby boiler) 1 X 12 Lac Kcal/hr Thermic Fluid Heater 1 X 10 Lac Kcal/hr Thermic	No change	2 x 16TPH boiler (1 in standby boiler) 1 X 12 Lac Kcal/hr Thermic Fluid Heater 1 X 10 Lac Kcal/hr Thermic	2	0	2	Multi cyclone Dust Collector going in for Bag Filter and then to Stack, 30 m AGL




	Fluid Heater (Standby TFH)		Fluid Heater (Standby TFH)				
<b>Total No of Stacks</b>				<b>7</b>	<b>0</b>	<b>7</b>	

**Solid Waste**

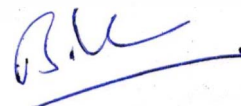
Description	Quantity (Kg/day)			Method of Collection	Method of Disposal
	Existing	Proposed	After change in product mix		
Organic	210.3	Nil	210.3	Collection in bins Manual	Existing: Composting and used as manure for gardening. Proposed: Compost in Organic waste convertor & will be used as manure for gardening.
Inorganic	142.02	Nil	142.02	Collection in bins Manual	Authorized recyclers.
Boiler ash (TPD) (from Bio-briquettes boiler)	5	Nil	5	Manual	Distributed to the local villagers for agricultural purposes, transport through trucks with water sprinkling & covered by tarpaulin.

**Hazardous Waste**

Name of the Hazardous Waste	Existing KLA/TPA	Proposed Quantity KLA/TPA	After Change in product mix Quantity KLA/TPA	Method of Stage / Disposal
Waste Sodium Dichromate Solution	22000	Nil	22000	Dispose to Authorized Vendor.
34.1ETP Sludge	3	Nil	3	Sent to Co-processing in Cement Industries



5.1 Spent Lubricating Oil	4	Nil	4	Dispose to PPCC Authorized Vendor.
5.2 Waste / Residue containing Oil	150	Nil	150	Dispose to PPCC Authorized Vendor.
20.2 Spent Solvent	900	Nil	900	Dispose to PPCC Authorized Vendor.
20.3 Distillation Residue	48	Nil	48	Dispose to PPCC Authorized Vendor.
28.1 Process Residue / Waste	720	Nil	720	Dispose to PPCC Authorized Vendor.
28.2 Spent Catalyst / Spent Carbon	54	Nil	54	Dispose to PPCC Authorized Vendor
28.3 Off Specification Product	1	Nil	1	Dispose to PPCC Authorized Vendor.
28.4 Date Expired / Discarded Off Specification drugs / Medicines	1	Nil	1	Dispose to PPCC Authorized Vendor.
28.5 Spent Organic Solvent	36	Nil	36	Dispose to PPCC Authorized Vendor.
33.2 Sludge from Treatment of Wastewater arising out of cleaning / disposal of Barrels / containers	20	Nil	20	Dispose to PPCC Authorized Vendor.
33.3 Discarded Containers / Barrels / Liners, Contaminated with Hazardous waste Chemicals	250	Nil	250	Dispose to PPCC Authorized Vendor.
35.1 Chemical Sludge from Wastewater treatment	4800	Nil	4800	ATFD salts are collected directly dispose to nearby TSDF sites / Co processor.
34.4 Oil and Grease Skimming Residues	1	Nil	1	Dispose to PPCC Authorized Vendor.
35.2 Spent Catalyst	1	Nil	1	
35.3 Spent Carbon	90	Nil	90	
Spent Acid	0	Nil	0	
<b>Total</b>	<b>29079</b>	<b>-</b>	<b>29079</b>	
Project Cost	Rs. 211.3307 Crores (existing); No additional project cost for proposed change in product mix.			
EMP Cost	Total Capital Cost - Rs. 40 Crores. Recurring Cost / Month - Rs. 1.5 Crores. No additional EMP cost for proposed change in product mix.			



The project/activity is covered under Category 'B2'-API of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020, 15.10.2020 & 16.07.2021).

The unit is not having Environmental Clearance at present since the plant had started the production in 1986 with valid consent order. Presently, the unit is holding Consent to Operate (No. 7528/PPCC/CTO(W)/OMK/PDY/JE/2021/1111(A) dated 24.09.2021 & No. 7528/PPCC/CTO(A)/OMK/PDY/JE/2021/1111 dated 24.09.2021) valid up to 31.01.2023 for the existing facility for the manufacturing capacity of 4812 TPA (401 TPM) with 5 Nos. of products from Puducherry Pollution Control Committee.


The SEAC inspected the industry on 16.03.2022 to assess the adequacy of existing operations and environmental safeguards.


The SEAC deliberated the proposal and made due diligence in the process as notified under the provisions of the EIA Notification 2006, as amended from time to time and accordingly decided to recommend the proposal for Environmental Clearance subject to following specific conditions given below, along with standard EC conditions prescribed by MoEFCC for Pharmaceutical / Chemical Industry sector given in Annexure II.

- i) This clearance is issued under the provisions of the EIA Notification, 2016. All other statutory clearances as applicable to the project shall be obtained by the project proponent from the concerned competent authority including the Consent to Establish and Operate for change in product mix from the Puducherry Pollution Control Committee (PPCC).
- ii) The pollution and control measures with regard to waste water treatment and disposal, air and noise pollution control measures, hazardous waste and solid waste management and all risk mitigation measures shall be strictly implemented as per the Environmental Management Plan submitted by the project proponent and in consonance with existing rules and regulations.
- iii) There shall be no additional water requirement or waste water generation from the process.
- iv) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- v) Environment and Safety Audit shall be carried out in different operating zones of the plant at least once in a year and the adequacy of environmental safeguards and plant / occupational safety shall be reviewed and necessary corrective measures shall be taken.
- vi) The proponent shall continuously monitor ambient VOC levels around the plant and implement necessary VOC control measures.
- vii) Fugitive emissions shall be controlled at 99.98% with effective chillers. VOCs shall be controlled at 99.997% with effective chillers / modern technology.
- viii) The unit shall ensure Zero Liquid Discharge from the plant.



- ix) All the ETP Tanks shall be above the ground level to avoid any ground water contamination. Waste water shall not be stored in underground sumps / tanks.
- x) The project proponent shall carry out regular monitoring of the ground water level and quality in and around the industry by establishing network of monitoring wells. Quarterly monitoring of water quality and water level shall be carried out through NABL accredited laboratory covering all seasons and reports shall be submitted to PPCC.
- xi) Organic Waste Convertor shall be installed for converting organic waste into manure and the manure shall be used for gardening.
- xii) The industry shall carry out energy audit through accredited agencies and take appropriate actions for energy conservation.
- xiii) The project proponent has allocated 8.42 acres of land (34.65%) for green belt development. This area shall not be diverted for other use. Stratified green belt with tall trees and shrubs beneath should be developed and maintained properly to serve as effective sink for air pollutants.
- xiv) A separate Environment Management Cell (having qualified persons with Environmental Science / Engineering / Management specializations) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xv) As per the MoEFCC OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, the project proponent shall allocate an amount of Rs. 1.58 Crores towards environment conservation and community welfare activities, which shall be utilized over a period of three years. The said amount shall be utilized for activities like infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas, etc. within the project area. The Project Proponent shall prepare a separate project report on the proposed environment conservation and community welfare activities in consultation with the District Collector and copy of the report shall be submitted to the District Collector, SEIAA, PPCC and Regional Office of MoEFCC. The activities shall be implemented in a time bound manner in consultation with the District Collector. The project progress report shall be submitted to the SEIAA, PPCC and Regional Office of MoEFCC as a part of the half yearly compliance report. The above fund allocated towards environment conservation support activities is to be in addition to the cost envisaged under the CSR budget of the company which will be allocated as per the rules prescribed by the Government of India / Companies Act 2013.

  
**Dr. R. Sagaya Alfred**  
(Secretary)

  
**Dr. B. Kumaran**  
(Chairman)

## ANNEXURE - I

**Members Present**

Sl. No.	Name and Designation of the Members Present on 15.03.2022 & 16.03.2022		
1.	Dr. B. Kumaran, Principal (Retd.), Indira Gandhi College of Arts and Science, Kathirkamam, Puducherry – 605 009.	-	Chairman
2.	Dr. S. Govindaradjane, Professor, Department of Civil Engineering, Pondicherry Engineering College, Pillaichavady, Puducherry – 605 014.	-	Member
3.	Mrs. S. Usha, Assistant Professor, Department of Chemical Engineering, Pondicherry Engineering College, Pillaichavady, Puducherry – 605 014.	-	Member
4.	Dr. A. Yogamoorthi, Associate Professor (Retd.) 6, Second Cross, Aravindar Nagar, Reddiarpalayam, Puducherry – 605010	-	Member
5.	Dr. K.M. Gopinathan, Associate Professor, Department of Zoology, Mahatma Gandhi Government Arts College, New Mahe – 673 311.	-	Member
6.	Dr. K. Sambandan, Assistant Professor, Department of Botany, Arignar Anna Government Arts and Science College, Karaikal – 609 605.	-	Member
7.	Dr. P. Kavita Vasudevan, Professor, Department of Community Medicine, Indira Gandhi Medical College and Research Institute, Kathirkamam, Puducherry – 605 009.	-	Member
8.	Dr. R. Sagaya Alfred Senior Scientific Officer Department of Science, Technology and Environment 3 <sup>rd</sup> Floor, PHB Building, Anna Nagar Puducherry – 605 005.	-	Secretary

## ANNEXURE – II

**Other EC conditions recommended by SEAC based on standard conditions prescribed by MoEFCC for Pharmaceutical / Chemical Industry sector****I. Statutory compliance**

- i) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the PPCC before commencement of production of the new products and shall submit copy of the same to SEIAA, Puducherry.
- ii) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time from PPCC.
- iii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

**II. Air quality monitoring and preservation**

- i) The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules, 1986 and the data to be transmitted to PPCC and CPCB online servers. This system shall be calibrated from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii) The project proponent shall install system to carryout Ambient Air Quality Monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv) 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/PPCC guidelines.
- v) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi) The DG sets shall be equipped with suitable pollution control devices and adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.





- vii) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July , 2010 and amended from time to time shall be followed.
- viii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 and amendment from time to time shall be complied with.

### **III. Water quality monitoring and preservation**

- i) The project proponent shall provide online continuous monitoring for treated effluent. The unit shall install web camera with night vision capability and flow meters in the channel/drain/pipelines carrying effluent within the premises.
- 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) The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986 or as specified by the Puducherry Pollution Control Committee while granting Consent under the Air/Water Act, whichever is more stringent.
- iv) Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- 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) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

### **IV. Noise monitoring and prevention**

- i) Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii) 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.
- iii) The ambient noise levels should conform to the standards prescribed under Environment (Protection) Rules, 1986 viz., 75 dB(A) during day time and 70 dB(A) during night time.



**V. Energy Conservation measures**

- i) The energy sources for lighting purposes shall preferably be LED based or advanced energy efficient lighting systems.

**VI. Waste management**

- i) 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.
- ii) Hazardous wastes like waste dichromate solution, ETP Sludge, waste oil, spent solvent, distillation residue, process residue, spent catalyst / carbon, off specification products, date expired / discarded off specification drugs, spent organic solvents, Sludge from Treatment of Wastewater arising out of cleaning / disposal of Barrels / containers, Discarded Containers / Barrels / Liners, Contaminated with Hazardous waste Chemicals, Chemical Sludge from Wastewater treatment, Oil and Grease Skimming Residues and spent acid shall be disposed off to the cement plants for co-processing, reprocessing units or TSDFs after obtaining necessary Hazardous Waste Authorization from PPCC.
- iii) 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 cleaning to reduce waste water generation.

**VII. Green Belt**

- i) 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 Forest Department.

**VIII. Safety and Human health issues**

- i) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process and material handling. Firefighting system shall be as per the norms.
- iii) The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.



- iv) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.
- v) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi) 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.

#### **XI. Corporate Environment Responsibility**

- i) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation / violation of the environment / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted as a part of half yearly compliance report.
- ii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA, PPCC and Regional Office of MoEFCC along with the Six-Monthly Compliance Report.
- iv) Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

#### **X. Miscellaneous**

- i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government (Industries Department and PPCC) who in turn has to display the same for 30 days from the date of receipt.



- iii) No further expansion or modifications in the plant shall be carried out without prior Environmental Clearance from SEIAA / MoEFCC, as applicable. In case of any deviation or alterations in the project proposal from those submitted to the SEIAA for clearance, a fresh reference shall be made to the SEIAA / MoEFCC, as applicable, to assess the adequacy of the conditions imposed and to add additional environmental protection measures required, if any.
- iv) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v) The project proponent shall monitor the criteria pollutants level viz., PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- vi) The project proponent shall submit six-monthly compliance report on the status of the compliance of the stipulated environmental conditions including results of monitored data in hard and soft copies on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year in respect of the conditions stipulated in the Environmental Clearance issued to SEIAA, PPCC and Regional Office of CPCB and MoEFCC.
- vii) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.
- viii) The project proponent shall submit the Environmental Statement for each financial year in Form-V to the Puducherry Pollution Control Committee as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- ix) The project proponent 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 start of production operation by the project.
- x) The project authorities must strictly adhere to the stipulations made by the Puducherry Pollution Control Committee and the U.T. Government.
- xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii) The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii) The SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiv) The Puducherry Pollution Control Committee and Regional Office of MoEFCC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the Officer (s) of the PPCC / Regional Office of MoEFCC by furnishing the requisite data / information / monitoring reports whenever requested.
- xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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