

Dr. JAYANTHI. M, I.F.S MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagal Maaligai, No.1 Jeenis Road, Saidapet, Chennai-15. Phone No.044-24359973 Fax No. 044-24359975

ENVIRONMENTAL CLEARANCE (EC) Letter No. SEIAA/TN/F. 6673/EC/ 8(a)/648/2019 dated: 17.06.2019.

To,

M/s. Radiance Realty Developers India Limited No.480, Anna Salai, Khivraj Complex-II, 6th floor, Nandanam, Chennai - 600035

Sir,

Sub: SEIAA, TN - Environmental Clearance - Proposed construction of Multi Storied residential building by M/s. Radiance Realty Developers India Limited in old survey No. 1271/1, 1272/2, 1273/1B (part) & 2B, 1274/1B (part), & New T.S.No.13/2, Block No.55, Ward No. D of Madhavaram Village, Madhavaram Taluk, Thiruvallur District, Tamil Nadu - Issued - Regarding.

Ref:

- 1. Application for Environmental Clearance dated: 22.11.2018.
- 2. Proponent submitted revised application for EC dated: 06.03.2019
- 3. Minutes of the 127th SEAC meeting held on 15.03.2019
- 4. Proponent reply dated: 02.04.2019 & 10.05.2019
- 5. Minutes of the 129th SEAC meeting held on 17.05.2019
- 6. Minutes of the 345th SEIAA meeting held on 17.06.2019

This has reference to your application 2nd cited, the proposal is for obtaining Environmental Clearance to establish a construction project under Category B2 and Schedule S.No. 8(a) under the Environment Impact Assessment Notification, 2006, as amended.

MEMBER SECRETARY SEIAA-TN

Page 1 of 22

The Competent Authority and Authorized signatory furnished detailed information in Form 1 and Form 1A and liquidate enclosures are as Annexures:

Annexure 1

	PROJI	ECT DETAILS
SL No	Description	Details
1)	Name of the Project proponent and address	M/s. Radiance Realty Developers India Limited
		No.480, Anna Salai,
	and the second	Khivraj Complex-II, 6th floor, Nandanam, Chennai - 600035
2)	Proposed Activity	Proposed Construction of Multi Storied residential building
3)	Schedule No.	8(a)
4)	Project Location	M
	i)Survey No	Old survey No. 1271/1, 1272/2, 1273/1B (part)
	स्य राज्ये	& 2B, 1274/1B (part), & New T.S.No.13/2,
		Block No.55, Ward No. D
	ii)Revenue Village	Madhavaram
	iii)Taluk	Madhavaram
	iv)District	Thiruvallur
5)	Area of the Land	16632.03 Sq.m
6)	Built up Area	75,219.03 Sq.m
7)	Brief description of the project	Proposed construction of Residential group
		development comprises of (3 Blocks); Block 1
	The state of the s	& 2: combined double basement floor
		(parking) + combined stilt floor (part)/ ground
		floor (part) + combined first floor with
		swimming pool, gym & indoor games + 2nd
	MENT IMPACTASS	floor to 18 floors (each block with 208

MEMBER SECRETARY SEIAA-TN

Page 2 of 22

		dwelling units); Block 3: stilt + 18 floors with
		107 dwelling units (totally 523 dwelling units)
	Number of Dwelling Unit	523 Nos
8)	Expected Occupancies	2877 Nos
	including visitors	
9)	Parking facilities	7489.60 Sq.m
10)	Green Belt	2495 sq.m
11)	UTILITIES-WATER	
	Total Fresh Water	241 KLD
	Requirements	
	a)Source from where the water	CMWSSB
	is proposed to be drawn	
	i)Domestic Purposes	239 KLD
	ii) Swimming pool top up	2 KLD
	iii) Toilet Flushing (Recycled	126 KLD
	Water)	
	iv) Green belt	9 KLD
	development/gardening	THE RESERVE THE PROPERTY OF THE PARTY OF THE
	(Recycled Water)	
	v) OSR (Recycled Water)	6 KLD
12)	Waste Water	
	i) Sewage	Total grey water generated – 149 KLD
	1) Sewage	Total sewage water generated – 177 KLD
	ii) Details of Treatment	Grey water treatment plant capacity: 170 KLD
		i) Pressure Sand Filter
		ii) Activated Carbon Filter
		iii) UV Disinfection system
		STP capacity: 200 KLD (MBBR technology)
		i) Bar Screen Chamber
		ii) Collection tank
	SUMENT IMPACT ASSE	iii) Equalization tank
	181	TEIL

1. TI JUN 2019

		iv) Aeration Tank
		v) Secondary settling Tank
		vi) Clarified water Tank
		vii) Sludge holding tank
		viii) Filter water tank
		ix) UF Treated Tank
		x) Pressure Sand Filter
		xi) Activated Carbon Filter
		xii)UV Disinfection system
	iii) Mode of Disposal with	Treated Grey Water:
	quantity	Toilet Flushing - 126 KLD,
		Greenbelt development – 9 KLD
	AND	OSR – 6 KLD
		Treated STP Water:
		Excess treated STP water to roadside avenue
	144	plantation – 168 KLD
13)	SOLID WASTE	daka
	I) Municipal solid Waste	1621 Kg/day
	i) Bio degradable – 973 Kg /day	Organic Waste Convertor
	ii) Non Bio degradable – 648	Disposed to Authorized Recyclers
	Kg /day	Disposed to Authorized Recyclers
	iii) STP Sludge – 20 Kg/ day	Manure for gardening
14)	POWER REQUIREMENT	
	i) Electricity Board	4876.8 KVA
	ii) D.G. Set	2 nos. of 320 KVA & 1 nos. of 100 KVA
	iii) Height of Stack above the	Stack height of 62 m has been proposed for 320
	tallest Building	KVA DG & Stack height of 60 m has been
		proposed for 100 KVA DG
15)	Project Cost	Rs. 140.45 Crores
16).	EMP Cost	For Operation Phase:
1	WENT IMPACT ASSE	Capital Cost - 171 Lakhs,
	1/25/	TE I

Page 4 of 22

		Operation cost- 55 Lakhs		
17	GPS Coordinates of the Site			
	Boundary	S.No	Latitude	Longitude
		1.	13°08'29.1" N	80°13'23.1" E
		2.	13°08'27.1" N	80°13'23.4" E
		3.	13°08'25.5" N	80°13'19.8" E
		4.	13°08'25.6" N	80°13'19.8" E
	eta Til 2015 an astrolia d	5.	13°08'26.3" N	80°13'26.4" E
		6.	13°08'27.2" N	80°13'31.0" E
		7.	13°08'27.0" N	80°13'28.8" E
		8.	13°08'27.5" N	80°13'28.8" E
		9.	13°08'29.7" N	80°13'26.5" E
		10.	13°08'29.7" N	80°13'26.4" E

Annexure 2- Affidavit

The Proponent has furnished affidavit in Hundred Rupees stamp paper attested by the Notary stating that

- The enclosed photograph of the site of the project has been taken on day of 14th march of the year 2019. This photograph has been attested by me, counter-signed by the Environment Consultant engaged for the project under appraisal and notarized by an approved Notary Public. It truly depicts the status of the site as on this day.
- 2. We commit to SEIAA that the total fresh water requirement for our residential group development is 241 KLD in which 239 KLD for domestic purposes & 2 KLD for swimming pool top up. The required water will be met through CMWSSB. We assure that the required permission from the competent Authority for supply of fresh water for entire period of operation will be obtained before obtaining completion certificate from the competent authority.
- 3. We commit to SEIAA that the Total quantity of Grey Water generated from the residential group development is 149 KLD which will be treated in the 170 KLD grey water treatment with out of which 141 kld of treated water will be

MEMBER SECRETARY SEIAA-TN

Page 5 of 22

generated, out of which 126 kld will be used for flushing, 9 kld will be used gardening, 6 kld will be used for OSR remaining. Total quantity of black water generated is 177 kld which will be treated in STP of 200 kld capacity, out of which 168 kld will be used for roadside avenue plantation.

- 4. We commit to SEIAA that the Total Municipal Solid waste generated from the development will be 1621 kg/day, out of which 973 Kg /day of compostable waste will be treated in organic waste convertor within the project site, 648 Kg /day of recyclable waste will be sold to authorized recyclers. STP dry sludge of 20 kg/day will be used as manure for gardening.
- 5. We have allocated the CER fund of Rs. 70 lakhs will be utilized for the following activities for Corporation School at 1.23 km in Madhavaram (NE)

S.No	CER Activity	Capital cost Allocation (in Lakhs)
1	Infrastructure development for sports facility, class room, knowledge center & Provision of basic amenities such as safe drinking water, Hygienic Toilets facilities, furnitures.	70
Total	cost allocation	70

6. The capital cost of Rs. 70 lakhs towards CER activities will be spent before applying CTO from TNPCB.

1.罗瑟/夏/夏/夏/

- We assure that we are liable for the operation and maintenance of STP for a period of 10 years from the date of operation of the project.
- We also assure that the storm water drain would not carry any untreated or treated sewage.
- We also assure that our project site does not encroach any water bodies such as rivers, canals, nallas, lakes, ponds, tanks, etc., from its original boundary.
- 10. We also assure that no litigations are pending against the project.
- 11. I am aware that I can be prosecuted under relevant Act and Rules, if I am not ensuring the adherence of the above commitment.

The project activity is covered in 8(a) of the Schedule and is of B2 category. It does not require Public Consultation as per Para 7 III Stage (3) (i) (d) of EIA Notification, 2006.

The Authority after consideration all the requisite documents with status and data and based on SEAC appraisal and recommendations for issue of Environmental Clearance in its 129th SEAC meeting held on 17.05.2019, SEIAA placed the proposal in the 345th SEIAA meeting held on 17.06.2019, hereby conveyed 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 14th 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:

SPECIFIC CONDITIONS

The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.

<u>Part - A - Common conditions applicable for Pre-construction, Construction and Operational 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.
- 2. The construction of STP, 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.

MEMBER SECRETARY
SEIAA-TN

Page 7 of 22

- 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.
- 5. The SEIAA reserves the right to add additional safeguard measures subsequently, if non-compliance of any of the EC conditions is found and to take action, including revoking of this Environmental Clearance as the case may be.
- 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; PM10, PM2.5, SO2, NOx (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.

MEMBER SECRETARY

3.48

- 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 set-up 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 of Rs. 226 Lakhs 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 activity should not cause any disturbance & deterioration of the local bio diversity.
- 23. 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.
- 24. All the assessed flora & fauna should be conserved and protected.
- 25. The proponent shall ensure that no impact on the nearby biodiversity occurs due to the project activity.
- 26. At any cost, treated/untreated sewage should not be discharged into the nearby water bodies. Similarly, the nearby water bodies should not be polluted with municipal solid waste generated from the project.
- 27. The height of the stack of DG sets shall be provided as per the CPCB norms.
- 28. Solar energy should be atleast 10% of total energy utilization. Further the proponent shall use solar panels for all the street lights proposed inside the premises.

MEMBER SECRETARY

29. 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.

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 fire fighting 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.
- 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.
- 9. 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.

MEMBER SECRETARY SEIAA-TN

Page 11 of 22

- 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 DTCP norms.
- 12. The project proponent shall ensure the level 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.
 - 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 structural design of the proposed building must be vetted by premier academic institutions like Anna University, IIT Madras, etc., and the fact shall be informed to SEIAA.
- 16. The present land use surrounding the project site shall not be disturbed at any point of time.
- 17. The green belt area shall be planted with indigenous native trees.
- 18. 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.
- 19. During the construction and operation phase, there should be no disturbance to the aquatic eco-system within and operation the area.

Page 12 of 22

- 20. The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972& Bio diversity Act 2002 should not be violated.
- 21. There should be Fire fighting plan and all required safety plan.
- 22. 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:

- i) All the labourers 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:

- i) The entire water requirement during construction phase may be met from ground water source from the source with approval of the PWD Department of water resources/ may be out sourced.
- 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 SPP, safe drinking water, medical health care, crèche etc.

MEMBER SECRETARY SEIAA-TN

Page 13 of 22

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 premixed 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) The solid waste in the form of excavated earth excluding the top soil generated from the project activity shall be scientifically utilized for construction of approach roads and peripheral roads, as reported.
- ii) In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be cocomposted with biodegradables.
- iii) House hold 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.

5. Top Soil Management:

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

BL A. W

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

MEMBER SECRETARY
SEIAA-TN

Page 14 of 22

aspects of the people. The construction and demolition waste shall be managed as per Construction & Demolition Waste Management Rules, 2016.

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 underground tanks 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

MEMBER SECRETARY SEIAA-TN

7.46

- 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.

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 cube-tests 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:

- 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:

- 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.

MEMBER SECRETARY SEIAA-TM

Page 16 of 22

- 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.
- 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:

- 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:

- 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 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.
- iv) The purpose of Green belt around residential buildings is to capture the fugitive emissions and to attenuate the noise generated, in addition to the improvement in the aesthetics. A wild range of indigenous plants species

should be planted in and around the premise in consultation with the DFO, District / State Agriculture University.

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) At any cost, treated/untreated sewage should not be discharged into the nearby water bodies. Similarly, the nearby water bodies should not be polluted with municipal solid waste generated from the project
- iv) The project proponent shall operate and maintain the Sewage treatment Plant and Grey water Treatment plant effectively to meet out the standards prescribed by the CPCB.

15. Rain Water Harvesting:

- i) The proponent/ Owner of the Flats 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 collection tank in order to recover and reuse the rain water during normal rains.
- iv) The Project Proponent has to provide rain water harvesting collection tank to the capacity of 160 Cu.m in order to recover and reuse the rain water during normal rains as committed

16. Building Safety:

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

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

- 1. There should be Fire fighting plan and all required safety plan.
- 2. Regular fire drills should be held to create awareness among owners/ residents.
- House hold 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. The project proponent has to furnish the certificate stating that the proposed site had not encroached any water body (rivers, canals, lakes, ponds, tanks, etc) from its original boundary shall be obtained from the competent authority before obtaining CTE from TNPCB.
- 6. For CER: The project proponent shall allocate and utilize the CER fund of Rs. 140.6 Lakhs as per MOEF & CC OM dated: 01.05.2018 shall be utilized for restoration of water bodies surrounding the project site in consultation with EMAT. The above said amount shall be paid in the form of DD favoring Environmental Management Authority of Tamil Nadu" (EMAT) before applying for CTO from TNPCB.
- 7. The EMP cost of Rs. 226 Lakhs 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. NOC from State Ground And Surface Water Resources Data Centre, Water Resources Department, Public Works Department, Tamil Nadu shall be obtained before the extraction of groundwater.
- 15. Raw water quality to be checked for portability and if necessary RO plant shall be provided.
- 16. 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 10 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.
- 17. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.
- 18. 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 laid down by CPCB irrespective of any use. Necessary measures should be made to mitigate the odour and mosquito problem from STP.

8.41

- 19. The Proponent shall operate STP continuously by providing stand by DG set in case of power failure.
- 20. 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
- 21. Adequate measures should be taken to prevent odour emanating from solid waste processing plant and STP.
- 22. 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.
- 23. 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.
- 24. The noise level shall be maintained as per MoEF/CPCB/TNPCB guidelines/norms both during day and night time.
- 25. 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.
- 26. The proponent is required to provide a house hold hazardous waste / E-waste collection and disposal mechanism.
- 27. The proponent/ Owner of the Flats 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.
- 28. 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.

Page 21 of 22

- 29. A copy of the Environmental clearance (EC) letter shall be made available to all the allottees along with the allotment order / sale deed.
- 30. 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.

Copy to:

- The Principal 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.
- The Member Secretary, Tamil Nadu Pollution Control Board,
 Mount Salai, Guindy, Chennai-600 032.
- The APCCF (C), Regional Office, Ministry of Environment & Forest (SZ),
 HEPC Building, 1st& 2nd 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 Commissioner, Greater Chennai Corporation, Rippon Building, Chennai
- 7. Stock File.

