

ENVIRONMENTAL CLEARANCE

# Pro-Active and Responsive Facilitation by Interactive, Single-Window Hub Virtuous Environmental



# **Government of India** Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority(SEIAA), Tamil Nadu)

To,

The Vice Chancellor SRI RAMACHANDRA EDUCATIONAL AND HEALTH TRUST Sri Ramachandra Institute of Higher Education and Research, No.1 Ramachandra Nagar, Porur, Chennai 600116 -600116

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam.

2.

4.

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/TN/MIS/71548/2022 dated 03 Nov 2022. The particulars of the environmental clearance granted to the project are as below.

EC23B000TN193685 1. EC Identification No.

File No. 9108

3. **Project Type** Expansion

Category

5. Project/Activity including N/A Schedule No.

6. Name of Project

7. Name of Company/Organization SRI RAMACHANDRA EDUCATIONAL

**B1** 

AND HEALTH TRUST

8. **Location of Project** Tamil Nadu 9. **TOR Date** 21 Apr 2022

The project details along with terms and conditions are appended herewith from page no 2 onwards.

(e-signed) Thiru.Deepak S.Bilgi Date: 03/03/2023 Member Secretary SEIAA - (Tamil Nadu)



Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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THIRU. DEEPAK S. BILGI, I.F.S. MEMBER SECRETARY

# STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY-TAMILNADU

3rd Floor, Panagal Maaligai, No.1, Jeenis Road, Saidapet, Chennai - 600 015. Phone No. 044-24359973 Fax No. 044-24359975

# ENVIRONMENTAL CLEARANCE (EC)

# Letter No. SEIAA-TN/F.No.9108/EC/8(a)/904/2022 dated:01.02.2023

#### Sir/Madam.

- Sub: SEIAA, TN Environmental Clearance (EC) Proposed additional construction of existing infrastructure facilities for Hospital, Institutional building and Hostels on plot bearing Survey Nos: S.No.149/2 and 150/1 & 4 of Karambakkam Village. S.No. 39/2 & 4 of Chettairagaram Village and S.No. 79/2, 80/2, 81 to 85, 86/2, 87 to 102, 103/2 and 104 to 109/1 & 2 of Thandalam Village of Greater Corporation of Chennai, Zone - XI, Division - 150 and S.No. 151/6, 163/5 & 6, 187/2, 188 to 221 of Ayyappan Thangal Village & S.No. 1 to 3 of Thelliyaragaram Village, Sriperumpudur Taluk, Kundrathur Panchayat Union, Kanchipuram district and in S.No. 210/1 & 4 of Vanagaram Village, Villivakkam Panchayat Union, Ambattur Taluk, Tiruvallur District by M/s. Sri Ramachandra Educational And Health Trust - under B category & Schedule - 8(b) 'Townships and Area Development projects' of the EIA Notification, 2006 as amended - Issued - Regarding.
- Ref: 1. Earlier EC issued vide SEIAA-TN Lr.No.SEIAA/TN /F.No.527/EC/8(b)/197/2012Dt:16.07.2013.
  - 2. Extension of validity/Amendment of EC vide Lr. No. SEIAA-TN/F-527/2012/A/-Ext/2016 Dt: 24.06.2016.
  - 3. Auto Terms of Reference (ToR) issued Dt:21.04.2022.
  - 4. Online Proposal No. SIA/TN/MIS/71548/2022, Dt:08.08.2022
  - 5. Your application for Environmental Clearance dated: 08.08.2022
  - 6. Minutes of 299th meeting of SEAC held on 23.07.2022,
  - 7. Minutes of 544th SEIAA meeting held on 25.08.2022
  - 8. Minutes of 321st meeting of SEAC held on 14.10.2022.

- 9. Minutes of 566th meeting of SEIAA held on 01.11.2022 & 02.11.2022
- 10. Minutes of 326th meeting of SEAC held on 04.11.2022.
- 11. Minutes of 570th meeting of SEIAA held on 12.11.2022
- 12. The Project Proponent reply dated: Dt:27.12.2022
- 13. Minutes of 343<sup>rd</sup> SEAC Meeting held on 05.01.2023.
- 14. Minutes of the 588th meeting of Authority held on 01.02.2023.

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This has reference to your application 4<sup>th</sup> & 5<sup>th</sup> cited, for the Proposed additional construction of existing infrastructure facilities for Hospital, Institutional building and Hostels on plot bearing Survey Nos: S.No.149/2 and 150/1 & 4 of Karambakkam Village, S.No. 39/2 & 4 of Chettairagaram Village and S.No.79/2, 80/2, 81 to 85, 86/2, 87 to 102, 103/2 and 104 to 109/1 & 2 of Thandalam Village of Greater Corporation of Chennai, Zone – XI, Division – 150 and S.No. 151/6, 163/5 & 6, 187/2, 188 to 221 of Ayyappan Thangal Village & S.No. 1 to 3 of Thelliyaragaram Village, Sriperumpudur Taluk, Kundrathur Panchayat Union, Kanchipuram district and in S.No. 210/1 & 4 of Vanagaram Village, Villivakkam Panchayat Union, Ambattur Taluk, Tiruvallur District by M/s. Sri Ramachandra Educational And Health Trust under B category & Schedule - 8(b) 'Townships and Area Development projects' of the EIA Notification, 2006 as amended.

The Competent Authority and Authorized Signatory furnished the detailed information in Form 1, Form 1A, Conceptual plan and liquidate enclosures are as Annexures:

#### Annexure 1

S. No	Description	Details
1.	Name of the Project	Proposed Additional Construction of Existing Infrastructure Facilities For Hospital, Institutional Building And Hostels by M/s. Sri Ramachandra Educational And Health Trust
2.	Location	S.No.149/2 and 150/1 & 4 of Karambakkam Village, S.No.39/2 & 4 of Chettairagaram Village and S.No.79/2, 80/2, 81 to 85, 86/2, 87 to 102, 103/2 and 104 to 109/1 & 2 of Thandalam Village of Greater Corporation of Chennai, Zone – XI, Division – 150 and S.No.151/6, 163/5 & 6, 187/2, 188 to 221 of Ayyappan Thangal Village & S.No.1 to 3 of Thelliyaragaram Village, Sriperumpudur Taluk, Kundrathur Panchayat Union, Kanchipuram district

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	•	and in S.No.210/1 & 4 of Vanagaram Village, Villivakkam Panchayat Union								
		Ambattur Taluk, Tiruvallur District, Tamil Nadu.								
3.	Type of	under B category & Schedule - 8(b) 'Townships and Area Development projects'								
	Project	of the E	of the EIA Notification, 2006 as amended.							
4.	Latitude &	S.No.	Latitude	tude						
	Longitude 1		13°2'44.39"N	'26.40"E						
		2.	13°2'15.19"N 80°8'1		9.10"E					
		3.	13°2'11.01"N	80°8'4	6.94"E					
		4.	13°2'43.21"N	80°8'4	4.74"E					
5.	Total Area (in sq. m)	S.No	Description		Existing	After Expansion				
		1	Total Land Area (Sq.m)		6,69,604.19	6,69,604.19				
		2	Total Ground Coverage Area	a of	95,289.15	1,01,218.83				
	telepat i		Building (Sq.m)							
		3	Roads and Pavements Area (Sq.n	n)	52,608.66	52,608.66				
		4	Other Utilities Area (Sq.m)		300.00	300.00				
		5	Surface Parking (Sq.m)	42,817.00	43,117.00					
			Green Belt & Landscaping (Sq.m	3,83,525.00	3,83,525.00					
			OSR (Sq.m)	67,287.00	67,287.00					
			Vacant Area (Sq.m)	27,777.38	21,547.70					
6.	Built up	3,75,445	.03 Sq.m (Existing)							
_	area		6.26 Sq.m (After Expansion)							
7.	Cost of		23 Crores (After Expansion) inc	cluding	g Proposed Ex	kpansion Cost -				
0	Project		2 Crores.							
8.	Brief		d for construction of additional fac		such as					
	description		Hospital Block – Oncology Block							
	of the		Varden Office & Store Block, Au							
	project	Canteen Block, Press Building, Allied Health Centre, Visitor's hall –								
		Eastern side between Block 9 & 10								
			the faculty of engineering & tec			-				
			ostel kitchen building – 3 <sup>rd</sup> floor a							
		• A	dditional construction of 3 <sup>rd</sup> floor	rover	the existing G	+2 building				

		Ladies str	udent hostel bu	ilding in the ex	kisting campus	_i agest!			
		Description	Existing	Demolition	Proposed	After Expansion			
		Total FSI Area	3,69,368.07 Sq.m	2345.04 Sq.m	1,51,420.37 Sq.m	5,18,443.40 Sq.m			
		Total Non FSI Area	6076.955 Sq.m	260.4 Sq.m	2,196.305 Sq.m	8,012.86 Sq.m			
	1.5	Total Built	3,75,445.03	2605.44	1,53,616.675	5,26,456.26			
	12	up Area	Sq.m	Sq.m	Sq.m	Sq.m			
	1 3 3 4	No. of Beds – 25	500 Nos.						
9.	Occupancy	19,629 Nos. (Ex	isting)	10 2 ° - 1	102				
		23,344 Nos. (Af	ter Expansion)		119				
10.	a) Water	Total Water Requirement – 4,267.5 kLD							
	requirement	Fresh Water Requirement - 1987 kLD (Existing 1923 kLD + Proposed 64							
	KLD (After	kLD)							
	expansion)	Recycled Water – 2280.5 kLD							
	b) Source	CMWSSB							
11.	Quantity of	Effluent Generation – 2398.74 kLD (Laundry 329.8 kLD + Lab & Operation							
	Sewage	Theatre 198.05 kLD + Drinking & Cooking 99 kLD + Other Domestic 932.							
	KLD	kLD + Swimming Pool 1 kLD + Toilet Flushing 838.39 kLD)							
12.	Details of	Combined ETP Capacity - 3000 kLD (Existing 2500 kLD + Proposed 500							
	Sewage	kLD)							
	Treatment	1. Collection Tank							
	Plant	2. Aeration	Tank						
		3. Clarifier	Tank						
		4. Pressure	Sand Filter						
		5. Activate	d Carbon Filte	r					

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	•	6. Sludge Drying Bed
		7. UV Disinfection System
		8. Ultra-Filtration System
	0.00	9. Filter Press
13.	Mode of	Toilet Flushing – 838.39 kLD
	Disposal of	Greenbelt – 1142.11 kLD
	treated	HVAC – 300 kLD
	sewage with	
	quantity	

14. Quantity of Solid Waste generated per day, Mode of treatment and Disposal of Solid Waste

S.No	Description	Existing Qty	After Expansion Qty	Mode of Treatment & Disposal		
1	Biodegradable Waste (Kg/day)	5382.36	4491.6	Food Waste and Garden Waste will be treated in Composting vessel followed be composting pits/ Bio methanation plan within the project site used as cooking fuel for hostel. Manure generated will be used for gardening.		
2	Non- Biodegradable Waste (Kg/day)	3588.24	2994.4	Waste will be sold to authorize recyclers		
3	Bio Medical Waste (Kg/day)	2860.0	2860.0	Disposed to CBMWTF		
	Total	11830.6	10346	Bio medical waste quantity considered at 27% in total waste		
4	STP Sludge (Kg/day)	250.0	300.0	Used as a Manure for greenbel development		
5	E- Waste (TPA)	4.80	5.0	Disposed to Authorized Recycler		

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15.	Power	Existing		roposed	After Expansion				
	requirement	13071 KW	4	484 KW	17555 KW				
		Source of power	Source of power supply: TANGEDCO						
16.	Details of D.G. set with Capacity	2 Nos. of 2000 kVA, 3 Nos. of 1500 kVA, 4 Nos. of 1000 kVA and 2 Nos. of 1010 kVA with stack height of 30 m							
17.	Hazardous Waste Generation & Disposal	Hazardous Waste	Existing Quantity (TPA)	After Expansion Quantity (TPA)	Disposal				
		5.1 - Used oil - from DG sets	2.4	2.5	Disposed to Authorized recycler				
18.	Details of Green Belt Area	3,83,525 Sq.m							
10	Details of	Existing		Proposed	After Expansion				
19.	Details of	8							
19.	Parking	42,817 Sq.m	3	300 Sq.m	43,117 Sq.m				
19.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	42,817 Sq.m	MLCP)– 26	571 Nos. (Includi	43,117 Sq.m ng proposed 682 nos of MLCP				
20.	Parking	42,817 Sq.m Four Wheeler (	MLCP)– 26 - 4006 Nos. s – 36 Nos.	571 Nos. (Includi					
20.	Parking Area  Provision for rain water	42,817 Sq.m Four Wheeler ( Two Wheeler – Percolation Pits	MLCP)- 26 - 4006 Nos. s - 36 Nos. - 122.4 cu.	571 Nos. (Includi					
	Parking Area  Provision for rain water harvesting	42,817 Sq.m  Four Wheeler ( Two Wheeler – Percolation Pits Total Capacity  Operation Pha Capital Cost –	MLCP)- 26-4006 Nos. s - 36 Nos. - 122.4 cu.	571 Nos. (Includi	ng proposed 682 nos of MLCP				

#### **AFFIDAVIT**

I, Smt. **Dr. Uma Sekar – Vice Chancellor,** M/s. Sri Ramachandra Educational & Health Trust, Survey Nos: S.No. 149/2 and 150/1 & 4 of Karambakkam Village, S.No. 39/2 & 4 of Chettairagaram Village and S.No.79/2, 80/2, 81 to 85, 86/2, 87 to 102, 103/2 and 104 to 109/1 & 2 of Thundalam Village of Greater Corporation of Chennai, Zone – XI, Division – 150 and S.No. 151/6, 163/5 & 6, 187/2, 188 to 221 of Ayyappan Thangal Village & S.No. 1 to 3 of Thelliyaragaram Village, Sriperumpudur Taluk, Kundrathur Panchayat Union, Kanchipuram district and in S.No. 210/1 & 4 of Vanagaram Village, Ambattur Taluk, Villivakkam Panchayat Union.

Proposed Additional Construction of existing infrastructure facilities for Hospital, Institutional building and Hostels in the land area of 6,69,604.19 Sq.m and the total built-up area is 526456.26 Sq.m by M/s. Sri Ramachandra Educational & Health Trust, an application submitted by us seeking Environmental Clearance under the EIA Notification, 2006 is under scrutiny in the Authority.

I am furnishing the following undertaking to the Authority.

- We assure you to furnish the detailed report in emission, noise and vibration due to the operations of DG sets as proposed and the same will be furnished to TNPCB before obtaining CTO and copy will be submitted to SEIAA-TN.
- We assure that the building will conform to minimum of IGBC platinum building norms and will obtain IGBC platinum certificate in this regard before obtaining CTO from TNPCB.
- 3. We assure to adopt IGBC Net Zero Water System.
- 4. We assure to obtain fresh water supply commitment letter for the expansion activity from the CMWSSB before obtaining CTO.
- 5. We assure to submit adequacy report for the combined ETP from the reputed institutions like IITs, NIT Trichy, Anna University etc. before obtaining the CTO from TNPCB.
- 6. We assure to provide and maintain adequate capacity of combined ETP and treated waste water will be utilized for Toilet flushing, HVAC and green belt after meeting the standards prescribed by TNPCB time to time as proposed and committed.
- 7. We assure to provide and maintain controlled green house, covering a minimum of 1/4 acre, to grow organic vegetables for their hostel students, within the existing proposed project site.
- We assure to provide and maintain composting pits followed by Biomethanation plant for treatment and disposal of biodegradable waste.
- 9. We assure to analyse the treated wastewater samples periodically through TNPCB.
- 10. We assure that the treated/untreated sewage water will not be let-out from the unit premises.

- 11. We assure to provide adequate organic waste disposal facility such as organic waste convertor waste within project site as committed and non- Biodegradable waste to authorized recyclers as committed.
- 12. We assure that the height of the stacks of DG sets will be provided as per the CPCB norms.
- 13. We assure to submit the structural stability certificate from reputed institutions like IIT, Anna University etc. to TNPCB before obtaining CTO.
- 14. We assure to make proper arrangements for the utilization of the treated water from the proposed site for toilet flushing (838.39 KLD), green belt development (1142.11 KLD) & HVAC (300 KLD) and no treated water be let out of the premise.
- 15. We assure that the sludge generated from the combined ETP will be collected and dewatered using filter press and the same will be utilized as manure for green belt development after composting.
- 16. We assure to provide the separate wall between the combined ETP and OSR area as per the layout furnished and committed.
- 17. We assure to plant indigenous species as given in the appendix, in consultation with DFO, State agriculture. The plant species with dense/moderate canopy of native origin will be chosen. Species of small/medium/tall trees alternating with shrubs will be planted in a mixed manner.
- 18. We assure that the taller/one-year-old saplings raised in appropriate size of bags, preferably eco-friendly bags will be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices and will earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 19. We assure to provide rain water harvesting sump of adequate capacity for collecting the runoff from rooftops, paved and unpaved roads as committed.
- 20. We assure to allot necessary area for the collection of E waste and strictly follow the E-Waste Management Rules 2016, as amended for disposal of the E waste generation within the premise.
- 21. We assure to obtain the necessary authorization from TNPCB and strictly follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016. as amended for the generation of Hazardous waste within the premises.
- 22. We assure that no waste of any type will be disposed off in any other way other than the approved one.

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- 23. We assure that all the mitigation measures for the flood management, to avoid pollution in Air, Noise, Solid waste disposal, Sewage treatment & disposal etc. will be followed strictly.
- 24. We assure to furnish commitment for post-COVID health management for construction workers as per ICMP, and MHA or the State Government guidelines as committed during SEAC meeting.
- 25. We assure to provide a medical facility, possibly with a medical officer in the project site for continuous monitoring the health of construction workers during COVID and Post -COVID period.
- 26. We assure to measure the criteria air pollutants data (including CO) due to traffic again before getting consent to operate from TNPCB and will submit a copy of the same to SE1AA.
- 27. We assure to utilize 30% & 50% of the open roof coverage area of the existing & proposed hostel buildings respectively for installation of Solar panel for harnessing green energy and will be utilized maximum for illumination of common areas, street lighting etc before obtaining CTO.
- 28. We assure to operate the DG sets with minimum of 30% of CNG substituted fuel to be achieved immediately and upto minimum 50% of CNG substituted fuel will be adopted within next 3 years.
- 29. We assure to form Environment Management Cell of qualified personals for continuous implementation and monitoring of EMP & recommendations stipulated by the competent authorities.
- 30. We agree that the grant of this E.C. is issued from the environmental angle only and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. We assure to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
- 31. We assure to comply the demolition plan & its mitigation measures (prepared as per the MoEF&CC Office Memorandum F. No. 22-65/2017-IA.111 dated: 30.09.2020 20.10.2020) as committed in the EMP.
- 32. We commit to SEIAA that the daily fresh water requirement is 1987 KLD to be sourced from CMWSSB. Out of 1987 KLD, 198 KLD for drinking & Cooking, 233 KLD for lab & Operation Theater, 1097 KLD will be used for Other domestic purpose, 2 KLD for swimming pool top up, 388 KLD for laundry and 69 KLD for Greenbelt

- 33. The waste water generated from the project will be 2398.74 KLD including 838.39 KLD of toilet flushing, which will be treated in the Combined Effluent Treatment Plant of 3000 KLD capacity & the treated sewage of 2280.5 KLD will be recycled out of which 838.39 KLD will be used for toilet flushing, 300 KLD for HVAC & 1142.11 KLD will be used for Greenbelt.
- 34. We commit to SEIAA that the total solid waste estimated to be generated is 10346 Kg/day in which 4491.6 Kg/day is Biodegradable waste, which will be treated in Composting vessel followed by composting pits/ Bio methanation plant within the project site and the generated gas used as cooking fuel for hostel. Manure generated will be used for gardening, 2994.4 Kg/day is Non-Biodegradable waste (including hazardous waste 2.5 TPA and E-waste 5 TPA) will be sold to authorized recyclers and Bio Medical Waste of 2860 Kg/day will be disposed to authorized Common Biomedical Waste Treatment Facility.
- 35. We commit to SEIAA that the proposed power requirement is 17,555 KW (Existing Connected Load 13,071 KW, Proposed Connected Load 4484 KW). The existing DG sets are of 11 Nos. (2000 KVA x 2 Nos,1500 KVA x 3 Nos, 1000 KVA x 4 Nos, 1010 KVA x 2 Nos) with stack height of 30 m.
- 36. We assure that, as per the MoEF&CC Office Memorandum F. No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the detailed as proposed in the CER are detailed below:

#### CER DETAILS

The Total Project Cost is 1535.23 Crores and project cost for Proposed Expansion is 530.12 crores in which the CER for the proposed project will be 3 crores on capital investment of the project cost. This will be used for Environmental measures and Infrastructure Development in the area surrounding our Project Site.

S. No	Activities	Phase	Phase 2	Phase 3	Total Cost (Crores)	No of Settlements	Details of Settlement Places
1	Infrastructure Creation for Drinking Water Supply	0.06	0.06	0.08	0.20	7	Adayalampattu Ayyappanthangal Gerugambakkam
2	Sanitation Facilities	0.06	0.06	0.08	0.20	8	Kovur
3	Health Care	0.5	0.75	0.75	2.00	8	Kattupakkam

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4	Education / Library	0.05	0.05	0.05	0.15	7	Mangadu
5	Solid Waste Management Facilities	0.05	0.05	0.05	0.15	7	Paraniputhur
6	Sports Development	0.05	0.05	0.05	0.15	8	
7	Avenue Plantation / Community Plantation	0	0.02	0.03	0.05	8	
8	Rain Water Harvesting	0	0.05	0.05	0.10	7	
	Total	0.77	1.09	1.14	3.00		

# **SEAC Recommendations:**

Proposed additional construction of existing infrastructure facilities for Hospital, Institutional building and Hostels on plot bearing Survey Nos: S.No. 149/2 and 150/1 & 4 of Karambakkam Village, S.No. 39/2 & 4 of Chettairagaram Village and S.No.79/2, 80/2, 81 to 85, 86/2, 87 to 102, 103/2 and 104 to 109/1 & 2 of Thandalam Village of Greater Corporation of Chennai, Zone – XI, Division – 150 and S.No. 151/6, 163/5 & 6, 187/2, 188 to 221 of Ayyappan Thangal Village & S.No. 1 to 3 of Thelliyaragaram Village, Sriperumpudur Taluk, Kundrathur Panchayat Union, Kanchipuram district and in S.No. 210/1 & 4 of Vanagaram Village, Ambattur Taluk, Villivakkam Panchayat Union, Ambattur Taluk, Tiruvallur District by M/s. Sri Ramachandra Educational And Health Trust – For Environmental Clearance.

# (SIA/TN/MIS/71548/2022), Dt:08.08.2022.

The minutes of 299<sup>th</sup> & 321<sup>st</sup> SEAC meetings 23.07.2022 & 14.10.2022 may kindly be seen. The proposal was placed in the 326<sup>th</sup> SEAC Meeting held on 04.11.2022. The details of the minutes are available in the website (parivesh.nic. in).

#### The SEAC noted the following:

- Earlier, the PP has obtained EC vide Lr No. SEIAA /TN /F.No.527/EC/8(b)/197/2012 Dt: 16.07.2013 & Extension of validity/Amendment vide Lr. No. SEIAA-TN/F-527/2012/A/-Ext/2016 Dt: 24.06.2016.
- The Project proponent M/s.Sri Ramachandra Educational And Health Trust has applied for Terms of Reference for the proposed additional construction of existing infrastructure facilities for Hospital, Institutional building and Hostels vide (SIA/TN/MIS/71548/2022),Dt:29.01.2022.

- 3. The Project consists existing Built-up area of 393454.22 Sq. m & 133002.04 Sq. m. proposed Built-up area. Total Built up area after expansion 393454.22 + 133002.04 = 526456.26 Sq.m. The total land area 669604.19 Sq.m.(No additional land for the proposed expansion activity).
- **4.** The project/activity is covered under Category "B" of item 8(b) "Building and Construction Projects" of the Schedule to the EIA Notification' 2006.
- 5. Auto ToR with public hearing generated on 21.04.2022. (As per paragraph 7(III) -1(d) EIA Notification, 2006 as amended "Public consultation is exempted for all Building /Construction projects/Area Development projects and Townships (item 8).)
- 6. The project proponent, M/s. Sri Ramachandra Educational and Health Trust has applied for Environmental Clearance for the proposed additional construction of existing infrastructure facilities for Hospital, Institutional building and Hostels vide online proposal (SIA/TN/MIS/71547/2013), Dt:08.08.2022.
- 7. Simultaneously, the project proponent vide Lr. Dt: 08.08.2022 has requested for withdrawal of online proposal (SIA/TN/MIS/71547/2013), Dt:08.08.2022 for the reasons stated therein.
- 8. Now, the project proponent, M/s. Sri Ramachandra Educational and Health Trust has applied for Environmental Clearance with EIA report for the proposed additional construction of existing infrastructure facilities for Hospital, Institutional building and Hostels vide online proposal (SIA/TN/MIS/71548/2022), Dt:08.08.2022.

Based on the presentation made and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the certain conditions stated therein.

Subsequently, the proposal was placed in the 571<sup>st</sup> Authority meeting held on 21.11.2022. The authority noted that though the Auto ToR has been generated, additional ToR has not been stipulated for additional studies for the proposed expansion activity. In this connection, the authority after detailed discussions, decided to refer back the proposal after the receipt of the following additional particulars in regard to proposed expansion activity as stated therein

In this connection, the PP has furnished reply Dt:27.12.2022 and the proposal was again placed in this 343<sup>th</sup> SEAC meeting held on 05.01.2023.

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The committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 326th Meeting of SEAC held on 04.11.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

Based on the presentation made and documents furnished by the project proponent, **SEAC decided** to recommend the proposal for the grant of Environmental Clearance subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

- The Proponent shall furnish the detailed report on emission, noise and vibration due to the operations of DG sets as proposed and the same shall be furnished to TNPCB before obtaining CTO and copy submitted to SEIAA-TN.
- The building shall conform to minimum of IGBC Platinum building norms and shall obtain IGBC Platinum certificate in this regard before obtaining CTO from TNPCB.
- 3. The PP shall adopt IGBC Net Zero Water System.
- 4. The PP shall obtain fresh water supply commitment letter for the expansion activity from the CMWSSB before obtaining CTO.
- The project proponent shall submit adequacy report for the proposed STP for the from reputed institutions like IITs, NIT Trichy, Anna university etc. before obtaining CTO from TNPCB.
- 6. The project proponent shall provide and maintain adequate capacity of Combined ETP and treated waste water shall be utilized for Toilet flushing, HVAC and green belt after meeting the standards prescribed TNPCB time to time as proposed and committed.
- 7. The project proponent shall provide and maintain controlled green house, covering a minimum of ¼ acre, to grow organic vegetables for their hostel students, within the existing proposed project site.
- 8. The project proponent shall provide and maintain composting pits followed by biomethanation plant for treatment and disposal of biodegradable waste.
- 9. The PP shall analyse the treated wastewater samples periodically through TNPCB.
- 10. The treated/untreated sewage water shall not be let-out from the unit premises.
- 11. The proponent shall provide adequate organic waste disposal facility such as organic waste convertor waste within project site as committed and non-Biodegradable waste to authorized recyclers as committed.

- 12. The height of the stacks of DG sets shall be provided as per the CPCB norms.
- 13. The project proponent shall submit structural stability certificate from reputed institutions like IIT, Anna University etc. To TNPCB before obtaining CTO.
- 14. The proponent shall make proper arrangements for the utilization of the treated water from the proposed site for Toilet flushing, Green belt development & HVAC and no treated water be let out of the premise.
- 15. The sludge generated from the Sewage Treatment Plant shall be collected and dewatered using filter press and the same shall be utilized as manure for green belt development after composting.
- 16. The proponent shall provide the separate wall between the STP and OSR area as per the layout furnished and committed.
- 17. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix, in consultation with the DFO, State Agriculture. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 18. Taller/one year old saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 19. The Proponent shall provide rain water harvesting sump of adequate capacity for collecting the runoff from rooftops, paved and unpaved roads as committed.
- 20. The project proponent shall allot necessary area for the collection of E waste and strictly follow the E-Waste Management Rules 2016, as amended for disposal of the E waste generation within the premise.
- 21. The project proponent shall obtain the necessary authorization from TNPCB and strictly follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended for the generation of Hazardous waste within the premises.
- 22. No waste of any type to be disposed off in any other way other than the approved one.
- 23. All the mitigation measures committed by the proponent for the flood management, to

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- avoid pollution in Air, Noise, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
- 24. The project proponent shall furnish commitment for post-COVID health management for construction workers as per ICMR and MHA or the State Government guidelines as committed for during SEAC meeting.
- 25. The project proponent shall provide a medical facility, possibly with a medical officer in the project site for continuous monitoring the health of construction workers during COVID and Post COVID period.
- 26. The project proponent shall measure the criteria air pollutants data (including CO) due to traffic again before getting consent to operate from TNPCB and submit a copy of the same to SEIAA.
- 27. The project proponent shall utilize 30 % & 50% of the open roof coverage area of the existing & proposed hostel buildings respectively for installation of Solar panel for harnessing green energy and shall be utilized maximum for illumination of common areas, street lighting etc before obtaining CTO.
- 28. The project proponent shall operate the DG sets with minimum of 30% of CNG substituted fuel to be achieved immediately and upto minimum 50% of CNG substituted fuel shall be adopted within next 3 years.
- 29. The project proponent shall form Environment Management Cell of qualified personals for continuous implementation and monitoring of EMP & recommendations stipulated by the competent authorities.
- 30. That the grant of this E.C. is issued from the environmental angle only and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
- 31. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020, the proponent shall include demolishing plan & its mitigation measures in the EMP and adhere the same as committed.
- 32. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 accepted by the Project proponent, the revised CER cost is Rs. 300 Lakhs and the 50% of the amount shall be spent in the 1st Year and remaining 50% in

the 2<sup>nd</sup> Year for the 15 Nos. of Govt. Schools around the proposed site for Drinking Water facility, Provision toilets / Renovation of existing sanitation facility, Health Education, Smart classroom facility, Solid Waste Management facility, Solar power for common utilities & Green Belt development.

# **SEIAA Recommendations:**

The proposal was placed in the 588<sup>th</sup> Authority meeting held on 01.02.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Environmental Clearance for a period of 7 Years subject to the conditions as recommended by SEAC & normal condition in addition to the following conditions

- 1. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 accepted by the Project proponent, the revised CER cost is Rs. 300 Lakhs and the 50% of the amount shall be spent in the 1<sup>st</sup> Year and remaining 50% in the 2<sup>nd</sup> Year for the 15 Nos. of Govt. Schools around the proposed site for Drinking Water facility, Provision toilets / Renovation of existing sanitation facility, Health Education, Smart classroom facility, Solid Waste Management facility, Solar power for common utilities & Green Belt development.
- 2. The proponent shall deploy cost-effective technology to reduce GHG emissions.
- 3. The proponent shall adopt strategies to develop carbon-neutral or zero-carbon building.
- 4. The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).
- 5. The proponent shall adopt strategies to decarbonize the building.
- 6. The proponent shall adopt strategies to maintain the health of the inhabitants.
- 7. The proponent shall adopt strategies to reduce electricity demand and consumption.
- 8. The proponent shall provide provisions for automated energy efficiency.
- 9. The proponent shall provide provisions for controlled ventilation and lighting systems.
- 10. The proponent shall adopt strategies to reduce temperature including the Building Façade.
- 11. The proponent shall adopt methodologies to effectively implement the Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.

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- The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.
- 13. The proponent shall adopt methodology to control thermal environment and other shocks in the building.
- 14. The proponent shall adopt strategies to reduce anthropogenic GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, nitrous oxide, etc., resulting from human activities.
- 15. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format.
- 16. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc..
- 17. The proponent should develop an emergency response plan in addition to the disaster management plan.
- 18. The proponent should maintain environmental audits to measure and mitigate environmental concerns.
- 19. The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms.
- 20. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.
- 21. As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work.
- 22. The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.
- 23. The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.
- 24. The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.
- 25. The proponent shall adopt strategies to prevent bird hits.

26. The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.

27. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.

# Annexure - 'C'

- 1. The proponent shall ensure that no treated or untreated sewage/effluent shall be let outside the project site & shall find access to nearby water-bodies under any circumstances other than the permitted mode of disposal.
- 2. The proponent shall provide Combined ETP of adequate capacity as committed and shall continuously & efficiently operate Combined ETP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time.
- 3. The proponent shall periodically test the treated effluent the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.
- 4. The proponent shall periodically test the water sample for the general water quality core parameters including fecal coliform within the proposed project site through TNPCB lab /NABL accredited laboratory and submit report to the concerned authorities.
- 5. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.
- 6. The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.
- 7. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.
- 8. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.
- 9. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.
- 10. The project proponent shall adhere to height of the buildings as committed.
- 11. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
- 12. The activities should in no way cause emission and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises.

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- 13. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.
- 14. The proponent shall ensure that provision should be given for proper utilization of recycled water.
- 15. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.
- 16. All the Buildings shall be energy efficient and confirm to the green building norms.
- 17. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.
- 18. The proponent shall ensure that the all activities of EMP shall be completed before obtaining CTO from TNPCB.
- 19. The proponent shall ensure that the activities undertaken should not result in carbon emission, and temperature rise, in the area.
- 20. The proponent shall ensure that the buildings and activities should not result in Environmental damages, nor result in temperature rise.
- 21. The proponent shall provide and ensure the green belt plan is implemented as indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns.
- 22. The project proponent shall ensure to provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.
- 23. The proponent shall provide the emergency exit in the buildings.
- 24. The proponent shall provide elevator as per rules CMDA/DTCP.
- 25. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.
- The proponent shall adhere to the provision and norms regard to fire safety prescribed by 26. competent authority.
- 27. The project proponent shall adhere to storm water management plan as committed.

Environmental Clearance along with the conditions containing four parts namely

Part - A – Common conditions applicable for Pre-construction, Construction and Operational Phases

Part - B - Specific Conditions - Pre construction phase

Part - C - Specific Conditions - Construction phase

Part - D - Specific Conditions - Operational Phase/Post constructional Phase / Entire life of the project.

#### Validity:

The SEIAA hereby accords Environmental Clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 as amended, with validity for Seven years from the date of issue of EC, subject to the compliance of the terms and conditions stipulated below:

# <u>Part - A - Common conditions applicable for Pre-construction, Construction and Operational</u> <u>Phases:</u>

- Any appeal against this Environmental Clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- The construction of STP, ETP, Solid Waste Management facility, E-waste management facility, DG sets, etc., should be made in the earmarked area only. In any case, the location of these utilities should not be changed later on.
- 3. The Environmental safeguards contained in the application of the proponent /mentioned during the presentation before the State Level Environment Impact Assessment Authority / State Level Expert Appraisal Committee should be implemented in the letter and spirit.
- 4. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire and Rescue Services Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wild Life (Protection) Act, 1972, State / Central Ground Water Authority, Coastal Regulatory Zone Authority, other statutory and other authorities as applicable to the project shall be obtained by project proponent from the concerned competent authorities.
- The SEIAA reserves the right to add additional safeguard measures subsequently, if noncompliance of any of the EC conditions is found and to take action, including revoking of this Environmental Clearance as the case may be.

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- 6. A proper record showing compliance of all the conditions of Environmental Clearance shall be maintained and made available at all the times.
- 7. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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. The status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Chennai by e-mail.
- 8. The Regional Office of the Ministry located at Chennai shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- "Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu.
- 10. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.
- 11. The conditions will 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, the Public Liability Insurance Act, 1991, along with their amendments ,draft Minor Mineral Conservation & Development Rules , 2010 framed under MMDR Act 1957, National Commission for protection of Child Right Rules ,2006 and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law, including the Hon'ble National Green Tribunal relating to the subject matter.
- 12. The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.
- 13. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- 14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, Chennai, the respective Zonal Office of CPCB, Bengaluru and the TNPCB. The criteria pollutant levels namely; PM<sub>10</sub>,

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- $PM_{2.5}$ ,  $SO_2$ ,  $NO_x$  (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored.
- 15. The SEIAA, TN may cancel the Environmental Clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the Environmental Clearance.
- 16. The Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance.
- 17. The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection, even during the subsequent period.
- 18. The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
- 19. Where the trees need to be cut, compensation plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree that is cut) should be done with the obligation to continue maintenance.
- 20. A separate environmental management cell with suitable qualified personnel should be setup under the control of a Senior Executive who will report directly to the Head of the Organization and the shortfall shall be strictly reviewed and addressed.
- 21. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.
- 22. The Project Proponent has to provide rain water harvesting pits to recover and reuse the rain water during normal rains as reported.
- 23. The project activity should not cause any disturbance & deterioration of the local bio diversity.
- 24. The project activity should not impact the water bodies. A detailed inventory of the water bodies and forest should be evaluated and fact reported to the Forest Department & PWD for monitoring.
- 25. All the assessed flora & fauna should be conserved and protected.

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- 26. The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.
- 27. Necessary permission shall be obtained from the competent authority for the drawl / outsourcing of fresh water before obtaining consent from TNPCB.
- 28. The proponent shall appoint an Environmental Engineer with necessary qualification for the operation and maintenance of STP (Sewage Treatment Plant) and GWTP (grey water Treatment Plant)
- 29. The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.
- 30. All the mitigation measures committed by the proponent for the flood management, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
- 31. No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.
- 32. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
- 33. The safety measures proposed in the report should be strictly followed.

# Part - B - Specific Conditions - Pre construction phase:

- 1. The project authorities should advertise with basic details at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of clearance. The press releases also mention that a copy of the clearance letter is available with the State Pollution Control Board and also at website of SEIAA, TN. The copy of the press release should be forwarded to the Regional Office of the Ministry of Environment and Forests located at Chennai and SEIAA-TN.
- 2. In the case of any change(s) in the scope of the project, a fresh appraisal by the SEAC/SEIAA shall be obtained before implementation.
- 3. A copy of the clearance letter shall be sent by the proponent to the Local Body. The clearance letter shall also be put on the website of the Proponent.
- 4. The approval of the competent authority shall be obtained for structural safety of the buildings during earthquake, adequacy of firefighting equipments, etc. as per National

Building Code including protection measures from lightning etc. before commencement of the work.

- All required sanitary and hygienic measures for the workers should be in place before starting
  construction activities and they have to be maintained throughout the construction phase.
- 6. Design of buildings should be in conformity with the Seismic Zone Classifications.
- 7. The Construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration.
- 8. No construction activity of any kind shall be taken up in the OSR area.
- Consent of the local body concerned should be obtained for using the treated sewage in the OSR area for gardening purpose. The quality of treated sewage shall satisfy the bathing quality prescribed by the CPCB.
- 10. The height and coverage of the constructions shall be in accordance with the existing FSI/FAR norms as per Coastal Regulation Zone Notification, 2011.
- 11. The Project Proponent shall provide car parking exclusively for the visiting guest in the proposed residential apartments as per CMDA norms.
- 12. The project proponent shall ensure the entry of basement shall be above maximum flood level.
- 13. The proponent shall prepare completion plans showing Separate pipelines marked with different colours with the following details
  - i. Location of STP, compost system, underground sewer line.
  - ii. Pipe Line conveying the treated effluent for green belt development.
  - iii. Pipe Line conveying the treated effluent for toilet flushing
  - iv. Water supply pipeline
  - v. Gas supply pipe line, if proposed
  - vi. Telephone cable
  - vii. Power cable
  - viii. Strom water drains, and
  - ix. Rain water harvesting system, etc. and it shall be made available to the owners
- 14. A First Aid Room shall be provided in the project site during the entire construction and operation phases of the project.
- 15. The present land use surrounding the project site shall not be disturbed at any point of time.
- 16. The green belt area shall be planted with indigenous native trees.

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- 17. Natural vegetation listed particularly the trees shall not be removed during the construction/operation phase. In case any trees are likely to be disturbed, shall be replanted.
- 18. During the construction and operation phase, there should be no disturbance to the aquatic eco-system within and outside the area.
- 19. The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972 & Bio diversity Act 2002 should not be violated.
- 20. There should be Firefighting plan and all required safety plan.
- 21. Regular fire drills should be held to create awareness among owners/ residents.

# Part - C - Specific Conditions - Construction phase:

#### 1. Construction Schedule:

 The Project proponent shall have to furnish the probable date of commissioning of the project supported with necessary bar charts to SEIAA-TN.

#### 2. Labour Welfare:

- All the laborers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.
- ii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.
- iii) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.

#### 3. Water Supply:

- The entire water requirement during construction phase may be met from private tankers
- ii) Provision shall be made for the housing labour within the site with all necessary infrastructures and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- iii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The treatment and disposal of waste water shall be through dispersion trench after treatment through septic tank. The MSW generated shall be disposed through Local Body and the identified dumpsite only.
- iv) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.
- v) Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators / pressure reducing devises / sensor based control.

# 4. Solid Waste Management:

- i) In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.
- ii) Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
- iii) Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed as per the solid waste management rules 2016.
- iv) No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.
- v) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment.

# 5. Top Soil Management:

 All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.

# 6. Construction Debris disposal:

i) Disposal of construction debris during construction phase should not create any adverse effect on the neighboring communities and be disposed off only in approved sites, with the approval of Competent Authority with necessary precautions for general safety and health aspects of the people. The construction and demolition waste shall be managed as per Construction & Demolition Waste Management Rules, 2016.

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ii) Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the adjacent land/ lake/ stream etc.

#### 7. Diesel Generator sets:

- i) Low Sulphur Diesel shall be used for operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986, and the Rules framed thereon.
- ii) The diesel required for operating stand by DG sets shall be stored in barrels fulfilling the safety norms and if required, clearance from Chief Controller of Explosives shall be taken.
- iii) The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, cooling water tower etc.

#### 8. Air & Noise Pollution Control:

- Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.
- ii) Ambient air and noise levels should conform to residential standards prescribed by the TNPCB, both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase. The pollution abatement measures shall be strictly implemented.
- iii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. Parking shall be fully internalized and no public space should be utilized. Parking plan to be as per CMDA norms. The traffic department shall be consulted and any cost effective traffic regulative facility shall be met before commissioning.
- iv) The buildings should have adequate distance between them to allow free movement of fresh air and passage of natural light, air and ventilation.
- v) The project proponent should ensure that adequate Air Pollution Control measures shall be provided from buses and other vehicles, which will be entering the bus terminal. Further, water sprinkling system shall be provided and same shall be used at regular interval to control the dust emission within the project site.

# 9. Building material:

- i) Fly-ash blocks should be used as building material in the construction as per the provision of Fly ash Notification of September, 1999 and amended as on 27th August, 2003 and Notification No. S.O. 2807 (E) dated: 03.11.2009.
- ii) Ready-mix concrete shall alone be used in building construction and necessary cubetests should be conducted to ascertain their quality.
- iii) Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating shall be used in windows.

# 10. Storm Water Drainage:

- i) Storm water management around the site and on site shall be established by following the guidelines laid down by the storm water manual.
- ii) Storm water management plan shall be obtained by engaging the services of Anna University/IIT.

# 11. Energy Conservation Measures:

- i) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material, to fulfill the requirement.
- ii) Opaque wall should meet prescribed requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill the requirement.
- iii) All norms of Energy Conservation Building Code (ECBC) and National Building Code, 2005 as energy conservation have to be adopted Solar lights shall be provided for illumination of common areas.
- iv) Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting. A hybrids system or fully solar system for a portion of the apartments shall be provided.
- v) A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc and submitted to the SEIAA in three month's time.

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vi) Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

# 12. Fire Safety:

- i) Adequate fire protection equipments and rescue arrangements should be made as per the prescribed standards.
- ii) Proper and free approach road for fire-fighting vehicles upto the buildings and for rescue operations in the event of emergency shall be made.

# 13. Green Belt Development:

- i) The Project Proponent shall plant tree species with large potential for carbon capture in the proposed green belt area based on the recommendation of the Forest department well before the project is completed.
- ii) The proponent has to earmark the greenbelt area with dimension and GPS coordinates for the green belt area all along the boundary of the project site with at least 3 meter wide and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval.
- iii) The proponent shall develop the green belt as per the plan furnished and area earmarked for the greenbelt shall not be alter at any point of time for any other purpose.

#### 14. Sewage Treatment Plant:

- i) The Sewage Treatment Plant (STP) installed should be certified by an independent expert/ reputed Academic institutions for its adequacy and a report in this regard should be submitted to the SEIAA, TN before the project is commissioned for operation. Explore the less power consuming systems viz baffle reactor, etc., for the treatment of sewage.
- ii) The Proponent shall install STP as furnished. Any alteration to satisfy the bathing quality shall be informed to SEIAA-TN.
- iii) The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.

- iv) The project proponent shall continuously operate and maintain the Sewage treatment plant and Effluent treatment plant to achieve the standards prescribed by the CPCB.
- v) The project proponent has to ensure the complete recycling of treated Sewage &Effluent water after achieving the standards prescribed by the CPCB.
- vi) The project proponent has to provide separate standby D.G set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.

# 15. Rain Water Harvesting:

- i) The proponent shall ensure that roof rain water collected from the covered roof of the buildings, etc shall be harvested so as to ensure the maximum beneficiation of rain water harvesting by constructing adequate sumps so that 100% of the harvested water shall be reused.
- ii) Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and grease, etc.
- iii) The Project Proponent has to provide rain water harvesting pits to recover and reuse the rain water during normal rains as reported.
- iv) The project activity should not cause any disturbance & deterioration of the local bio diversity.

# 16. Building Safety:

Lightning arrester shall be properly designed and installed at top of the building and where ever is necessary.

# Part - D - Specific Conditions - Operational Phase/Post constructional phase/Entire life of the project:

- 1. There should be Firefighting plan and all required safety plan.
- 2. Regular fire drills should be held to create awareness among owners/ residents.
- 3. Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
- 4. The building should not spoil the green views and aesthetics of surroundings and should provide enough clean air space.
- 5. Solar energy saving shall be increased to atleast10% of total energy utilization.

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- 6. The Project proponent has to spend the CER as committed in the affidavit. The above activity shall be carried out before obtaining CTO from TNPCB.
- 7. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually
- 8. The EMP cost shall be printed in the Brochure / Pamphlet for the preparation of the sale of the property and should also mention the component involved.
- 9. The Project proponent shall get due permission from the Wetland Authority before the commencement of the work, if applicable.
- 10. The Project proponent should discuss with the wet land Authority, Tamil Nadu Forest Department, PWD and support lake restoration cum improvement, awareness and conservation programs.
- 11. The project activities should in no way disturb the manmade structures.
- 12. The Proponent shall do afforestation/restoration programme contemplated to strengthen the open spaces shall preferably include native species along with the financial forecast for planting and maintenance for 5 years.
- 13. "Consent to Operate" should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA-TN.
- 14. Raw water quality to be checked for portability and if necessary RO plant shall be provided.
- 15. The Proponent should be responsible for the maintenance of common facilities including greening, rain water harvesting, sewage treatment and disposal, solid waste disposal and environmental monitoring including terrace gardening for a period of 3 years. Within one year after handing over the flats to all allottees a viable society or an association among the allottees shall be formed to take responsibility of continuous maintenance of all facilities with required agreements for compliance of all conditions furnished in Environment Clearance (EC) order issued by the SEIAA-TN or the Proponent himself shall maintain all the above facilities for the entire period. The copy of MOU between the buyers Association and proponent shall be communicated to SEIAA-TN.
- 16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.
- 17. Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. The treated sewage shall conform to the norms and standards for bathing quality

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- laid down by CPCB irrespective of any use. Necessary measures should be made to mitigate the odour and mosquito problem from STP.
- 18. The Proponent shall operate STP continuously by providing stand by DG set in case of power failure.
- 19. It is the sole responsibility of the proponent that the treated sewage water disposed for green belt development/ avenue plantation should not pollute the soil/ ground water/ adjacent canals/ lakes/ ponds, etc
- Adequate measures should be taken to prevent odour emanating from solid waste processing plant and STP.
- 21. The e waste generated should be collected and disposed to a nearby authorized e-waste centre as per E- waste (Management & Handling), Rules 2016 as amended.
- 22. Diesel power generating sets proposed as source of back-up power during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets.
- 23. The noise level shall be maintained as per MoEF/CPCB/TNPCB guidelines/norms both during day and night time.
- 24. Spent oil from D.G sets should be stored in HDPE drums in an isolated covered facility and disposed as per the Hazardous & other Wastes (Management & Transboundary Movement) Rules 2016. Spent oil from D.G sets should be disposed off through registered recyclers.
- 25. The proponent is required to provide a house hold hazardous waste / E-waste collection and disposal mechanism.
- 26. The proponent shall ensure that storm water drain provided at the project site shall be maintained without choking or without causing stagnation and should also ensure that the storm water shall be properly disposed off in the natural drainage / channels without disrupting the adjacent public. Adequate harvesting of the storm water should also be ensured.
- 27. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- 28. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

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29. The Environmental Clearance is issued based on the documents furnished by the project proponent. In case any documents found to be incorrect/not in order at a later date the Environmental Clearance issued to the project will be deemed to be revoked/ cancelled.

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SEIAA-TN

# Copy to:

- The Additional Chief Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
- The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
- 3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
- 4. The APCCF (C), Regional Office, Ministry of Environment & Forest (SZ), 34, HEPC Building, 1<sup>st</sup> & 2<sup>nd</sup> Floor, Cathedral Garden Road, Nungambakkam, Chennai 34.
- Monitoring Cell, I A Division, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110003.
- 6. The Corporation of Tiruvallur, Tiruvallur District.
- 7. Stock File.

Swachhta Action Plan is a landmark initiative in mainstreaming Swachhta elements across all sectors of the Government to accomplish the Prime Minister's vision and Gandhiji's goal. With their vast reach and expertise base, higher education institutions can set the tone and pace for the Swachhta movement throughout the country. SRIHER's Social Entrepreneurship & Rural Engagement Cell was established on March 11<sup>th</sup>, 2021 to help achieve this goal.

https://drive.google.com/file/d/1qR6GezcptJ9eh7LTbO5IDMbSzwOcoufC/view

SESREC's vision and mission is to actively develop and promote initiatives aimed at creating awareness, facilitating the implementation and/or enhancing of existing sanitation, hygiene, waste management, water management, energy saving, and greenery inside the campus and adopted villages through mentoring, building environmental stewardship and creating social responsible individuals. Various efforts are carried out by the institution to promote Swacchta and Jal Shakti initiatives, including provision of clean toilets and safe drinking water; conducting awareness campaigns and Swachhta audits; waste management and implementing the ban on one time use plastic for protecting the environmental and ecosystem.

#### **Greenery:**

SRIHER is famous for its green campus. It is known for its beautiful biodiversity park which is bustling with fauna and flora including habitation of native plants. The Biodiversity

Park gives the students an escape from the mundane hustle of everyday life. The institution is also actively taking efforts to set up a Miyawaki forest in the campus; one of its kind growing forests is short period.

An herbal garden with medicinal plants started as an initiative by the Faculty of Pharmacy is maintained with utmost care. Students are taken to visit the green house, which is stretched in an area of 1500 sq.ft housing around 100 species of plants of which 50 species are end angered and of rare collection.



#### Water Management:



Speech competition was conducted by the English Literary Club on 12<sup>th</sup> September, 2021 on the theme of Water Conservation. Pond restoration programme was organized at Samiyarkulam, Kolapakkam on 4<sup>th</sup> September, 2021. One of the uniqueness is the National Service Scheme students engage in restoration of the same pond towards sustainability.

Student volunteers from the NSS of the university coordinated and performed activities that includes cleaning the surroundings, strengthening boundaries, clearing weeds, draining water, sludge removal, etc. A team of 6 members from the Iyarkai Charitable Trust and 99 student volunteers from NSS units I and IV assisted to complete this activity.

SRIHER has a special waste water treatment plant which aims to conserve the quality of water. The treated water is filtered using the sand and carbon filters which is then chlorinated and treated using UV radiation. Around 80% of the treated water is used for AC system, gardening and agricultural purposes, 20% of water is pumped back to the artificial pond which serves as ground water recharge system.



The established rain water harvesting system, storm water collection, bore well recharge areas, tank, bunds and water distribution systems are maintained at periodical intervals throughout the year for effective water management. A separate water treatment system is in operation to date for distributing to toilet flushing thus conserving water by reusing a portion of treated water.



https://drive.google.com/file/d/1EmP0lQ-nDHMC92fnaWnkjZzyH7tEw0CM/view

#### **Waste Management:**

Biomedical Waste, E-Waste, Solid Wastes, Waste Water and Hazardous Wastes are disposed adhering to local regulations. The treated waste water from the combined effluent treatment system meets the waste water quality standards.

The Ad-dezign competition was conducted as a part of SWACHHTA PAKHWADA 2021 by the English literary club & Student council (SRIHER). In this event, students were encouraged to design an advertisement pamphlet depicting how a waste material can be transformed into innovative useful product-digitally or handmade. The theme for the event was "Wealth out of Waste"

Swachhta and Rural Engagement Cell (SES-REC) of Sri Ramachandra Institute of Higher Education & Research (DU) has organized an Institutional Level Competition for students on the following activities - Essay Writing, Poster making and Slogan writing competition on the theme waste management and energy conservation.

#### Sanitization and Hygiene:

SRIHER's Department of Periodontology and Implantology observed Oral Hygiene

Awareness Week from August 2-7, 2021. Students taught patients and the broader public about dental hygiene and its relevance to overall systemic health.

The NSS organized a hand washing and sanitization camp for rural residents. Hand hygiene demonstrations and COVID kits were supplied to 50 homes. A cleanliness drive was held on September 14,



2021, at Vyasarpadi. Volunteers from the National Service Scheme planned and carried out mosquito-control activities in stagnant water. Community were emphasized that the breeding



Category - I Deemed to be University) Porur, Chennai

places propagate mosquito-borne diseases like dengue, malaria, and filariasis. https://youtu.be/00yn7TqVuSc

# **Energy Conservation**

SRIHER has taken strong steps towards conserving water on campus to minimize its wastage. SRIHER has a conventional water treatment plant which uses a minimal amount of electricity, approximately 10 units per day by using energy efficiency pumps. Wood fuel using canteen has replaced with briquettes for cooking purposes as it is renewable and clean source of energy intended to curb the greenhouse gas emissions. As other canteens use LPG stove, the safety and utility committee oversees the safety of using and storing LPG cylinders within the campus.



# **Rural Entrepreneurship**

On August 21, 2021, Sri Ramachandra Faculty of Management Sciences hosted a rural entrepreneurship development programme. The Rural Entrepreneurship Development Program assists SRIHER students in conducting Entrepreneurship Development Programs to improve

entrepreneurial and activity-oriented skills among unemployed rural women seeking to start small or micro-businesses. Mrs. Vasanthi Shankar empowered women and encouraged them to start their own business, something she had learned from her own experience. She also assured to the rural women to teach beautician courses to interested women.

On June 12, 2021, the Department of Environmental Health Engineering sponsored a "Healing the Nature-Green Initiatives at Individual Level" environmental awareness education workshop for SRIHER students. In addition to solar energy and water



conservation, Mr. Suresh stressed the need of waste food management and the utilization of associated trash for vegetation growth. He is identified as a resource person to be enagged in green initiatives of SRIHER

# **Corporate Social Responsibility (CSR)**

The Department of Environmental Health Engineering is in discussion with industry to participate in rural development programmes using CSR funds. Few firms have come forward to invest in toilets and biogas plants. The NSS unit has created a village-level connection with the president and members for smooth functioning of the programs of SRIHER. An online meeting was held with the Foundation for



Innovative Packaging and Sustainability (FIPS) to scope the objectives for their engagement with SRIHER. The MoU will aim to promote skill development courses in sustainable packaging and



circular economy, as well as technical and advisory support for packaging research projects.

Dr. P.V. VIJAYARAGHAVAN

M.B.B.S., D.Ortho, DNB (Ortho), M.Ch (Ortho) UK, FRCS (Glasgow)

FAOI (Swiss), FAIMER Fellow

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