

File No: 10640 Government of India Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority(SEIAA), TAMIL NADU) ***



Dated 23/04/2024



To,

10,		
	Sudhakar MD	
	PURAVANKARA LIMITED	
	No 33, Ground Floor, 2nd Street, South Beach av	enue, MRC Nagar, RA Puram, Chennai 600028,
	CHENNAI, TAMIL NADU, 600028	
	puravankara2022@gmail.com	
	ST D' A COMP	
Subject:	Grant of EC under the provision of the EIA Notif	ication 2006-regarding.
Sir/Mada <mark>m,</mark>		
,	This is in reference to your application for Gra	nt of EC under the provision of the EIA Notification
		onstruction of High-Rise Building at S.No : 299/1A1,
	299/1B, 299/2A1, 299/2B1, 299/3B1, 299/3C1,	299/4B, 301/1A, 301/2A, 301/3A of Sathankuppam
	Village (Hamlet of Pudupakkam), Vandalur T	aluk and 612B/2 of Padur Village, Thiruporur Taluk,
	Chengalpet District, Tamil Nadu by M/s Purava	nkara Limited submitted to SEIAA-TN vide proposal
	number SIA/TN/INFRA2/457893/2024 dated 13/	/03/2024.
	Reference:	
	1. EC Letter No. SEIAA/TN/F-1821/EC/8(b)/365	
	2. Online Proposal No SIA/TN/INFRA2/457893/	
	3. Application seeking Environmental Clearance	dated: 18.01.2024.
	2. The particulars of the proposal are as below :	
	2. The particulars of the proposal are as below .	
	(i) EC Identification No.	EC24C3801TN5733600N
	(ii) File No.	10640
	(iii) Clearance Type	EC
	(iv) Category	B2
	(v) Project/Activity Included Schedule No.	8(a) Building / Construction
	•	Proposed Construction of High-Rise Building by
	(vii) Name of Project	M/s Puravankara Limited
	(viii) Name of Company/Organization	PURAVANKARA LIMITED
	(ix) Location of Project (District, State)	CHENGALPATTU, TAMIL NADU
	(x) Issuing Authority	SEIAA
	(xi) Applicability of General Conditions	no

- 3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) EIA & EMP Reports were submitted to the SEIAA for an appraisal by the State Expert Appraisal Committee (SEAC) under the provisions of EIA notification 2006 and its subsequent amendments.
- 4. The above-mentioned proposal has been considered by SEIAA in the meeting held on 18/04/2024. The minutes of the meeting and all the Application and documents are available on PARIVESH portal which can be accessed by scanning the QR Code above.

S. No	Description	Details			
1.	Name of the Project	Proposed Construction of High-Rise Building			
2.	Location	S.No : 299/1A1, 299/1B, 299/2A1, 299/2B1, 299/3B1, 299/3C1, 299/4B, 301/1A, 301/2A, 301/3A of Sathankuppam Village (Hamlet of Pudupakkam), Vandalur Taluk and 612B/2 of Padur Village, Thiruporur Taluk, Chengalpet District			
3.	Type of Project	8(a) Building and Construction Proje	ect		
4.	Latitude & Longitude	Latitude	Longitude		
		12°47'39.60"N	80°12'32.67"	E	
		12°47'37.16"N,	80°12'39.24"	E	
		12°47'33.88"N	80°12'38.46"	E	
		12°47'35.49"N	80°12'32.39"	E	
	\geq	12°47'36.53"N	80°12'32.76"	E	
		12°47' <mark>37.07"</mark> N	80°12'31.56"	E	
			·	S I	
5. 6.	Total Plot Area (in sq. m) Brief description of the project	23,371 <mark>Sq</mark> m			
	 Tower A with Combined Stilt+ Combined Podium 1/1st floor+ Com Podium 2/2nd Floor + 3rd floor to18th floor with 169 Dwelling Units. Tower B with Combined Stilt+ Combined Podium 1/1st floor+ Com Podium 2/2nd Floor + 3rd floor to18th floor with 169 Dwelling Units. Tower C with Combined Stilt+ Combined Podium 1/1st floor+ Com Podium 2/2nd Floor + 3rd floor to18th floor with 169 Dwelling Units. Tower D with Combined Stilt+ Combined Podium 1/1st floor+ Com Podium 2/2nd Floor + 3rd floor to18th floor with 169 Dwelling Units. Tower D with Combined Stilt+ Combined Podium 1/1st floor+ Com Podium 2/2nd Floor + 3rd floor to18th floor with 169 Dwelling Units. Club House with Combined Stilt + Combined Podium 1/1st floor+ Combined Podium 2/2nd Floor + 3rd floor to 5th Floor. Built-up area is 1,00,732.88 Sq.m. 				Units. + Combined Units. + Combined Units. + Combined Units. 1/1st floor+
7.	Built up area details	Name of theBuilt-up Area Block/Building (FSI Area) Sqm Tower A, Tower B, Tower C, Tower Combined Stilt1746.63 Floor Combined Podium2544.77	Sqm (parking)	(OT/Driver's room)	Total Built Up Area 9851.91

5. The salient features of the project are as follows:

		3rd Floor	4423.32	0.00	438.5		2
		4th Floor	4116.12	0.00	393.8	4509.94	ł
		5th Floor	4445.14	0.00	452.7	4897.89)
		6th Floor	4405.04	0.00	421.7	4826.74	ł
		7th Floor	4192.53	0.00	421.5	6 4614.09)
		8th Floor	4151.07	0.00	394.0	07 4545.14	ł
		9th Floor	4116.12	0.00	393.8	4509.94	ł
		10th Floor	4116.12	0.00	393.8	4509.94	ł
		11th Floor	4151.07	0.00	394.0	07 4545.14	ł
		12th Floor	4116.12	0.00	393.8	4509.94	ł
		13th Floor	4116.12	0.00	393.8	4509.94	ł
		14th Floor	4151.07	0.00	394.0	07 4545.14	ł
		15th Floor	4116.12	0.00	393.8	4509.94	ł
		16th Floor	4116.12	0.00	393.8	4509.94	ł
		17th Floor	4151.07	0.00	394.0	07 4545.14	ł
		18th Floor	4116.12	0.00	393.8	4509.94	ł
			10.05		<u> </u>	10.05	
		Total	73937.24	1954	7.69 7247.		.88
			- /				
8.	Maximum height of the project	58.35 m	IVE				
9.	Maximum number of floors	18 Floors	0-5	0			
10.		4 Blocks	K SUNA DA	$\sim \checkmark$			
10. 11.	Permissible FSI area	12.55					
		75955.75 sq		12			
12.	Proposed FSI area	73937.24 sq					
13.	3	Rs.32 <mark>9.72 C</mark>					
14.	No. of Saleable Units	676 Dwellin	g Units				
15.	1 1	4128 Nos					
16.	a) Water requirement (in KLD)	Fresh water-	-340 KLD				
17.	b) Source	Thiruporur I	Panchayat	18			
18.	Details of Sewage generation and Treatment	STP of 500 1	KLD	S- ///			
19.	Details of greywater / Effluent generation and Treatment	Nil	CODEE	N	Ś	2	
20.	Mode of Disposal of treated	Flushing-17'	2 KLD		5		
20.			Dvelopment-18 KI	D			
			ed sewage to Thir		avat- 261 KI D		
21.	Quantity of Solid Waste			Quantity	layar 201 KLD		
21.	generation, Mode of treatment	S. No. Des	cription	(Kg/day)	Mode of treat	ment / disposal	
	and Disposal				Will be treat	ted in Organic Wa	octo
	and Disposal	Bio	degradable (@409	¹ 776		d used as manure	
		of w	vaste generated)	110		J used as manufe	101
		Nor	Diadaanadahi	l.a.	gardening.		
			- Biodegradabl		Will Send to	authorized recyc	elers
			60% of wast	le1105	for recycling		
		gene	erated)		X7:11 1		f
		3 STP	sludge	25	Will be us greenbelt deve		for
22	Overtity of TW	NT:1					
22.	Quantity of E-Waste						
	generation, Mode of treatment						
00	and Disposal	A T'1					
23.	Quantity of Biomedical Waste	µN11					

	generation, Mode of treatment					
	and Disposal					
24.	Quantity of Hazardous Waste	Nil				
27.	generation, Mode of treatment					
	and Disposal					
25.	-	6498 KVA				
26.	Details of solar energy	50% of the total roof area is	provided w	vith S	olar Panels	
		9.3 KLD of Hot water will b	-			ıter
27.	Details of D.G. set with	DG set of 4 Nos. x 625 KVA		<u> </u>		
	Capacity					
28.	Details of Green Belt Area					
	i) Total area of green belt					
	ii) No. of trees existing within					
	the project site	-10				
	iii) No. of trees proposed to be	Jan Land				
	planted					
	iv) No. of trees to be					
	transplant <mark>ed / cut</mark>					
29.	Details of OSR Area	Nil	7			
30.	Details of Parking Area	Details		of king	Car No of wheeler parking	two- Area allotted for parking in (Sqm)
	N N N N	1. Surface Parking	206		5	2428.52
		2. Stilt Parking	239		325	8032.42
		3. Podium 1	145		237	5914.89
		4. Podium 2	122		186	5604.21
		Total number of Car required as DTCP norms	Parks 308		753	<u> </u>
		Total number of Car provided	Parks 712		753	-
31.		190 Cum Rainwater storage		2.0		
	harvesting	Recharge pit: 30 Nos with D	ia 1.2 m, d	epth	3 m.	
32.	EMP Cost (Rs.)	During Construction Phase				0
	1 3 A	Capital Cost – Rs.16 Lakhs				
		O & M Cost (Per Annum)- H	Rs.6 Lakhs			
	10	Operation Phase				
	62	Capital Cost- Rs. 385 Lakhs				
		Recurring Cost- Rs. 49.5 Lai	khs	6		
33.	CER Cost	Rs.320 Lakhs				

6. The SEAC, based on the information viz: Form 1, EIA/EMP report etc., & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to compliance of Specific and Standard EC conditions as given in this letter.

- 7. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact Assessment Authority(SEIAA) Appraisal Committee hereby decided to grant EC for instant proposal of Thiru. Sudhakar MD under the provisions of EIA Notification, 2006 and as amended thereof.
- 8. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.

9. The EC to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to

approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

- 10. The Project Proponent is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.
- 11. Validity of EC is for a period of 7 years from the date of issue of EC. In case the project proponent fails to complete the construction/proposed activities within the EC validity date, application for EC validity extension shall be submitted to the regulatory authority as per the provision contained in the Para 9.0 of EIA notification, 2006 and its amendment.

12. General Instructions:

- 13. a) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- 14. b) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- 15. c) The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks
- 16. and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
- 17. d) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
- 18. (e) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 19. (f) The Regional Office of this Ministry 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.
- 20. (g) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 21. This issues with the approval of the Competent Authority.

Copy To

- 1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- 2. The Additional Chief Secretary to Government, Environment and Forests Department, Tamil Nadu.
- 3. The Additional Chief Secretary to Government, Natural Resources Department, Tamil Nadu.

4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.

- 5. The Chair Person, TNPC Board, 76, Mount Salai, Guindy, Chennai-32
- 6. The Commissioner, Greater Chennai Corporation, Rippon Building, Chennai District

7. Directorate of Town and Country Planning, Opposite to LIC, Chengalvarayan Building, Fourth Floor, 807, Anna Salai, Chennai – 600 002.

8. File Copy.

Specific EC Conditions for (Building / Construction)

1. Seac Conditions - Site Specific

S. No	EC Conditions				
1.1	 The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating. The PP shall obtain fresh water supply commitment letter and disposal of excess treated water from the local body /Metro Water/TWAD. 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 PP 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 PP shall ansure that at least 50% of the HVAC system runs on air cooling mechanism. The PP shall ansure that at least 50% of the HVAC system runs on air cooling mechanism. The proponent shall provide the solar canopies on the parking area as per the requirements at ground level. The company shall have a well laid down environmental policy duly approved by the Board of Directors before obtaining EC. The PP shall furnish NOC of Airport authority for Height Clearance. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is inteant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the preived of heavy rain				

2. Seiaa Standard Conditions:

S. No	EC Conditions
2.1	 Climate Change The proponent shall adopt strategies to decarbonize the building. The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials). The proponent shall adopt strategies to reduce temperature including the Building Façade. The proponent shall adopt methodology to control thermal environment and other shocks in the building. The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands. The proponent shall adopt strategies to ensure the building in blocks are not trapping heat to become local urban heat islands. The proponent shall adopt strategies to ensure the building in blocks are not trapping heat to become local urban heat islands. The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues. 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. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building. Heatth The proponent shall adopt strategies to reduce electricity demand and consumption. The proponent shall provide provisions for controlled ventilation and lighting systems. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation. Regulatory Frameworks The proponent shall adopt methodologies to effectively implement the Solid waste Management Aules, 2016, E-Waste (Management) Rules, 2016, a samended, Burdrobi educate capacity of DG set (standby) for the proposed STP so as to ensure continuous and ef

S. No	EC Conditions
	 EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns. Others 46. 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. 47. The project proponent shall adhere to height of the buildings as committed.

Standard EC Conditions for (Building / Construction)

1. Statutory Compliance

S. No	EC Conditions
1.1	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
1.2	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
1.3	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
1.6	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.7	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
1.8	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
1.9	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

2. Air Quality Monitoring And Preservation

S.	. No	EC Conditions	
2.1		Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of	

S. No	EC Conditions		
	Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.		
2.2	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.		
2.3	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.		
2.4	Diesel power generating sets proposed as source of backup power 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. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.		
2.5	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.		
2.6	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.		
2.7	Wet jet shall be provided for grinding and stone cutting.		
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.		
2.9	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.		
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.		
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.		
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.		

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
3.2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3.3	Total fresh water use shall not exceed the proposed requirement as provided in the project details.
3.4	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
3.5	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available.
3.6	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
3.7	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
3.8	Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
3.9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
3.10	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
3.11	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
3.12	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse.
3.13	All recharge should be limited to shallow aquifer.

S. No	EC Conditions
3.14	No ground water shall be used during construction phase of the project.
3.15	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
3.16	No sewage or untreated effluent water would be discharged through storm water drains.
3.17	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
3.18	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
3.19	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
4. Noise Monitoring A	And Prevention

4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
4.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

5. Energy Conservation Measures

S. No	EC Conditions
5.1	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

S. No	EC Conditions
5.2	Outdoor and common area lighting shall be LED.
5.3	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
5.4	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

6. Waste Management

S. No	EC Conditions
6.1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
6.3	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6.6	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
6.7	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
6.8	Fly ash 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 25th January, 2016. Ready mixed concrete must be used in building construction.
6.9	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
6.10	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.

7. Green Cover

S. No	EC Conditions
7.1	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
7.2	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
7.3	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
7.4	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

8. Transp<mark>ort</mark>

8. Transp <mark>ort</mark>	3. Transport	
S. No	EC Conditions	
8.1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.	
8.2	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	

9.

S. No	EC Conditions
9.1	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

10. Human Health Issues

S. No	EC Conditions
10.1	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.
10.3	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
10.4	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure 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.
10.5	Occupational health surveillance of the workers shall be done on a regular basis.
10.6	A First Aid Room shall be provided in the project both during construction and operations of the project.

11. Miscellaneous

11. Miscellaneo	1. Miscellaneous	
S. <mark>No</mark>	EC Conditions	
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.	
11.2	ii. environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	
11.5	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 six-monthly report.	

S. No	EC Conditions
11.6	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
11.7	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
11.8	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP reportand also that during their presentation to the State Expert Appraisal Committee.
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC)/SEIAA-TN.
11.13	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11.14	The Ministry/SEIAA-TN may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11.15	The Ministry/SEIAA-TN reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.16	The Regional Office of this Ministry 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.
11.17	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
11.18	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

12. Specific Conditions

S. No	EC Conditions
12.1	Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.

Additional EC Conditions

SEIAA Specific Conditions:

1. The company shall have a well laid down environmental policy duly approved by the Board of Directors before obtaining CTE.

2. A detailed traffic management and traffic decongestion plan from reputed Research and Academic Institution such as NIRM, IITs, NITs, Anna University Chennai-CEG Campus etc., shall be submitted before obtaining CTE.

3. The proponent shall provide details of sufficient grass lawns, Indoor games, Gym and play facilities for children before obtaining CTE.

4. The PP shall furnish details regarding number of visitors' parking that are provided within the premises & a detailed layout of the parking provided shall be furnished before obtaining CTE.

5. The proponent shall deploy cost-effective technology to reduce GHG emissions.

6. The proponent shall adopt strategies to develop carbon-neutral or zero-carbon building.

7. The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).

8. The proponent shall adopt strategies to decarbonize the building.

9. The proponent shall adopt strategies to maintain the health of the inhabitants.

10. The proponent shall adopt strategies to reduce electricity demand and consumption.

11. The proponent shall provide provisions for automated energy efficiency.

12. The proponent shall provide provisions for controlled ventilation and lighting systems.

13. The proponent shall adopt strategies to reduce temperature including the Building Façade.

14. 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.

15. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.

16. The prop<mark>onent shall adopt methodology to control thermal environment and other shocks in the building.</mark>

17. The proponent shall adopt strategies to reduce anthropogenic GHGs such as CO2, CH4, nitrous oxide, etc., resulting from human activities.

18. The database record of environmental conditions of all the events from pre-construction, construction and postconstruction should be maintained in digitized format.

19. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc,.

20. The proponent should develop an emergency response plan in addition to the disaster management plan.

21. The proponent should maintain environmental audits to measure and mitigate environmental concerns.

22. 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.

23. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.

24. 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.