

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. 6957/EC/ 8(b)/683/2019 dated: 11.12.2019.

To

The Managing Director

M/s. Tamil Nadu Polymer Industries Park Ltd.

19-A, Rukmani Lakshmipathy Road

Post Box No.7223

Egmore

Chennai-600 008

Sir,

Sub: SEIAA, TN - Environmental Clearance – Proposed establishment of Polymer Industries Park at Voyalur & Puzhidivakkam by M/s. Tamil Nadu Polymer Industries Park Ltd at S.F. No. 143 & 187 of Puzhidivakkam village, 2053B part of Voyalur Village, Ponneri Taluk, Tiruvallur District, Tamil Nadu - Issued – Regarding.

Ref: 1. Your application for Terms of Reference dated: 22.07.2019

- 2. ToR Issued by SEIAA-TN Vide Lr. No. SEIAA/ TN/ F.No.6957/ SEAC/ ToR-654/ 2019 dated: 31.10.2019
- 3. Proponent EIA report submitted to SEIAA-TN on 20.11.2019
- 4. Minutes of the 139th SEAC Meeting held on 23.11.2019

5. Minutes of the 162 stran Meeting held on 27.11.2019

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- 6. Proponent revised EIA report submitted to SEIAA-TN on 09.12.2019
- 7. Minutes of the 363rd SEIAA Meeting held on 11.12.2019

This has reference to your application 3rd cited, the proposal is for obtaining Environmental Clearance to establish a construction project under Category B2 and Schedule S.No. 8(b) under the Environment Impact Assessment Notification, 2006, as amended.

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

Annexure 1

PROJECT DETAILS			
SL No	Description	Details	
1)	Name of the Project proponent a	nd The Managing Director	
	address	Tamilnadu Polymer Industries Park Limited,	
		19/A, Rukmani Lakshmipathy Road,	
		Egmore, Chennai – 600 008	
2)	Proposed Activity	Proposed establishment of Polymer	
		Industries Park at Voyalur &	
		Puzhidivakkam Villages	
3)	Schedule No.	8(b)	
4)	Project Location		
	i)Survey No	143 & 187 of Puzhidivakkam village,	
		2053B part of Voyalur Village	
	ii)Revenue Village	Puzhidivakkam & Voyalur Village	
	iii)Taluk	Ponneri	
	iv)District	Tiruvallur	
5)	Area of the Land	239.82 acres	
6)	Built up Area		

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	Sl.No.	Descri	ption	Area (Acres)
		Plot area		167.21
	2	OSR		24.38
	3	Amenities		5.01
	4	Logistics (Truck Terminal))	6.00
	5	Solid Waste Management		9.00
	6	Road, Water supply, Storm	water drain & Street	
		Lights		25.22
	7	Utility Corridor		3.00
		Total area		239.82
7)	Brief description of the project			
	The proposal is an infrastructure development project. It involves development			
	of roads, water supply, storm water drainage, street lights, green belt			
	development, and such other amenities. Industrial Park will house industries which do not fall under EIA Notification			
	2006 and amendments thereof. The proposed industries include the following:			
	Polymer and Plastic Components/Parts/Products			
	Engineering Manufacturing / Production, specifically, Machines for			Machines for
	Plastic component manufacturing with Metal Finishing and Surface			and Surface
	C	coating activities.		
	• A	ny other industries that	are not under the pu	rview of EIA
	Notification,2006			
8)	Lar	nd Use Classification	Patta dry land & Govt Po	oramboke Land



9) Green Belt				
	Sl.No. Description		Area	
				(Acres)
	1.	In OSR	***************************************	24.38
	2.	By Member Industries (33	3 % of the total plot	56.30
		area		
		allotted to Member Industries) i.e 33% of		
		167.21 Ha		
		Total		80.68
		Percentage of Green Belt		33.09%
		Industrial Park i.e 239.82	hectares	33.0770
10)	UI	TILITIES-WATER		
	a) 7	Total Water Requirements	1 M	LD
	b)	Source from where the	Tamil Nadu Water Supply and Drainage	
		water is proposed to be	Board (TWAD)	
	drawn		·	
	c) Sewage system		All member units will be mandated to	
			install "Zero Liquid Discharge" based	
			Effluent Treatment Plants to reclaim	
			water for recycle/reuse in their utilities	
İ			and green belt development.	
			The quantity of sewage that will be	
			generated from SIPO	COT administrative
			office will be mana	ged in septic tank
			followed by soak pit	
	d)	ETP & Recycle line	All member units w	
			install "Zero Liquid	
			Effluent Treatment	
			water for recycle/reu	
11)	~	1337 . 3.6	and green belt develo	-
11)	Solid	Waste Management	Area of 9 acres has 1	•
			establishing a solid	waste management
-			facility.	



		· ,,
		SIPCOT will identify a TSDF provider and facilitate to establish such a treatment, storage and disposal facility(TSDF) in line with guidelines of CPCB & MoEF & CC.
	· · · · · · · · · · · · · · · · · · ·	Solid waste generated will be disposed to the approved Municipal Solid Waste Management or else SIPCOT will set up its facility through renowned agencies by outsourcing their services on annual contract basis
12)	Power requirement	50MW from TANGEDCO
13)	Project Cost	Rs. 216.91 Crores
14)	EMP Cost	For Operation Phase: Capital Cost –72.76 lakhs Operation cost- 36.60 Lakhs per annum

Annexure 2- Affidavit

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

I, Dr. S. AneeshSekhar, IAS, Managing Director, Authorised Signatory, represent M/s. Tamil Nadu Polymer Industries Park Ltd (TPIPL), 19-A, RukmaniLakshmipathy Road, Egmore, Chennai – 600008. We have proposed to establish a polymer industries park over an extent of 239.82acres at Voyalur and Puzhudivakkam Villages, Ponneri taluk, Thiruvallur District. 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, hereby solemnly affirm and state as follows:-

1. We commit to SEIAA that will develop Green belt in 10.16% of the total area i.e 24.38 acres. Further, we will also ensure the development of green belt in 33% of the allotted area by the member units i.e 55.18 acres, which is 23.01% of total area. It will be made as a mandatory condition in the land allotment order as well as the lease deed to be executed between TPIPL and allottees. The net area of

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- green belt of the proposed industrial park in the post project scenario will be 79.56 acres, which is 33.17% of the total area of the park.
- 2. We commit to SEIAA that the area proposed for the park does not fall under CRZ area. The co-ordinates of the site as per the map prepared by Institute of Remote Sensing, Anna University superimposing the site on approved CZMP as per CRZ notification 2011 vide Ref.No.AU/IRS/CU/229-2019 are as follows:

Label	Latitude	Longitude
A	13 ⁰ 17'53.829"N	80 ⁰ 18'57.149"E
В	13 ⁰ 17'51.613"N	80 ⁰ 19'6.267"E
С	13 ⁰ 17'29.520"N	80 ⁰ 19'17.462"E
D	13 ⁰ 17'25.876"N	80 ⁰ 19'17.624"E
Е	13 ⁰ 17'0.406"N	80 ⁰ 19'11.241"E
F	13 ⁰ 16'45.849"N	80 ⁰ 19'2.924"E
G	13 ⁰ 16'11.552"N	80 ⁰ 18'54.004"E
Н	13 ⁰ 16'10.676"N	80 ⁰ 18'48.620"E
I	13 ⁰ 16'15.943"N	80 ⁰ 18'48.161"E
J	13 ⁰ 16'16.212"N	80 ⁰ 18'46.548"E
K	13 ⁰ 16'39.554"N	80 ⁰ 18'52.076"E
L	13 ⁰ 16'44.580"N	80 ⁰ 18'50.337"E
M	13°16'56.035"N	80°18'44.163"E
N	13°17'3.801"N	80°18'42.680"E
0	13°17'5.139"N	80°18'43.162"E
P	13°17'2.214"N	80°18'53.224"E
Q	13°16'59.337"N	80°18'57.518"E
R	13°16'59.532"N	80°19'3.514"E
S	13°17'18.118"N	80°19'8.899"E
T	13°17'26.234"N	80°19'9.191''E
U	13°17'29.254"N	80°19'8.933"E
V	13°17,30008077N	90°19'6.172"E

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W	13°17'33.153"N	80°19'8.035"E

- 3. We commit to SEIAA that the total water requirement for the park is 1MLD, which will be obtained from Tamil Nadu Water Supply and Drainage Board (TWAD). TWAD Board has already issued approval for 2.2 MLD (Letter No. 1609/F.CBIC/DO/PF Dn/VLR/date: 16.09.2015.
- 4. We commit to SEIAA that all member units will be mandated to install "Zero Liquid Discharge" based Effluent Treatment Plants to reclaim water for recycle/reuse in their utilities and green belt development. We will mandate to member units to manage the sewage as per TNPCB norms. The solid waste stream will be sent to TNPCB approved vendors/TSDF for proper and ultimate disposal. The quantity of sewage that will be generated from TPIPL administrative office will only be 1000litres/day and it will be managed in septic tank followed by soak pit as onsite construction.
- 5. We commit to SEIAA that all member units will be mandated to provide rain water harvesting structures as per norms. TPIPL will construct percolation tanks for harvesting the rainwater in the project office.
- 6. We commit to SEIAA that we will provide storm water drainage system as open concrete channels, all along the road side for ensuring proper collection of storm water and will let out in the nearby water bodies. We also assure that the storm water drain would not carry any untreated or treated sewage.
- 7. We commit to SEIAA that we will undertake CER activities as per norms with the approval of board of TPIPL.
- 8. 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.
- 9. We are aware that we can be prosecuted under relevant Act and Rules, if we are not ensuring the adherence of the above commitment

The project activity is covered in 8(b) 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.

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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 139th meeting held on 23.11.2019, SEIAA placed the proposal in the 363rd SEIAA meeting held on 19.12.2019 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:

<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.
- 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.
- 9. "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 Polymon) Act, 1974, the Air (Prevention & Control of

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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.



- 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.1.09 Crores 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 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.
- 26. As per MoEF & CC, GoI, Office Memorandum dated 30.03.2015, prior clearance from Forestry & Wildlife angle including clearance from obtaining committee of the National Board for Wildlife as applicable shall be obtained



- before starting the quarrying operation, if the project site is located within 10KM from National Park and Sanctuaries.
- 27. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
- 28. The safety measures proposed in the report should be strictly followed.
- 29. The Developer shall ensure that no allotment letter/ sale deed in any form shall be made to house category A or category B industry as prescribed in the schedule of EIA notification 2006. However, in case any category A or category B type of industry as prescribed in the schedule of EIA notification 2006 is proposed then the individual unit shall apply and seek Environmental Clearance under the EIA notification 2006.
- 30. The project proponent must submit the permissible land use classification certificate obtained from competent authority for the proposed project before obtain the CTE from TNPCB.
- 31. The proponent shall obtain the necessary permission/ NOC of water supply from the TWAD board
- 32. The Developer shall mandate the member industries of the Industrial Park to allot 33% of the plot area for green belt development and to install RWH structures.
- 33. The Developer has to ensure that all the member industries within the Industrial Park shall make their own arrangements to achieve zero discharge of the trade effluents, solid waste & E waste management, gaseous emission and noise control measures to achieve the standards prescribed by the TNPCB.
- .34. The project proponent shall ensure that the individual member units will not be allowed to carry out manufacturing of products stipulated in G.O. (Ms) No. 84 dated 25/06/2018 on banning of one time use on and throwaway plastics.
- 35. The project proponent must submit the permissible land use classification certificate obtained from competent authority for the proposed project before obtain the CTE from TNPCB.



- 36. The CER fund shall be utilized as per the office memorandum of MoEF & CC dated 01.05.2018 before obtaining CTO from TNPCB.
- 37. The allotted industrial units shall obtain consent from the TNPCB separately for their establishment & operation in this industrial estate.
- 38. The project proponent shall ensure that 33% of the total area of the project site should be covered with green belt.
- 39. The proponent shall provide Rain Water Harvesting pits so as to recharge the ground water table.
- 40. Discharge of treated sewage shall conform to the norms & standards prescribed by the Tamil Nadu Pollution Control Board.
- 41. It is the sole responsibility of the proponent that the treated sewage disposed for green belt development/ avenue plantation should not pollute the soil/ ground water/ adjacent canals/ lakes/ ponds, etc.
- 42. The Developer has to ensure that all the member industries within the Industrial Park shall make their own arrangements to achieve zero discharge of the trade effluents,
- 43. The project proponent shall ensure that all the member units should treat and dispose solid waste & E-waste as per the Solid Waste Management Rule2016 as amended and E-Waste Management Rules, 2016
- 44. There shall be no discharge of effluent outside the Industrial Park at any time.
- 45. The Developer shall mandate the member units of the Industrial Park to install adequate APC measures/Acoustic to achieve air emissions standards within permissible limits prescribed by the CPCB.
- 46. The Project proponent shall earmark the following Co ordinates in the project site as per CRZ map issued by IRS, Anna University and shall provide with pillar stone.

LABLE	LATITUDE	LONGITUDE
A	13°17'53.829"N	80°18'57.149"E
В	13°17'51.613"N	80°19'6.267"E
С	13°17'29.520"N	80°19'17.462"E
D	13°17'25.876"N	80°19'17.624"E
E	13°17'0.406"N	80°19'11.241"E



F	13°16'45.849"N	80°19'2.924"E
G	13°16'11.552"N	80°18'54.004"E
H	13°16'10.676"N	80°18'48.620"E
I	13°16'15.943"N	80°18'48.161"E
J	13°16'16.212"N	80°18'46.548"E
K	13°16'39.554"N	80°18'52.076"E
L	13°16'44.580"N	80°18'50.337"E
M	13°16'56.035"N	80°18'44.163"E
N	13°17'3.801"N	80°18'42.680"E
0	13°17'5.139"N	80°18'43.162"E
P	13°17'2.214"N	80°18'53.224"E
Q	13°16'59,337''N	80°18'57.518"E
R	13°16'59.532"N	80°19'3.514"E
S	13°17'18[18"N	80°19'8.899"E
T	13°17'26.234"N	80°19'9.191"E
U	13°17'29.254''N	80°19'8.933"E
V	13°17'30.657."N	80°19'6.172"E
W	13°17'33.153"N	80°19'8.035"E

47. The Environmental Clearance issued only for the revised proposal submitted by the proponent for the project site fall non CRZ area as per CRZ (Ref.No AU/IRS/CU/229-2019 Dt.9.12.2019) map issued by IRS, Anna University.

<u>Part - B - Specific Conditions - Pre construction phase:</u>

- 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 adequates of fire fighting equipments, etc as per

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

- 5. 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.
- 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.
- 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 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.
 - 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



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- 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.
- 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 Fire fighting 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:

i) 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 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

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- 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 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 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) 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.



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- ii) 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.
- 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:

i) 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.
- 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, which rules framed thereon.

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- 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:

- i) 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 DTCP 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:

- 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:

- 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.
- 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 purpose of Green belt around the project 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, Viluppuram District / State Agriculture University. The plants species should have thick canopy cover, perennial green nature, native origin and large leaf areas. Medium size trees and small trees alternating with shrubs shall be planted. If possible Miyawaki method of planting i.e planting different types of trees at very close escapement may be tried which will give a good green cover. A total of 15% of the plot area should be designated for green belt which should be raised along the boundaries of the plot and in between blocks in an organized manner
- 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 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 DTCP approval

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

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 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 the cessary.

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

- 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. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- 7. Solar energy saving shall be increased to atleast10% of total energy utilization.
- 8. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- 9. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF & CC as a part of sixmonthly report.



- 10. 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.
- 11. The Project proponent shall get due permission from the wetland Authority before the commencement of the work, if applicable.
- 12. The project activities should in no way disturb the manmade structures.
- 13. 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.
- 14. "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.
- 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 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.
- 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.



- 19. The Proponent shall operate STP continuously by providing stand by DG set in case of power failure.
- 20. 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/ 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.
- 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. A copy of the Environmental clearance (EC) letter shall be made available to all the allottees along with the allotment order / sale deed.



29. 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.

MEMBER SECRETARY
SEIAA-TN

Copy to:

- 1. 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.
- 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, 1st& 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai 34.
- 5. Monitoring Cell, I A Division, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi 110003.
- 6. The District Collector, Tiruvallur District
- 7. Stock File.

