

**MINUTES OF THE 27<sup>th</sup> MEETING OF  
THE STATE EXPERT APPRAISAL COMMITTEE (SEAC)  
CONVENED ON 08.07.2021 AT 10.30 A.M.  
THROUGH VIDEO CONFERENCE**

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The 26<sup>th</sup> meeting of SEAC was organized through video conference 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.1: Confirmation of the Minutes of the 26<sup>th</sup> meeting of the SEAC convened on 06.10.2020.**

The Committee confirmed the minutes of the previous meeting.

**Agenda Item No. 2: Examination of Project proposals under the provisions of the EIA Notification, 2006 and its subsequent amendments for onward appraisal to the SEIAA for further examination to consider issue of Environmental Clearance (EC) and Terms of Reference (TOR):**

**i) Proposal for Environmental Clearance submitted by M/s. Solara Active Pharma Sciences Limited, Puducherry for Expansion of Bulk Drugs manufacturing facility with increase in Production Capacity from 4812 TPA to 8424 TPA.**

The committee discussed the proposal in detail with the project proponent. The following representatives participated on behalf of the project proponent and their EIA Consultant and made a presentation on the salient features of the project:

- i) Mr. M. Mohan, Sr. Vice President, Solara Active Pharma Sciences Limited.
- ii) Mr. R. Ramesh, General Manager – EHS, Solara Active Pharma Sciences Limited.
- iii) Dr. J. R. Moses, CEO, Hubert Enviro Care Systems (P) Ltd.
- iv) Mr. Vamsee Krishna, Consultancy Head, Hubert Enviro Care Systems (P) Ltd.
- v) Mr. Shyam Prakash Menon, EIA Coordinator, Hubert Enviro Care Systems (P) Ltd.
- vi) Mr. Tamil Selvan, Consultant, Hubert Enviro Care Systems (P) Ltd.

The project involves expansion of Bulk Drugs Manufacturing Facility with increase in Production Capacity from 4812 TPA to 8424 TPA. The project details are stated below in brief:

Name of the Project	Expansion of Bulk Drugs manufacturing facility with increase in Production Capacity from 4812 TPA to 8424 TPA by M/s. Solara Active Pharma Sciences Limited, Puducherry
Project Location	Plot No. 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, Periakalpet, Mathur Road, Puducherry.



Project Description	Sl. No.	Product Name	CAS Numbers	TPA			Final product usage
				Existing	Proposed	After Expansion	
	1	Ibuprofen	15687-27-1	4,308	2,892	7,200	Anti-inflammatory
	2	Ibuprofen DC	15687-27-1	240	240	480	
	3	Ibuprofen Lysinate	57469-77-9	240	480	720	
		Ibuprofen Sodium	31121-93-4				
		S+ Ibuprofen	51146-56-6				
	4	Carisoprodol	78-44-4	12	0	12	
	5	Pilot Scale Operations for R&D	-	12	0	12	
	<b>Total</b>			<b>4,812</b>	<b>3,612</b>	<b>8,424</b>	
Total land area	24.99 Acres (101115 Sq.m)						
Ground Coverage area	6.28 Acres (25410 sq.m)						
Green belt area	34.5% (8.62 Acre)						
Manpower	839 (Existing - 789 & Proposed - 50)						
Power requirement	5860 kVA (Existing - 3860 & Proposed - 2000)						
Source of power	Puducherry Electricity Department						
Power backup	2 x 1500 and 2 x 1000 kVA DG Sets (Existing) 1 x 1500 and 1 x 1000 (Proposed)						
Water Source	Bore well, Purchased water and Treated Sewage water from PWD STP.						
Water requirement	Total Water Requirement:						
	<b>Description</b>	<b>Existing KLD</b>	<b>Proposed KLD</b>	<b>After Expansion KLD</b>			
	Freshwater requirement	110	67	177			
	Recycled water	695	625	1320			
	<b>Total</b>	<b>805</b>	<b>692</b>	<b>1497</b>			

\*Note: Recycled water includes treated sewage water consumed from PWD STP. About 566 KLD treated sewage is taken from PWD STP for existing operation and additional 483 KLD is proposed to be taken for proposed enhancement.

Water Requirement Break-up:

Water requirement	Existing (KLD)	Proposed (KLD)	After Expansion (KLD)	Total Break-up	
				Fresh water	Treated Water
Process	60	34	94	94	-
Non-Process (DM Plant)	35	12	23	23	-
Process cooling tower	360	324	684	-	684
Cooling tower (ZLD)	169	134	333	-	333
Boiler Feed	166	167	303	-	303
Domestic	5	45	50	50	-
Green belt	10	0	10	10	-
<b>Total</b>	<b>805</b>	<b>692</b>	<b>1497</b>	<b>177</b>	<b>1320</b>

Waste Water Generation

Description	Existing (KLD)	Proposed (KLD)	After Expansion (KLD)	Treatment Units	Final Disposal Points
<b>Total HTDS effluent</b>	<b>55</b>	<b>39</b>	<b>94</b>	Effluent High pollutant stream from process is treated in stripper and MEE (cap 400 KLD). The condensate is sent to biological treatment followed by RO I (cap 400 KLD). RO I permeate reused for non-process. RO I rejects sent to RO III.	Concentrate from Multiple Effect Evaporator (MEE) is treated in Agitated Thin Film Drier (ATFD) and the sludge generated from biological treatment system and ATFD salts are dispose to TSDF sites/Co processor.

LTDS (Non-process cooling, Boiler, Centrifuge & watering & boiler blow down, DM plant regeneration, scrubber & softener)	118	101	219	Effluent Low TDS stream, domestic sewage & treated sewage from PWD is treated in ETP (cap 1000 KLD (LTDS), and 400 KLD (HTDS) followed by RO I & II (cap 400 & 840 KLD). RO I & II reject goes to RO III feed (cap 360 KLD). RO I & II permeate reused for non-process. RO III reject to MEE. ZLD method is followed.	Treated waste water is reused in process utilities.
Domestic	5	40	45		
Treated sewage water from PWD	566	483	1049		
<b>Total LTDS effluent</b>	<b>689</b>	<b>624</b>	<b>1313</b>		
<b>Total (HTDS + LTDS effluent)</b>	<b>744</b>	<b>663</b>	<b>1407</b>		

Additionally, 43 KLD effluent from Strides Pharma Sciences Ltd. – Formulation division (non EC category) is also treated in this plant.

#### Air Emissions

Details	Air pollution source			No of stacks			APC Measures
	Existing	Proposed	After expansion	Existing	Proposed	Total	
Stack Process	IBU	-	IBU	2	0	2	Existing Wet Scrubber/ Bag filter
	S-IBU	-	S-IBU	1	0	1	Bag Filter
	IBU Lysine	-	IBU Lysine	1	1	2	Bag Filter
	-	IBU Sodium	IBU Sodium	0	1	1	Bag Filter
	-	DC-90	DC-90	0	1	1	Bag Filter
	-	Pilot Plant	Pilot Plant	0	1	1	Bag Filter
Stack – Non Process (DG) (kVA)	2 x 1500 2 x 1000	1 x 1500 1 x 1000	3 x 1500 3 x 1000	4	2	6	Chimney 18 m height, AGL

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 Fluid Heater (1 x 10 is Standby TFH)	1 x 7.5TPH No Change No Change No Change	2 x 16TPH Boiler (1 in standby boiler) & 1 x 7.5 TPH 1 X 12 Lac Kcal/hr Thermic Fluid Heater 1 X 10 Lac Kcal/hr Thermic Fluid Heater (1 x 10 is Standby TFH)	2	0	2	Multi cyclone dust collector going in for bag filter and then to stack, 30 m AGL
<b>Total No of Stacks</b>				<b>10</b>	<b>6</b>	<b>16</b>	

**Solid Waste**

Description	Quantity (Kg/day)			Method of Collection	Method of Disposal
	Existing	Proposed	After Expansion		
Organic	210.3	13.5	223.8	Collection in bins Manual	<b>Existing:</b> Composting and used as manure for gardening <b>Proposed:</b> Compost in Organic waste convertor & will be used as manure for gardening.
Inorganic	142.02	9	151.02	Collection in bins Manual	Authorized recyclers
Boiler ash (TPD) (from Bio-briquettes boiler)	5	1.5	6.5	Manual	Distributed to the local villagers for agricultural purposes, transport through trucks with water sprinkling & covered by tarpaulin

<b>Hazardous Waste</b>						
Sl. No.	Schedule No.	Name of the Hazardous Waste	Existing Quantity KLA/TPA	Proposed Quantity KLA/TPA	After Expansion Quantity KLA/TPA	Method of Stage / Disposal
1	Class A of Schedule II	Waste Sodium Dichromate Solution	22000	8000	30000	Selling to Authorized Vendor
2	34.3 Schedule I	ETP Sludge	3	0	3	Sent to Coprocessing in Cement Industries
3	5.1 Schedule I	Spent Lubricating Oil	4	6	10	Dispose to PPCB Authorized Vendor
4	5.2 Schedule I	Waste / Residue containing Oil	150	100	250	Dispose to PPCB Authorized Vendor
5	20.2 Schedule I	Spent Solvent	900	300	1200	Dispose to PPCB Authorized Vendor
6	20.3 Schedule I	Distillation Residue	48	22	70	Dispose to PPCB Authorized Vendor
7	28.1 Schedule I	Process Residue / Waste	720	280	1000	Dispose to PPCB Authorized Vendor
8	28.2 Schedule II	Spent Catalyst / Spent Carbon	54	20	74	Dispose to PPCB Authorized Vendor
9	28.3 Schedule II	Off Specification Product	1	9	10	Dispose to PPCB Authorized Vendor
10	28.4 Schedule II	Date Expired / Discarded Off Specification drugs / Medicines	1	9	10	Dispose to PPCB Authorized Vendor



11	28.5 Schedule II	Spent Organic Solvent	36	50	86	Dispose to PPCB Authorized Vendor
12	33.2 Schedule I	Sludge from Treatment of Wastewater arising out of cleaning / disposal of Barrels / containers	20	10	30	Dispose to PPCB Authorized Vendor
13	33.3 Schedule I	Discarded Containers / Barrels / Liners, Contaminated with Hazardous waste Chemicals	250	180	430	Dispose to PPCB Authorized Vendor
14	35.1 Schedule I	Chemical Sludge from Wastewater treatment	4800	3200	8000	ATFD salts are currently stored inhouse and options to dispose to nearby TSDF sites/Co processor.
15	34.4 Schedule I	Oil and Grease Skimming Residues	1	9	10	Dispose to PPCC Authorized Vendor
16	35.2 Schedule I	Spent Catalyst	1	1	2	
17	35.3 Schedule I	Spent Carbon	90	18	108	
18		Spent Acid	0	4320	4320	
<b>Total</b>			<b>29079</b>	<b>16534</b>	<b>45613</b>	

Project Cost	Rs. 101.5 Crores.
EMP Cost	Total Capital Cost - Rs. 14.35 Crores. Recurring Cost / Month - Rs. 0.60 Crores.
CER fund proposed	Rs. 1.10 Crores.

As per S.O. 1223(E) dated: 27.03.2020 of MoEFCC "All proposals for projects or activities in respect of Active Pharmaceutical Ingredients (API) received upto the 30th September 2020, shall be appraised as Category 'B2' Projects, provided that any Subsequent amendment or expansion or change in product mix, after the 30th September 2020, shall be considered as per the provisions in force at that time". The time limit was subsequently extended till 30<sup>th</sup> March 2021 vide S.O. 3636 (E) dated 15.10.2020 and then extended till 30<sup>th</sup>

September 2022 vide S.O. 2346(E) dated 16.06.2021. Accordingly, the project / activity is covered under category B2 under the EIA Notification, 2006 and its subsequent amendments.

The SEAC after due consideration of the documents submitted and presentation made by the project proponent decided to call for following additional particulars and deferred the proposal for the next meeting.

- i) As per G.O. Ms. No. 134/88/F6 dated 24.11.1988 and G.O. Ms. No. 20/90/F6 dated 11/7/1990 there is a ban for water-based industries drawing water more than 10,000 LPD in Puducherry. The project proponent shall submit due approval obtained from the competent authority for the current expansion proposal in the light of above G.O.s.
- ii) The total water requirement of the project is 1497 KLD. At present 110 KLD fresh water is sourced from the borewell located within the factory and additional requirement of fresh water for the expansion is stated to be 67 KLD which is proposed to be purchased through private suppliers. Further, about 566 KLD treated sewage is utilized from the PWD STP for the present project and it is proposed to take additional quantity of 483 KLD from the PWD STP for expansion. The specific location of the water source, mode of transportation and traffic management plan, status of approval from the Puducherry Ground Water Authority and PWD respectively for purchase and transport of water from private suppliers and for transport of treated sewage from PWD STP shall be clearly stated.
- iii) As per Water Balance provided, about 10 KLD of Fresh Water is used for gardening. This shall be avoided and only treated wastewater shall be used for gardening as copious quantity of treated waste water is available. Water Balance shall be modified accordingly.
- iv) Details of Onsite and Offsite Disaster (Natural and Man-made) Preparedness and Emergency Management and their linkage with District Disaster Management Plan shall be stated.
- v) Details of energy conservation measures, use of solar energy and alternative source of energy shall be submitted.
- vi) Details of the existing and proposed buildings along with floor wise area of each building shall be provided.
- vii) Details of observation borewells located around the factory and test results for last two years shall be submitted.

The SEAC decided to carryout site inspection after the unit submits the additional particulars as stated above.

**2. Proposal for Terms of Reference submitted by M/s. Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry for proposed expansion and modifications in existing premises of Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), JIPMER, Dhanvantri Nagar, Thattanchavady village, Pondicherry.**

The committee discussed the proposal in detail with the project proponent. The following representatives participated on behalf of the project proponent and their EIA Consultant and made a presentation on the salient features of the project:

- i) Dr. Santhosh Satheesh, Professor, Dept of Cardiology, Acting Project Coordinator, JIPMER
- ii) Dr. Sunil Jadhav, Senior Medical Officer, Officer-in-Charge - Sanitation, JIPMER





- iii) Dr. Devan, Medical Officer, JIPMER
- iv) Mr. R P Lokhande, SE, CPWD, Puducherry
- v) Mr. Abhishek Gopal, EE, CPWD, Puducherry
- vi) Mr. K Vasudevan, EE(E), CPWD, Puducherry
- vii) Dr. J.R. Moses, CEO, Hubert Enviro Care Systems (P) Ltd.
- viii) Mr. Vamsee Krishna, Consultancy Head, Hubert Enviro Care Systems (P) Ltd.
- ix) Mr. Shyam Prakash Menon, EIA Coordinator, Hubert Enviro Care Systems (P) Ltd.
- x) Ms. Ramaa Prakash, Consultancy Manager, Hubert Enviro Care Systems (P) Ltd.
- xi) Mr. Tamil Selvan, Consultant, Hubert Enviro Care Systems (P) Ltd.

The project involves expansion and modifications in existing premises of Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER). The project details are stated below in brief:

Name of the Project	Expansion and modifications in existing premises of Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER).		
Project Location	R.S. No. 213/1, 218 Part, 228 Part, Thattanchavady Village, Oulgaret Municipality, Puducherry.		
Project Description	Proposed buildings and status of construction		
	<b>SL. No.</b>	<b>Block Name</b>	<b>Total Built up area (Sq. m.)</b>
	1	Admin Block (G+5) (of which four floors already approved. Present construction is fifth floor)	979.80
	2	Animal house (G+4)	5,586.00
	3	Cancer centre	11,026.08
	4	International Hostel	2,769.49
	5	Pharmacy block (G+3)	2,280.00
	6	Nuclear Centre (G)	787.00
	7	Indoor stadium (G)	3,812.60
	8	Kitchen (G+2)	2,128.38
	9	Blood Bank (G+3)	2,110.35
10	Hostel (G+7)	18,000.00	
	<b>Total</b>	<b>49,479.70</b>	
Total land area	7,77,620.80 Sq. m. (192.15 Acres)		
Built up area	Existing Built-up area: 3,40,739 Sq. m. Additional Built-up area: 49,479.7 Sq. m. Total Built-up area after expansion: 3,90,218.7 Sq. m.		
Project Cost	Rs. 262.11 Crores.		



The said project / activity is covered under category B1 (Township and Area Development Projects) of item 8 (b) of Schedule to the EIA Notification, 2006 and its subsequent amendments. TOR has been automatically granted in the Parivesh web portal on 25.06.2021.

The SEAC after due consideration of the documents submitted and presentation made by the project proponent noted that out of the 10 buildings proposed in the current application, construction of 6 buildings has already been completed, three buildings are under construction and one building is yet to be constructed. 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 SEAC also observed that the project proponent is a premier Health Institution in the country and the constructions carried out already fall under permissible activities as per the EIA Notification, 2006. Therefore, TOR could be granted for preparing the EIA Report and submitting EC application, by following the SOPs for violation cases given in the MoEF&CC Office Memorandum dated 07<sup>th</sup> July 2021.

The EIA Consultant requested SEAC to allow them to use the already collected baseline data for which EC has been issued for JIPMER vide F. No. SEIAA/PDY/86332/2018/573 dated 13<sup>th</sup> December 2018. The SEAC informed that this could not be agreed as the baseline data was collected during June 2017 and it is more than three years old which is not in consonance with the MoEFCC OM dated 29<sup>th</sup> August 2017.

After deliberation the SEAC recommended to issue the following TORs for the purpose of preparing the EIA / EMP Report for obtaining Environmental Clearance, in addition to the TORs automatically granted in Parivesh web portal on 25.06.2021:


- (i) The Puducherry Pollution Control Committee (PPCC) shall take action against the project proponent under Section 15 read with Section 19 of the Environment (Protection) Act, 1986 for starting the construction works without obtaining Prior Environmental Clearance.
- (ii) The project proponent shall stop the construction activities, shall not put in use the buildings that are already constructed without obtaining Prior Environmental Clearance and shall maintain status quo until Environmental Clearance is granted.
- (iii) 0.5% of the total project cost incurred up to the date of filing of Environmental Clearance application along with EIA / EMP Report shall be remitted into the Environment Compensation Fund of Puducherry Pollution Control Committee as penalty for commencing the construction activity without obtaining prior Environmental Clearance and the remittance details shall be submitted along with Environmental Clearance application. Duly certified statement of expenditure shall be given.
- (iv) Assessment of Ecological Damage, Remediation Plan and Natural and Community Resource Augmentation Plan shall be prepared as an independent chapter in the Environment Impact Assessment Report by the QCI/NABET accredited EIA consultants. The collection and analysis of data for assessment of ecological damage, preparation of remediation plan and community augmentation plan shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986 or an environmental laboratory accredited by the National Accreditation Board.


- (v) EMP prepared for implementation shall comprise of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- (vi) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the Puducherry Pollution Control Committee. The quantum of such liability shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be deposited prior to the grant of Environmental Clearance and will be released after successful implementation of the remediation plan and natural and community augmentation plan.
- (vii) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
- (viii) Since the project site is within 10 kms of Ousteri Bird Sanctuary which is a notified wild life protected area, the project proponent shall apply for Wild Life Clearance from the Standing Committee of the National Board for Wildlife and submit the copy of application.
- (ix) Point wise Compliance report on the various conditions stipulated in the earlier Environmental Clearances issued by the SEIAA and conditions stipulated in the latest Consent to Operate obtained from Puducherry Pollution Control Committee shall be submitted.
- (x) Compliance report to the various provisions of the Bio-medical Waste Management Rules, 2016 and Authorization obtained thereunder from Puducherry Pollution Control Committee shall be submitted.

**Agenda Item No. 3:** Any other item with the permission of the Chairman – Nil.

The meeting ended with vote of thanks to the chair.

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Dr. R. Sagaya Alfred  
(Secretary)

  
Dr. B. Kumaran  
(Chairman)

**ANNEXURE - I****Members Present**

Sl. No.	Name and Designation of the Members Present	-	
1.	Dr. B. Kumaran, Principal, 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.	Dr. S. Ram Kumar, Dean, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry – 605 009.	-	Member
4.	Mrs. S. Usha, Assistant Professor, Department of Chemical Engineering, Pondicherry Engineering College, Pillaichavady, Puducherry – 605 014.	-	Member
5.	Dr. A. Yogamoorthi, Associate Professor Professor (Retd.), 6, Second Cross, Aravindar Nagar, Reddiarpalayam, Puducherry – 605010	-	Member
6.	Dr. K.M. Gopinathan, Associate Professor, Department of Zoology, Mahatma Gandhi Government Arts College, New Mahe – 673 311.	-	Member
7.	Dr. K. Sambandan, Assistant Professor, Department of Botany, Arignar Anna Government Arts and Science College, Karaikal – 609 605.	-	Member
8.	Dr. P. Kavita Vasudevan, Associate Professor, Department of Community Medicine, Indira Gandhi Medical College and Research Institute, Kathirkamam, Puducherry – 605 009.	-	Member
9.	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

