Final Report

Initial Environmental Examination- Integrated Industrial Housing Project for TEPL by Vidiyal Residency Private Ltd

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Submitted by:

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Prepared by Tamil Nadu Infrastructure Fund Management Corporation (TNIFMC), Government of Tamil Nadu for the Asian Development Bank.

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Abbreviations

BMTPC	Building Materials and Technology Promotion Council
CPCB	Central Pollution Control Board
BUA	Built-up Area
DG set	Diesel Generator set
EIA	Environmental Impact Assessment
E&S	Environmental and Social
EHS	Environmental, Health & Safety
EMC	Environmental Management Centre LLP
EPF	Employee Provident Fund
ESAP	Environmental and Social Action Plan
ESGDD	Environmental Social and Governance Due Diligence
ESGMS	Environmental, Social and Governance Management System
ESI	Employee State Insurance
EWS	Economically Weaker Sections
FSI	Floor Space Index
HR	Human Resources
HSE	Health, Safety and Environment
INR	Indian National Rupees
KWH	Kilo Watt Hour
KVA	Kilo Volt Ampere
KWH	Kilo Watt Hour
LPG	Liquified Petroleum Gas
NABL	National Accreditation Board for Testing and Calibration Laboratories
NOC	No Objection Certificate
NGO	Non-Governmental Organization
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
PM	Particulate Matter
PMC	Project Management Consultant
PUC	Pollution Under Control
RCC	Reinforced Cement Concrete
SPCB	State Pollution Control Board
TIDCO	Tamil Nadu Industrial Development Corporation
TNIFMC	Tamil Nadu Infrastructure Fund Management Corporation Limited

Executive Summary

The 'TATA Integrated Industrial Housing' project is a residential project, to be developed by Vidiyal Residency Pvt. Ltd (VRPL), in Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu. The project involves the construction of housing facility for industrial workers of Tata Electronics Private Limited (TEPL) and has been taken up under Affordable Rental Housing Complexes (ARHC) Scheme of Government of India.

The entire project is to be built in 18 blocks, of which, the Environmental Clearance dated 26/04/2022 vide letter no. SEIAA/TN/F.8993/EC8(a)829/2022 has been obtained for constructing 14 blocks in the first phase of development with a built-up area of 1,44,247 sq.m. For the construction of the remaining 4 blocks, environment clearance shall be obtained prior to commencement of construction.

As per Environmental Clearance, the project has been categorised as B2 as per the EIA Notification, 2006 and it's amendment thereon. It does not require an EIA report and public consultation to be placed before the Appraisal Committee. As per the Tamil Nadu Shelter Fund's Environmental, Social and Governance Management System (ESGMS) screening tool, this project has been categorized as a B[1].

The civil works contractor has been finalized and the project is at a pre-construction stage. Land has been provided on lease basis to Vidiyal Residency Pvt. Ltd by the Government of Tamil Nadu through Tamil Nadu Industrial Development Corporation (TIDCO) for a period of 99 years. The District Administration-of Krishnagiri District, Denkanikottai Taluk, has in turn handed over the possession of 64.42 acres of land to TIDCO for the project. The land is classified as a barren land as per revenue records. Currently the land parcel is not barricaded and has a free and open access. There are a few structures which are unused and transferred as part of the lease of the land. There are no environmentally or culturally sensitive areas identified in the vicinity of the project site. The site is currently clear with no identified environmental issues hence no alternative analysis is required.

Vidiyal Residency Pvt. Ltd, has engaged Tata Consulting Engineers (TCE) as the "Owner's Engineer" with the responsibility as Project Management Consultants (PMC) to manage the construction of the project. The PMC has finalized a civil works contractor for the Engineering, Procurement, and Construction (EPC) of the project. The PMC shall be responsible for ensuring the efficient implementation of the EMP and the Environmental Clearance requirements of the project. If there are any new impacts identified during the construction stage, the EMP needs to be updated with the same.

It is recommended that regular monitoring of air, ground water, noise and the proposed mitigation measures be carried out during the pre-construction, construction, and operation phase of the project. Regular training of the construction workers and PMC staff needs to be conducted on EMP and Occupational Health and Safety related issues. A grievance redress committee and mechanism for prompt response to public complaints is to be set up for the project.

The Tamil Nadu Shelter Fund (TNSF) adopted ESGMS in 2020. The key components of TNSF's ESGMS includes an Environmental, Social, and Governance (ESG) Policy, implementation procedures presented as tools, process flowcharts, formats & templates, and a resource library. The ten tools

[1] The project may result in specific environment and social impacts, that are site specific for which mitigation measures have been developed.

which are part of the ESGMS are designed to enable compliance with the ESG requirements established for the TNSF.

TNSF's ESGMS outlines the screening, categorization, and due diligence (including identification of environmental and social impacts and mitigation) for potential investments under TNSF. Subprojects meeting the subproject eligibility criteria can be included under the project. Subprojects listed in the Prohibited Investment Activities List (PIAL) will not be include. Category A[2] subprojects will not be considered for investment. In addition to the ESGMS, an action plan has been agreed with TNIFMC that applies to Asian Development Bank (ADB)-funded investments under the TNSF to ensure compliance with ADB Safeguard Policy Statement (SPS), 2009.

ADB's Safeguard Policy Statements (SPS), 2009 is applicable for the Project. Based on ADB's Rapid Environmental Assessment (REA) Checklist, the environment category of the Project is "B". Accordingly, the initial environment examination (IEE) report is prepared. The IEE study was conducted by the Environmental Management Centre (EMC) LLP to understand the environmental impacts and associated mitigation measures due to the project development. The methodology used for conducting the study includes collection of secondary information, site observation by EMC team, meetings with TNIFMC, TEPL, stakeholders, and with local community around the project area.

The project shall obtain all applicable and necessary approvals from regulatory authorities. A robust stakeholder engagement plan and grievance redressal mechanism is being developed for the project.

Reporting of the ESGMS and agreed action plan shall be submitted to ADB on a semi-annual basis during project implementation; these semi-annual reports on ESGMS and action plan implementation will be shared with ADB and publicly disclosed.

The chapter-1 provides a detailed overview of the project including the construction status, building details, site connectivity, social infrastructure in the site vicinity, and the associated facilities of the project.

The chapter-2 throws light on the policy regulations and legal requirements for the project as per the ADB framework. The compliance of the project has been reviewed against the applicable National and State EHSS regulations including Environmental regulations, Occupational Health and Safety, and Labour and Working conditions requirements.

The chapter-3 includes the description of the existing environment in and around the project. This has been broadly categorised into the physical environment, biological environment, and socio-economic and cultural environment. There are no major impacts from the project activities.

Chapter-4 describes the potential environmental impacts due to project activities and suggested mitigation measures to minimize any negative impacts. It has been observed that there are no major adverse environmental impacts expected to arise from the project activities.

Chapter-5 presents the analysis of alternatives considering the 'Without project' scenario for comparison. It is concluded that the without project scenario alternative is unacceptable, and the potential socio-economic benefits of implementation of such project far outweigh the limited adverse impacts, all of which can be controlled and minimized to an allowable level.

Chapter-6 presents details on the institutional arrangements for the execution of the project. This

2 Projects that will have adverse environmental, social and governance impacts

includes deputation of PMC, EPC contractor, and SHE officer along with brief description of their roles and responsibilities.

Chapter-7 consists of the Environmental monitoring and management plan (EMP) which anticipates the environmental and social impacts and mitigation measures for establishing project's compliance to EHS legal requirements.

As established in Chapter-8, the project does not require public consultation as per the Government of India's requirement (EIA notification 2006 and its amendment thereon). However, the public consultation has been done along the Project site and (informed about the project activities) and feedbacks collected. The public consultation shall also be carried out during implementation of the Project.

Chapter-9 describes the grievance redressal mechanism required to be adopted during implementation of the project. A sample grievance redressal form has also been included in the Annexures.

Chapter-10 gives the final conclusions and recommendations. It has been suggested that the project should follow the recommendations provided in the EMP with due diligence.

1 Project Overview

1.1 Background

1. The Tamil Nadu Infrastructure Fund Management Corporation (hereafter referred to as TNIFMC), is an Asset Management Company (AMC) promoted by the Government of Tamil Nadu (GoTN) for the purpose of raising and managing alternative investment funds focused on sectors like infrastructure, affordable housing etc. The TNIFMC is managing Tamil Nadu Shelter Fund (TNSF) which is registered as a Category I (Social Venture) Alternative Investment Fund, with a mandate to invest in affordable housing projects in Tamil Nadu. TNSF invests in affordable housing projects in the Private, PPP or Government and/or its agencies. The primary focus of TNSF is:

- Affordable housing – with focus on housing for the economically weaker (EWS) and low-income groups (LIG),
- Hostels - for working women from all sections of the society
- Industrial housing for workers in and around Industrial Complexes/ Parks/ Clusters
- Senior and assisted living

2. The Tata Electronics Private Limited ("TEPL" or "Project") is planning to setup industrial housing for their workers in Krishnagiri district, Tamil Nadu. For the development of this project, TEPL has setup a Special Purpose Vehicle (SPV) viz., Vidiyal Residency Private Limited (VRPL) ("Company"), as a 100% owned subsidiary. The TNSF is planning to invest in the proposed project and is committed to integrate ESGMS into this project. As per the TNSF ESGMS screening tool, this project has been categorized as a B[3].

3. This Initial Environment Examination (IEE) report is prepared in accordance with ADB's SPS 2009 requirements for environment category B projects. The study has been carried out to understand the environmental impacts and associated mitigation measures of the project. The information collection for preparation of this report includes collection of secondary information, site observation by the EMC team, meetings with TNIFMC, stakeholders, TEPL and with project beneficiaries around the project.

1.2 Report Structure

4. This report contains following ten (10) sections including the Executive Summary at the beginning.

Executive summary

1. Project overview
2. Policy, Legal, and Administrative Framework
3. Description of the Environment
4. Anticipated Environmental Impacts and Mitigation Measures
5. Analysis of Alternatives
6. Institutional arrangements
7. Information Disclosure, Consultation and Participation
8. Grievance Redress Mechanism
9. Environmental Management Plan
10. Conclusion and Recommendations

[3] The project may result in specific environment and social impacts, that are site specific for which mitigation measures need to be developed.

1.3 Description of the Project

5. The 'TATA Integrated Industrial Housing' project is a residential project, to be developed by Vidiyal Residency Pvt. Ltd. in Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu. The project involves the construction of housing facility for industrial workers of TEPL and has been taken up under Affordable Rental Housing Complexes (ARHC) scheme of Government of India.

6. The entire project is to be built in 18 blocks (details given in Table 1), of which, the Environmental Clearance dated 26/04/2022 vide letter no. SEIAA/TN/F.8993/EC8(a)829/2022 has been obtained for constructing 14 blocks in the first phase of development with a built-up area of 1,44,247 sq.m, as shown below in Table 2. For the construction of the remaining 4 blocks, environment clearance shall be obtained prior to commencement of construction.

Table 1- Total Project Details

S.No	Building Type	Building Count	Total Built-up Area
1	Type A	8	1,80,433 sq.m
2	Type B	5	
3	Type C	3	
4	Type A- IBHK	1	
5	Type B- IBHK	1	

Table 2- Details of first phase of development under the Project

S.No	Building Type	Building Count	Total Built-up Area
1	Type A	6	1,44,247.12 sq.m
2	Type B	5	
3	Type C	3	
Total		14	

7. As per EIA notification 2006 and its amendment, the Project (considering the total built-up area, under first phase of development) is categorised as B2[4].

Land

8. Land has been provided on lease basis by the Government of Tamil Nadu through Tamil Nadu Industrial Development Corporation (TIDCO) to VRPL for a period of 99 years. The District Administration-of Krishnagiri District, Denkanikottai Taluk, has handed over the possession of 64.42 acres of land to TIDCO for the project. The land is barren as per revenue records. Currently the land parcel is not barricaded and has free and open access. There are a few unoccupied temporary and a few dilapidated structures present on the land as observed during the site-visit, which shall be demolished prior to construction of the project. The pictures of the site are provided in annexure 1.

[4] Building and Construction Projects - Schedule 8 (a): Built-up Area <1, 50,000 sq. mtrs (ie' 1,44, 247.12 Sq. m) - Category'B2'. Category B2 projects do NOT REQUIRE an EIA report and public consultation/hearing to be placed before the Appraisal Committee

1.3.1 Current Status of Project

9. The project is at pre-construction stage. The civil works contractor has been finalized for the project.

1.3.2 Project Description

10. The project is being constructed in Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu. The total plot area is 2,60,698.74 sq.m (64.62 acres) for the proposed construction of housing facility for industrial workers which shall include a total built up area of 1,44,247.12 sq.m, an Open Space Ratio (OSR) area of 26,069.87 sq.m, a Greenbelt area of 39,155.54 sq.m, and a reservoir area of 6,473.54 sq.m. as specified in the Environmental Clearance dated 26/04/2022 vide letter no. SEIAA/TN/F.8993/EC8(a)829/2022. In addition to the main dormitory buildings, other utility buildings like commercial, medical, creche, central kitchen have also been planned in the same area for a total extent of 6,522.25 sq.m. A total of three (3) STPs with capacity of 1467 KLD have also been proposed for development on site. The STP sludge and treated water coming from STP shall be reused on site to the maximum extent possible during the construction and operation phases. In addition, solar panels shall be provided on the roofs and rainwater harvesting shall be practised on the project site through proposed rainwater reservoirs and percolation pits as a part of water conservation practices. The Project location as shown on google map is given in Figure 1.

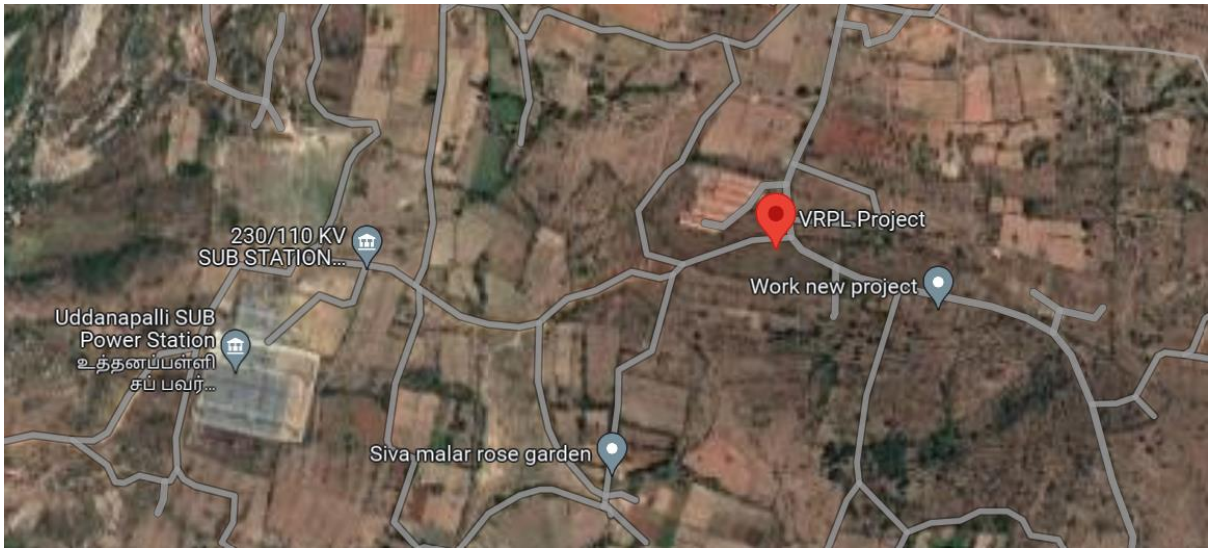


Figure 1: Project location map on google map

Location: (https://goo.gl/maps/X7JrV8ttTrL4diK69)

1.3.3 Connectivity

11. The site is well connected through internal village roads and lies in around 2 km aerial distance to both Dharmapuri Hosur road and Bengaluru Road. The nearest railway station is Periya Nagathunai station i.e., 3.86 km southwest. The nearest airports are Hosur airport that is 19.25km in the northwest direction and Kempengowda airport international airport is approximately 70 kms in the northwest direction. A location map showing the Project connectivity is given in **figure 2**.

Projects immediate borders	The project is bordered by Village Road to TNEB sub-station on the North, 'Our Lady of Lourdes Shrine' Church and multiple private landowners in the South, Nagamangalam-Kelamangalam Village Road on the East, and Agricultural lands owned by multiple private landowners on the West.
Highways	The project site is connected to the SH 85 – Attibele-Rayakottai road towards the South of project location through a 2.5 km long secondary road and to SH-17 – Rayakotta Road towards the North of project location through a 2.2 km long secondary road.
Railway Stations	The nearest railway station from the project location is Periya Nagathunai Railway Station (approx. 6.6 km south-west).
Bus Stations	Kelamangalam Bus Stand is the closest Bus station to the project (approx. 14.3 km. west).
Airport	Hosur Airport is located at an approx. aerial distance of 19 km west of project.

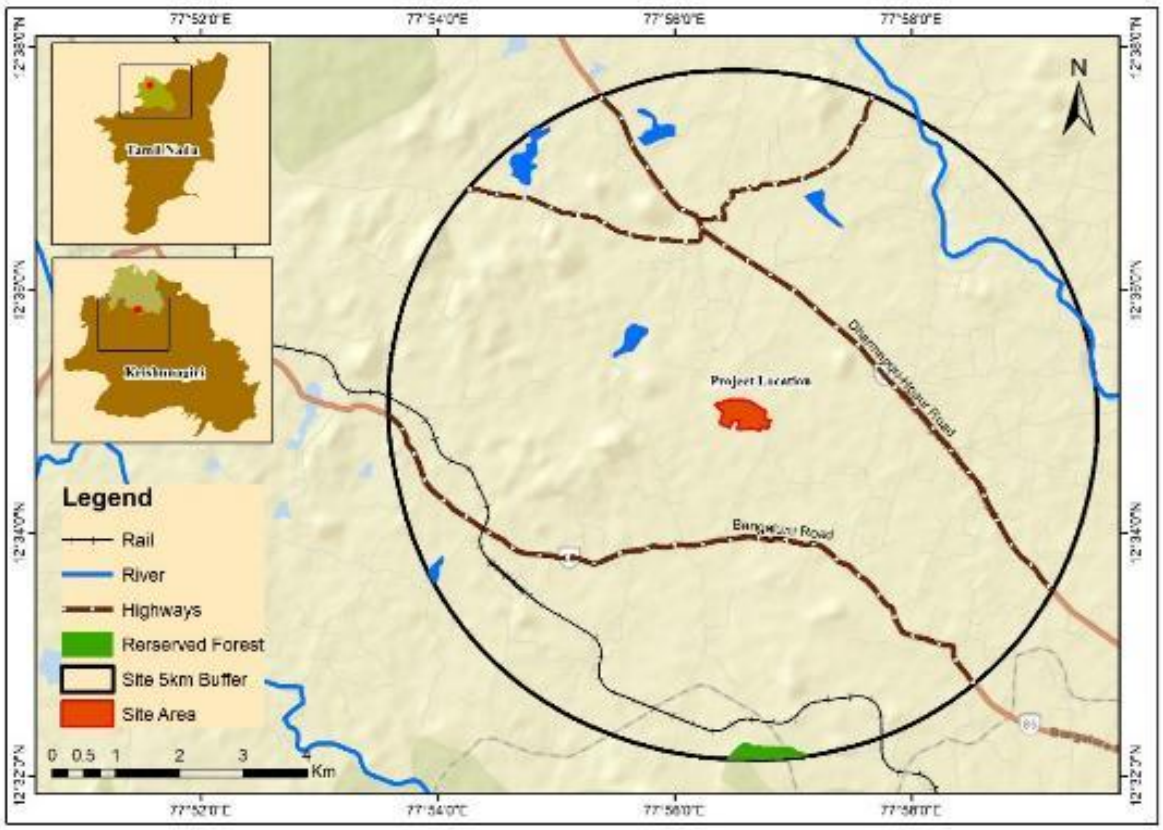


Figure 1 Connectivity of the Site

1.3.4 Social Infrastructure

12. The following is the social infrastructure available near the site.

Hospitals	Rajiv Hospital (approx. 9.9 km) and Primary Health Centre (approx. 11 km) are the nearest hospitals to the project. Other nearby medical facilities (Sri Balaji Clinic and Government mini clinic) are within 5 km radius of the project.
Schools & Colleges	The schools and colleges located near the project site include Nimai Public School, Government High School, Vidyalaya Matriculation School

	Uddanapalli, Government Polytechnic College, Kelamangalam, Annai Madhammal Institute of Hotel Management & Vocational Science Shoolagiri, and Shri Bharathi College of Education (~6 km from project site)
Police Station	The nearest police station is located on Rayakotta Road at approximately 3.8 km from the project site.

1.3.5 Associated Facilities

13. The project has the following associated facilities planned

Water Supply	1930 KLD to be met by TWAD board/ Municipal Corporation, Tankers/ Rainwater Reservoirs
Sanitation	3 Nos of combined capacity of 1467 KLD with Sequential Batch Reactor Technology STP
Municipal Solid Waste	Biodegradable Waste-4430 kg/day to be treated in organic waste converters & used as manure for the grepoweten belt Non-biodegradable waste-5895kgs/day to be handled by the authorized vendor STP sludge- 500 kg/day to be used as manure for gardening
Electricity	3795 kVA from TANGEDCOgree
D.G Set back up	Proposed D.G Sets I No. of 1250 kVA D.G set 4 Nos. of 1010 kVA D.G set
Rainwater Harvesting & Reservoir	Proposed to provide 1m wide rainwater trenches all along the periphery of the site. Roof top rainwater will be collected in the proposed reservoir area & it is proposed to provide adequate percolation pits.
Greenbelt & Open Space Reservation (OSR)	65,225.41 sq.m
Medical Facility	464.515 sq.m
Commercial Complex	963.33 sq.m
Creche	279.298 sq.m
Central Kitchen	900 sq.m
Recreation Centre	966.213 sq.m
Security Main	86.520 sq.m
Security Men	25.00 sq.m

2 Policy, Legal and Legislative Framework

2.1 ADB Safeguard Policy Statement, 2009

14. ADB's Safeguard Policy Statement (SPS), 2009 governs the environment and social safeguards of ADB's operations. The requirements for environmental safeguards support the integration of environmental considerations into the project decision making process. These requirements arise if a proposed project is likely to have environmental impacts and risks to the physical, biological, socioeconomic, and/or physical cultural resources in the project's area of influence.

15. Project screening and categorization using the sector-based rapid environmental assessment (REA) checklists (provided in annexure 2) determines the categorization of the project based on the significance of the project's potential environmental impacts and risks.

2.2 Categorization

2.2.1. ADB Categorization

16. ADB assigns one of the following environmental categories to the proposed project

i. Category A- The project is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. Impacts may affect an area larger than the sites or facilities subject to physical works. A full-scale environmental impact assessment (EIA), including an environmental management plan (EMP), must be prepared by the borrower/client.
ii. Category B- The project's potential environmental impacts are less adverse and fewer in number than those in category A. Impacts are site-specific, few of which, if any, are irreversible. Impacts can be readily addressed through mitigation measures. An initial environmental examination (IEE), including an EMP, must be prepared by the borrower/client.
iii. Category C- The project is likely to have minimal or no adverse environmental impacts. An EIA or IEE is not required, but ADB will conduct a desk review of the project's environmental implications.

17. Initial screening using the REA checklist (given in Annexure 2: Rapid Environmental Assessment Checklist) and the ESGMS Screening tool developed by TNSF under the ESGMS indicates that the project will not cause any significant negative environmental impacts and that most impacts are site specific, temporary, and therefore the project is classified as B as per ADB's SPS, 2009 and TNSF ESGMS. Accordingly, an IEE and EMP has been prepared for this project.

2.2.2. National and State Environmental Regulations

18. The Government of India EIA Notification of 2006 and its amendment thereon sets out the requirement for Environmental Assessment in India. This states that Environmental Clearance (EC) is required for specified activities/projects, and this must be obtained before any construction work or land preparation (except land acquisition) may commence. Projects are categorized as 'A' or 'B' depending on the scale of the project and the nature of its impacts.

i. Category A projects require Environmental Clearance from the central Ministry of Environment, Forests and Climate Change (MoEF&CC). The proponent is required to provide preliminary details of the project in the prescribed manner with all requisite details, after which an Expert Appraisal Committee (EAC) of the MoEF&CC prepares comprehensive Terms of Reference (TOR) for the EIA

study. On completion of the study and review of the report by the EAC, MoEF&CC considers the recommendation of the EAC and provides the Environmental Clearance if appropriate.

ii. Category B projects require environmental clearance from the State Environment Impact Assessment Authority (SEIAA). The state-level EAC categorizes the project as either B1 (requiring EIA study) or B2 (no EIA study) and prepares TOR for B1 projects within 60 days. On completion of the study and review of the report by the EAC, the SEIAA issues the Environmental Clearance based on the EAC recommendation. The Notification also provides that any project or activity classified as category "B" will be treated as category "A" if it is located in whole or in part within 10 km from the boundary of protected areas, critically polluted areas, eco-sensitive areas or interstate or international boundaries.

19. The projects requiring an Environmental Impact Assessment report termed Category 'B1' and remaining projects termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests should issue appropriate guidelines from time to time. All projects and activities listed as Category 'B' in Item 8 of the Schedule (Construction / Township / Commercial Complexes /Housing) shall not require scoping and will be appraised on the basis of Form 1/ Form 1A and the conceptual plan.

20. The project involves the construction of industrial housing facilities in two phases in 18 blocks near TEPL manufacturing plant, Krishnagiri (a total of 1,80,433 sq.m built-up area, having 14,308 beds). In the first phase of development, the built-up area is 1,44,247 sq.m. The Project falls under B2 category, as per EIA notification, 2006 and it's amendment thereon. Accordingly, the project has obtained the requisite EC (copy provided in annexure 3) for the first phase from the State Environment Impact Assessment Authority (SEIAA). As the project is categorized as a B2 category project, it does not warrant an EIA study.

2.2.3. Applicable International Standards and Best Practices

21. During the design, construction, and operation stages of the project the contractor will apply standards and performance levels consistent with international good practices, as reflected in internationally recognized standards such as the IFC EHS guidelines and standards of the World Health Organization (WHO) and Government of India regulations. The project shall also follow the guidelines and the conditions mentioned as part of the Environment Clearance permission issued for the project. The guidelines for Sewage Treatment Plant and Rainwater Harvesting are specified in the Environment Clearance conditions.

22. The project shall also incorporate Core Labour Standards for the project. The Central Pollution Control Board notifications and guidelines for operation of DG sets[5] in the project. The clearances and permissions required by the Contractor for Project during the Construction stage is explained in chapter 2.3 and 2.4. The potential risks and impacts of the project have been identified in table 4, and an Environmental Management Plan has been developed for the project accordingly and included in the tender and contract documents. (Refer chapter 7)

[5] https://cpcb.nic.in/genset-notifications/ 22

2.3 Applicable National and State Regulations

Applicable EHSS regulations

23. The following are the national and state level (Tamil Nadu) EHSS regulations applicable to the Company

2.3.1. Legal Compliance - Environment

#	Regulation	Reason for Application	Legal Requirements
1.	Environment Impact Notification 2006 and amendments	The total built-up area of the project is more than 20,000 sq.m.	Obtain Environmental Clearance (EC) under the EIA Notification 2006
			Compliance to conditions of the Environmental Clearance. Submission of Bi-annual compliance report post EC to Regional Office (RO), MoEF&CC. The requisite Environmental Clearance has been obtained and the same has been provided under Annexure 3.
2.	Water (Prevention and Control of Pollution) Act, 1974; and Rules 1975 Air (Prevention and Control of Pollution) Act, 1981; and Rules 1982	The project shall generate wastewater and air emissions and is required to obtain Consent to Establish from the SPCB for the project as well as the batching plant.	Consent to Establish from SPCB u/s 25 Water Act and u/s 21 of the Air Act.
			Comply with conditions of Consent to Establish for batching plant. The consent shall also provide the specifications for installing STP and DG set.
3.	Noise Pollution (Regulation and Control) Rules, 2000	The project construction shall result in noise pollution	No horn shall be used in silence zones[6] or during night-time in residential areas except during a public emergency Sound emitting construction equipment shall not be used or operated during night-time[7] in residential areas and silence zones.

[6] Silence Zone: An area comprising not less than 100 meters around hospitals, educational institutions and courts may be declared as silence area / zone

[7] Night-time: means the period between 10.00 p.m. and 6.00 a.m
http://cpcbenvis.nic.in/noisepollution/noise_rules_2000.pdf

#	Regulation	Reason for Application	Legal Requirements
			Ambient noise levels should conform to residential standards prescribed by the TNPCB, both during day and night.
4.	Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2016	The project construction may result in generation of hazardous waste.	Company shall be responsible for safe and environmentally sound management of hazardous and other wastes. u/r 4(2) and providing a household hazardous waste collection and disposal mechanism. Hazardous waste should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules, 2016 during operations period.
5.	Construction and Demolition Waste Management Rules, 2016	The project construction shall generate C&D waste.	Mode of disposal of C&D waste. u/r 4 with approval of competent authority as per C&D waste management rules, 2016. Construction waste must not be allowed to contaminate watercourses.
6.	Solid Waste Management Rules, 2016	The project shall generate solid waste in the labour camps.	Every waste generator shall segregate and store the waste generated by them in three streams, namely, bio-degradable, non-bio-degradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorized waste pickers or waste collector as per the direction or notification by the local authorities from time to time. u/r 4(a)
7.	E-Waste (Management) Rules, 2016	The project in construction phase has the potential to generate e-waste	Ensure e-waste generated by them is channelized through collection centre or dealer of authorized producer or dismantler or recycler or through the designated take back service provider of the producer to

#	Regulation	Reason for Application	Legal Requirements
			authorized dismantler or recycler. u/r 9(1) as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment. Maintain records of E-Waste generated in Form-2. u/r 9(2)
8.	Central Ground Water Authority Guidelines to regulate and control Ground Water Extraction in India dated 1 June, 2019 Tamil Nadu Groundwater (Development and Management) Act, 2003	The project may use ground water during construction	The project does not intend to use ground water during construction. However, if at any stage, the project intends to use ground water during construction, then registration of existing bore wells/ NOC for new bore wells shall be obtained. In case groundwater is used, groundwater level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.
9.	Environmental Protection Second Amendment Rules 2002 (DG Set) & 2004	The project may use DG sets for power generation during operation stage.	a) Stack Height of DG set should be as per the regulations which shall be mentioned in the CTE/CTO for the project. b) The DG set should be housed in an acoustic enclosure

2.3.2. Legal Compliance - Occupational Health & Safety

#	Regulation	Reason for Application	Legal Requirements
1.	The Building and Other Construction Workers'(Regulation of Employment and Conditions of Service) Central Rules, 1998	The project under assessment shall shortly enter the construction phase. Further the regulation provides requirements on Occupational, Health and Safety measures pertaining to construction activities.	a) Safety & Health – General Provisions (Chapter IV) – physical hazards, PPE, electrical hazards, vehicular traffic
			b) Fire Protection (u/s 35 & u/r 62)
			c) Stability of structures (u/s 49 & u/r 76)

#	Regulation	Reason for Application	Legal Requirements
			d) Lifting appliances and gear (Chapter VII) – testing, safe load indicators, ropes,
			e) Reporting of Accidents (u/r 237)
			f) Medical examination – crane operators, exposure to special occupational hazard (u/r 250)
2.	Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010	The project will use electricity for various activities at the project site	a) General safety requirements for: - Electric supply lines and apparatus safety - Cut-out - Earthed terminal - Dangerous Notice - Flexible Cables
			b) Fire buckets filled with clean dry sand and ready for immediate use for extinguishing fires, in addition to fire extinguishers suitable for dealing with electric fires shall be kept at site
3.	Central Motor Vehicle Act 1988 and Rules 1989 (amended 2016)	The project may lease vehicles from third party vendors used for transportation and construction.	a) Driver to obtain a driving license authorizing him to drive/operate the vehicle b) Owner to obtain Certificate of Registration for the vehicle c) For valid registration, a transport vehicle should have a Certificate of Fitness d) Owner to obtain insurance policy for the vehicle
4.	Fire NOC from Municipal Corporation under the Development Control Regulations	The project classifies as high-rise buildings and needs approval for more than 17.25 m in height	Obtaining Provisional Fire NOC at the time of obtaining Commencement Certificate from the Municipal Corporation
5.	Ministry of Civil Aviation (Height Restrictions for Safeguarding of Aircraft	The project is located within the 20 kms radius of the Hosur aerodrome.	Obtain No Objection Certificate for the height clearance under the Rules

#	Regulation	Reason for Application	Legal Requirements
	Operations) Rules, 2015.		

2.3.3. Legal Compliance - Labour & Working Conditions

#	Regulation	Reason for Application	Legal Requirements
1.	Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and Rules 1998	The Company will employ more than ten building workers in building or other construction work on daily basis.	a. Registration of establishment and workers under the Building and other Construction Workers (BOCW) Act 1996 and Rules 1998
			b. Hours of work, rest intervals & weekly off (Chapter XXVI)
			c. Welfare of Building workers (Chapter XXVIII) – latrine, urinal, canteens
2.	The Contract Labour (Regulation and Abolition) Act, 1970; and Contract Labour (Regulation & Abolition) Central Rules, 1971	The Company may appoint contractors who may have appointed sub-contractors for various project activities	a. Registration of principal employer
			b. Contractor's license for workers more than 50.
3.	Minimum Wages Act 1948	The Company, through its sub-contractors will engage unskilled, semi-skilled and skilled personnel in the project	a. Payment of minimum wages as per latest circular. u/s 5&12 b. Copy of minimum wages abstract issued by the respective state
4.	Employee Compensation Act 1923 and Amendment Act 2009	The Company may employ workers directly and through Contractors whose remuneration is more than INR 21,000/- per month and are not covered under ESI	Payment of compensation to employee. Obtaining insurance policy for the same. u/s 4(2)
5.	Employees' State Insurance Act (ESI), 1948	The Company through its contractors engages personnel whose remuneration is less than INR 21,000/-	Deduction of employee contribution and deposit of employee and employer contribution with the ESI Corporation. u/s 40(1)
6.	Employees' Provident Funds (EPF) and	The Company, if itself and through its contractors	Deduction of employee contribution and deposit of

#	Regulation	Reason for Application	Legal Requirements
	Miscellaneous Provisions Act, 1952 amended upto 1996's	employs more than 20 persons at the project, shall be considered for compliance under this Act.	employee and employer contribution with the authority. u/s 6
7.	Inter-State Migrant Workers Act 1979	The project may employ migrant construction labourers	a. Registration of Establishment as principal employer (u/s 4) b. Contractor's license for engaging migrant workers (u/s 8)
8.	The Child and Adolescent Labour (Prohibition & Regulation) Act, 1986 amended in 2016	The Company, through its sub-contractors may engage unskilled, semi-skilled and skilled personnel in the project	Prohibit the engagement of children (below 18 years of age) in all occupations and to prohibit the engagement of adolescents in hazardous occupations and processes
9.	Private Security Agencies (Regulation) Act, 2005	If the company employs a private security agency to provide security at the project.	a. Private Security Agency to obtain a license. u/s 4
10.	The Sexual Harassment of Women at workplace (Prevention, Prohibition and Redressal) Act 2013	The project may employ female workers at site.	a. Constitution of Internal Complaints Committee (ICC). u/s 4 b. Receive complaints of sexual harassment. u/s 9 c. Conduct enquiry on receipt of complaint. u/s 11

2.4 Clearances and Permissions Required by the Contractor for Project Construction

Table 3- Clearances and Permissions required for the project

#	Construction Activity	Statutory Authority	Statute under which Clearance is required	Implementation	Current Status	Supervision
1.	Batching plants, Crushers, Hot mix plants, and DG sets	Tamil Nadu Pollution Control Board (TNPCB)	Consent to establish (CTE) and Consent to Operate (CTO) under the Air (Prevention and Control of Pollution) Act,	Contractor	To be obtained	Project Management Consultant

#	Construction Activity	Statutory Authority	Statute under which Clearance is required	Implementation	Current Status	Supervision
			1981; and Rules 1982			
2.	Discharges from Construction activities	TNPCB	Consent to establish (CTE) and Consent to Operate (CTO) under the Water (Prevention and Control of Pollution) Act, 1974; and Rules 1975	Contractor	To be obtained	Project Management Consultant
3.	Storage, handling, and transport of hazardous materials	TNPCB	Hazardous Wastes (Management, Handling and Transboundary Movement) Rules 2016 Manufacturing, Storage, and Import of Hazardous Chemicals Rules, 1989	Contractor	To be obtained	Project Management Consultant
4.	Sand mining, quarries and borrow areas	Department of Geology and Mining, Government of Tamil Nadu	Contractor to obtain material from the existing government licensed mines/quarries;	Contractor	To be obtained	Project Management Consultant
5.	Disposal of Construction and Demolition waste	TNPCB	Construction and Demolition Waste Management Rules, 2016	Contractor	To be obtained	Project Management Consultant

2.5 ADB SPS Requirements.

24. During the design, construction, and operation of the project the PMC and the contractor will apply pollution prevention and control technologies and practices consistent with Indian regulatory requirements, wherever available. In instances when Indian regulations are not available, acceptable

international good practices, as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines are to be referred. These standards contain performance levels and measures that are normally acceptable and applicable to projects. As suggested in the ADB SPS 2009, capacity building exercises to cover all stakeholders viz., PMC and Contractor shall be conducted on a periodic basis to ensure consistent implementation of the environmental regulations.

3 Description of Existing Environment

25. Environment facts to be considered in relation to location of the project (construction of building) such as the description of (i) Physical Environment; (ii) Biological Environment and (iii) Socio-cultural Environment. Hence it is necessary to ascertain the baseline data of these environmental facts within identified location of project site.

3.1 Physical Environment

3.1.1 Study Area

26. The project is located near Nangalmanglam village in the Krishnagiri district of Tamil Nadu state. For further investigation of the site a 5 km buffer around the site was created (As shown in Figure 3). The pictures of the site and location are provided in annexure 1.

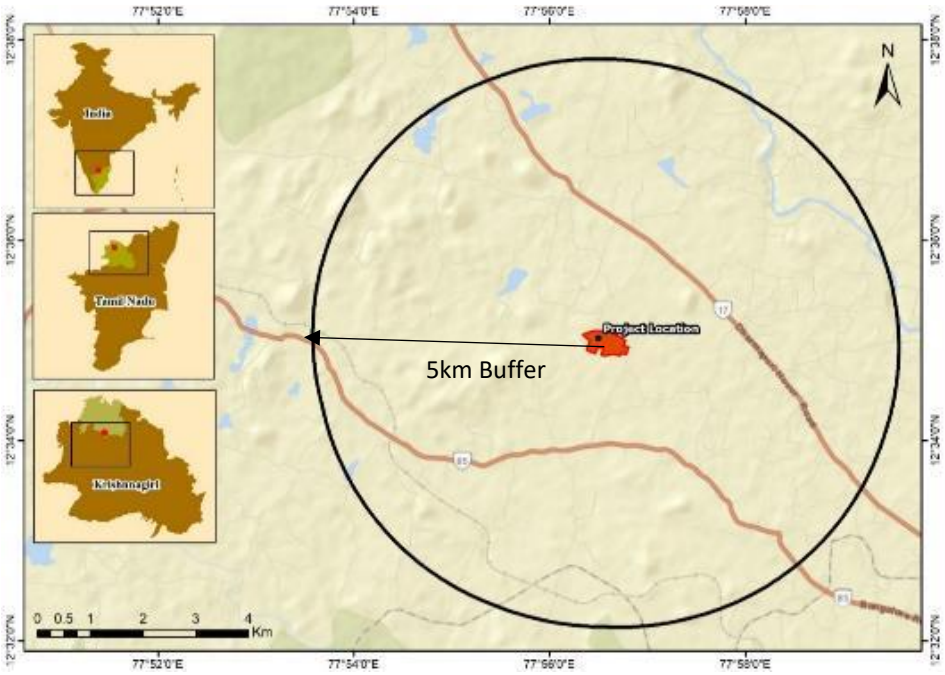


Figure 3 Buffer map of the site

3.1.2 Land use

27. The map in Figure 4 shows land use land cover map of the area around site. The maximum area around the site is occupied by Cropland[8] followed by bare/sparse vegetation which sums up to 60.27% and 13.66% respectively. The cropland is uncultivated consisting primarily of bushes and shrubs. The lowest area percentages have been recorded in terms of permanent water bodies i.e., 0.3%. The area around the site has little or no permanent water bodies.

28. The land use of site is mostly fallow and open barren land. The project land is not used for cattle grazing by nearby villagers. As per the revenue records the land classification of the project land is barren with no agricultural activities being undertaken on the site.

8 Cropland includes areas used for the production of adapted crops for harvest.

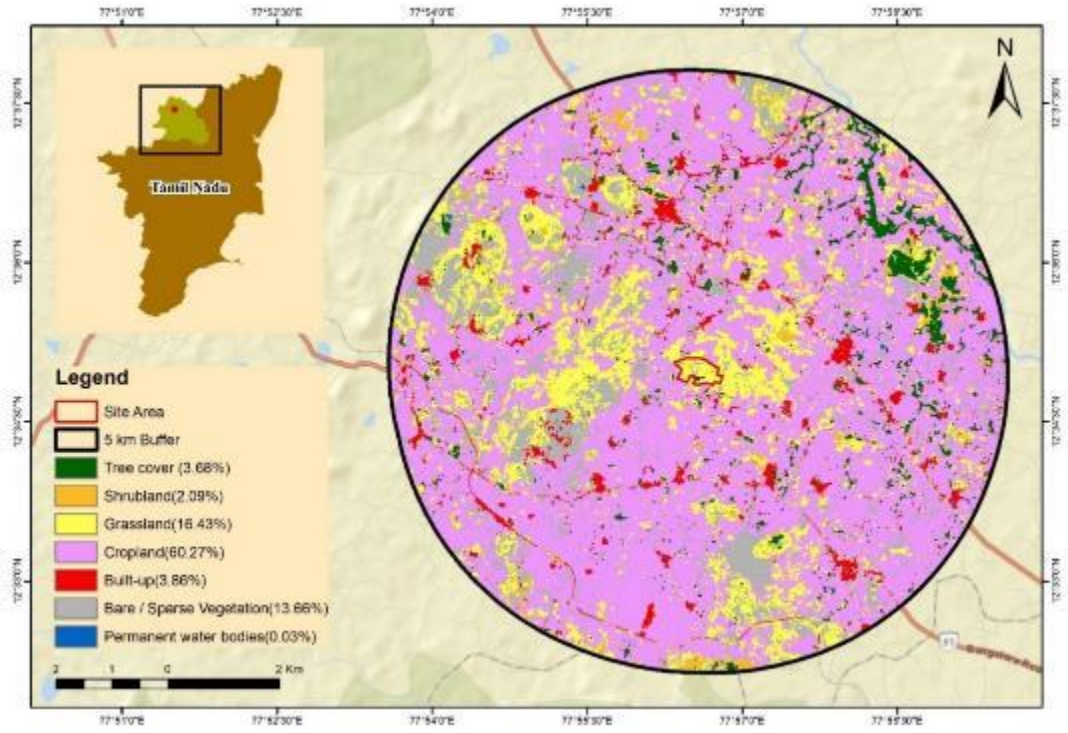


Figure 4 Map showing land use land cover map around Site

3.1.3 Meteorology and Climate

29. The Krishnagiri district experiences a tropical savannah climate. The annual rainfall of the district is 794mm. The temperature of the district is between 21-31 degree Celsius. Krishnagiri district forms parts of Cauvery and Thenpennaiyar rivers basins. Cauvery River forms the southwestern boundary of the district. Dodda Halla is the most important tributary of Cauvery draining the rugged terrain in the north-western part of the district.

3.1.4 Air Quality Standards

30. The primary data of ambient air quality baseline assessment has been conducted for the project and the results have been found to be within acceptable levels.

AAQ results:

Parameters	Conc.	NAAQ Standards	Locations		
			Near Site (Nagamangalam)	Nerupukottai	Haleseeban
			A1	A2	A3
PM_{10} Conc. (µg/m³)	Min.	100 (24 Hours)	54.7	53.9	51.1
	Max		72.6	64.6	67.8
	Avg.		65.3	60.9	62.1
$PM_{2.5}$ Conc. (µg/m³)	Min.	60 (24 Hours)	37.2	34.9	34.8
	Max		41.9	39.1	41.0
	Avg.		39.4	36.9	37.5
SO_2 Conc. (µg/m³)	Min.	80 (24 Hours)	7.7	8.4	7.9
	Max		10.2	11.1	10.5
	Avg.		9.4	10.2	9.6
NO_2 Conc.(µg/m³)	Min.	80 (24 Hours)	16.3	17.6	16.8
	Max		21.6	23.3	22.3
	Avg.		19.8	21.3	20.4

3.1.5 Noise Quality

31. The primary data of ambient noise levels baseline assessment has been conducted for the project and the results have been found to be within acceptable levels.

Noise Results:

S. No	Location	Noise level in dB(A) Leq		CPCB Standard		Environmental Setting
		Day	Night	Lday (Ld)	LNight (Ln)	
1	Project Site	50.7	44.9	75	70	Industrial
2	Nerupukottai	49.2	42.1	55	45	Residential
3	Haleseeban	52.6	43.9	55	45	Residential

3.1.6 Ground Water Results

32. The primary data of ground water quality baseline assessment has been conducted for the project and the results has been found to be within acceptable levels.

Ground Water Results:

S. No	Parameters	Unit	Drinking water Standard (IS 10500: 2012) Permissible Limit	Drinking water Standard (IS 10500: 2012) Acceptable Limit	Near Site (Nagamangalam)	Nerupukottai	Haleseeban
					GW1	GW2	GW3
1	pH	--	NR	6.5-8.5	7.3	7.6	7.21
2	Total Dissolve Solids	mg/l	2000	500	857	872	506
3	Total Suspended Solids		-	-	BLQ (LOQ 1)	BLQ (LOQ 1)	BLQ (LOQ 1)
4	Alkalinity as $CaCO_3$	mg/l	600	200	262	279	160
5	Total Hardness as $CaCO_3$	mg/l	600	200	415	411	278
6	Chloride as Cl	mg/l	1000	250	196	149	108.35
7	Fluorides as F		1.5	1	0.36	0.41	0.51
8	Cyanide	mg/l	NR	0.05	BLQ (LOQ 0.01)	BLQ (LOQ 0.01)	BLQ (LOQ 0.01)
9	Arsenic as As	mg/l	0.05	0.01	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
10	Boron as B	mg/l	1.0	0.5	BQL (LOQ 0.1)	BQL (LOQ 0.1)	BQL (LOQ 0.1)
11	Cadmium as Cd	mg/l	NR	0.003	BQL (LOQ 0.001)	BQL (LOQ 0.001)	BQL (LOQ 0.001)
12	Chromium as Cr	mg/l	NR	0.05	BQL (LOQ 0.01)	BQL (LOQ 0.01)	BQL (LOQ 0.01)
13	Copper as Cu	mg/l	1.5	0.05	BLQ (LOQ 0.01)	BLQ (LOQ 0.01)	BLQ (LOQ 0.01)
14	Total Iron	mg/l	NR	0.3	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)
15	Lead as Pb	mg/l	NR	0.01	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
16	Manganese as Mn	mg/l	0.3	0.1	BLQ (LOQ 0.05)	BLQ (LOQ 0.05)	BLQ (LOQ 0.05)
17	Mercury	mg/l	NR	0.001	BLQ (LOQ 0.0005)	BLQ (LOQ 0.0005)	BLQ (LOQ 0.0005)
18	Nickel as Ni	mg/l	NR	0.02	BLQ (LOQ 0.01)	BLQ (LOQ 0.01)	BLQ (LOQ 0.01)
19	Selenium as Se	mg/l	NR	0.01	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)

3.2 Biological Environment

3.2.1 Flora

33.The project land is an empty land with no previous habitation. The land has tree cover (about 2000 trees), but the project is designed in a way that there will be no cutting of trees. For any unavoidable cutting of trees, the requisite tree cutting permission would be obtained from the concerned department. Further, there would be compensatory afforestation undertaken in the ratio of 1:10 (as per the EC conditions). The Udedurgam reserve forest is at an aerial distance of 5km from the project site. The project will however have no impact on the forest site. The forest cover map of with respect to Project Site is given in **figure -5**.

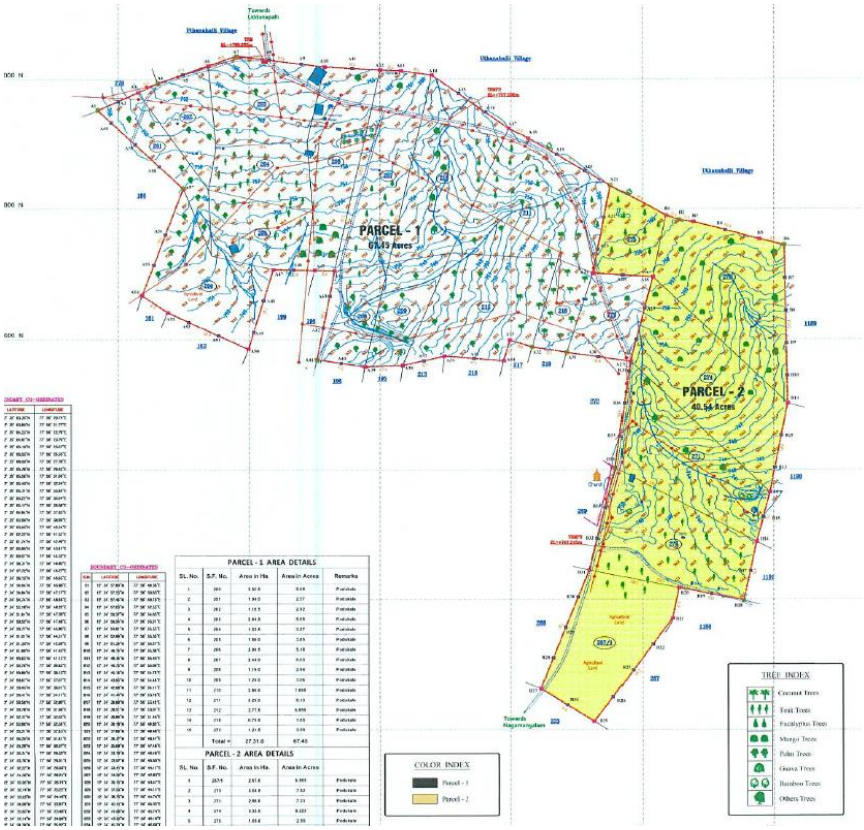


Figure 5: Forest Cover map of the Site

3.2.1 Fauna

34. There are no agricultural crops found in the project area. Hence, the project will not in any way affect or impact, disturb or affect any species. Also, there are no wild animals within the project area. The location map showing 5 Km buffer around the site area is given in **figure 6.**

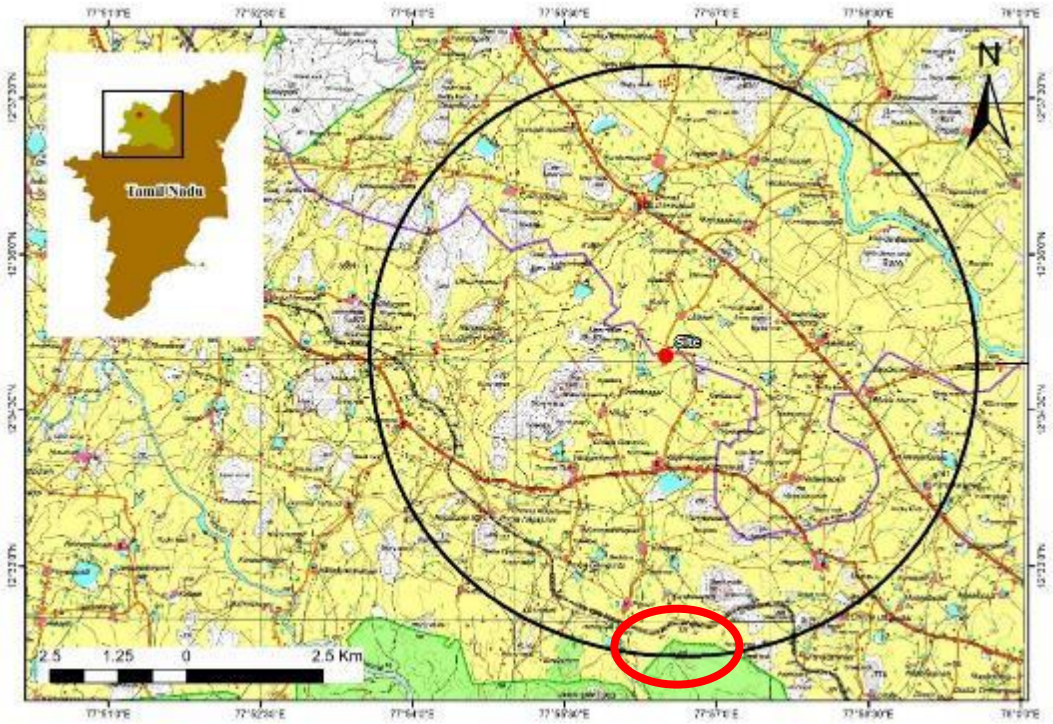


Figure 6 Map Showing 5 Km buffer around the site area

35. It can be stated from the analysis of the topographic sheet that the southernmost tip of the site buffer covers Udedurgam reserved forest at an approx. aerial distance of 5 km. However, the project will not have any impact on the forest.

36. There is presence of stony waste land about 2.26 km in the southwest of the site which at present is used for open pit mining as confirmed from Google earth. However, this will not lead to any severe impact on project and vice versa.

3.3 Socio-economic and Cultural Environment

37. Krishnagiri district has a total geographic area of 5,143 sq.m and is surrounded by Vellore and Tiruvanamalai districts in the east, Karnataka in the west, Andhra Pradesh in the north and Dharmapuri in the south. According to 2011 census, Krishnagiri district had a population of 1,99,657 with a sex-ratio of 1,015 females for every 1,000 males, much above the national average of 929.

38. The density of population has increased to 370 from 307 from 2001 to 2011. The decadal growth in population is primarily attributed to presence of industries leading to immigration of people for employment and livelihood activities. Agriculture is the main livelihood activity in the district with paddy, maize and ragi. There is huge presence of industries in Krishnagiri. The State Industrial Promotion Corporation of Tamil Nadu has developed one of the largest industrial complexes in Hosur in 1370 acres to develop large, medium, and small-scale industries. The average literacy of the district was 76.79%, compared to the national average of 72.99%.

4 Potential Environment impacts and mitigation measures

4.1 Potential impacts due to project activity

39. The potential environmental impacts and mitigation measures due to the project activities during pre-construction, construction, and operation stages have been identified in the table below. Screening of potential environmental impacts are categorized into pre-construction, construction, and operations stage. Pre-construction impacts include site levelling and design impacts. Construction impacts include impacts due to construction activities. Operations stage impacts include impacts arising from operations and maintenance of the facility.

Table 4- Potential Impacts and Mitigation Measures

Potential Impacts	Mitigation measures
Pre-construction stage	
Clearing of trees/ vegetation and excess earth disposal	There are currently about ~2000 trees present on the project site, as reported. The project has been designed so as to preserve these trees and ensure that no cutting or transplantation of trees will take place. In case of any unavoidable tree felling, the requisite tree cutting permission from the concerned department shall be obtained. Further, as part of the Environment Clearance, compensatory afforestation will be undertaken in the ratio of 1:10 trees. The project activity should not cause any disturbance & deterioration of the local bio-diversity.
Storm water runoff	The site drainage will be connected to rainwater harvesting reservoirs planned in the site. Storm water management around the site and on site shall be established by following the guidelines laid down by the storm water manual. The storm water management plan shall be obtained by engaging the services of Anna University/IIT.
Presence of Municipal Dump Site/ Hazardous Waste Landfills:	The nearest active dumpsite from the project area is Hennagara Lake Garbage Dump which are located at an aerial distance of ~ 36 km to the north-west of the Project. Thus, risk of exposure to pollution from dump sites to the project is negligible.
Presence of critically polluted areas	The project site is not located near (within 5 km distance) any Notified Polluted areas as per Central Pollution Control Board in the 'Comprehensive Environmental Assessment of Industrial Clusters', 2013. The nearest notified polluted area to the project location is Vellore, Tamil Nadu, which is located at an aerial distance of approximately 135 km from the project site.

Potential Impacts	Mitigation measures
	Therefore, the risk from the critically polluted areas to the project is low.
Presence of Municipal Dump Site/ Hazardous Waste Landfills:	The nearest active dumpsite from the project area is Hennagara Lake Garbage Dump which are located at an aerial distance of ~ 36 km to the north-west of the Project. Thus, risk of exposure to pollution from dump sites to the project is negligible.
Risk caused by Force Majeure	The study area is not much susceptible to floods, landslides, cloud bursts, and cyclones. The project site falls under the Seismic Zone-II (least active) according to the Indian Standard Seismic Zoning Map. Therefore, suitable earthquake design will be followed. Apart from this, all the necessary precaution will be taken to ensure the safety of workers including the provision of first aid kits.
Impact on social and cultural resources like heritage sites and communities	There shall be no impact on social and cultural resources as this is a residential project. The nearest ASI protected monument is Rayakottai Hill Fort located at a distance of approximately 11.8 kms towards south-east of the site. Therefore, there is no risk from the project activities to the heritage sites and communities.
Necessary Consents/ permits/ clearances	All the necessary consents and permits for the project shall be obtained by VRPL for the project. The project has been granted permission to obtain building permits within 6 months from start of construction by the government. For the DG sets and the STP, the company shall obtain a Consent to Establish (CtE) from SPCB post which a Consent to Operate (CtO) shall be obtained. The PMC shall obtain fresh water supply commitment letter and disposal of excess treated sewage from TWAD/competent authority before obtaining CTO. The Company shall ensure that the Fire NOC and Airport NOC is obtained from the relevant authorities for the project.
Impact on safe passage for local people; traffic congestion	The nearby village road will be utilized for the transportation of material and personnel during construction phase. The impact on traffic disturbance will be temporary during construction phase only. During the construction activity, utmost care will be taken to control the noise levels within the standards. The traffic movement will be preferably carried out in the off-peak hours.
Impacts on Protected Area	Udedurgam reserved forest is the nearest protected area located at an approx. aerial distance of 5 km. However, the project activities will not have any impact on the forest. Mudumalai Tiger Reserve and Karaivetti Bird Sanctuary are the nearest protected areas from the project site and are

Potential Impacts	Mitigation measures
	located at an approx. aerial distance of 190 km south-west and 200 km south-east respectively from the project site. Therefore, the risk from the project activities to the protected area is negligible.
Impacts on flora and fauna	Mudumalai Tiger Reserve and Karaivetti Bird Sanctuary are the nearest protected areas from the project site and are located at an approx. aerial distance of 190 km south-west and 200 km south-east respectively from the project site. Udedurgam reserved forest at an approx. aerial distance of 5 km. However, the project will not have any impact on the forest. There are no protected biodiversity areas in and around the area. Therefore, the risk to flora and fauna from the project activities is negligible.
Sources of pollution around the project location:	TATA Industries Estate is the nearest industrial area located at ~3.5 km towards south-west of the project site. The other industries falling within the 5 km radius of the project are HK Industrial Enterprises and Sree Rayan Industries and there is no sewage treatment plant located in the vicinity of the project. Thus, risk of exposure to pollution from the nearby industries to the project is 'Low'.
Construction Stage	
Setting up of Labor camps	The site for setting up the labor camps shall be selected in a way that it is away from residential areas. The site shall be situated in a place that it is not located near waterbodies and does not involve cutting of trees. Adequate provisions shall be made in the camps. Provision shall be made for housing all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc in the form of temporary structures.
Noise pollution from construction vehicles, equipment, and machinery	This is anticipated but will be temporary during construction phase and limited to the project site. The monitoring of the ambient noise levels will be performed regularly on the project site during the construction phase.
Use of ground water	The project plans to purchase water from water tankers for construction and domestic purposes. However, if at any stage the project needs to extract groundwater, the contractor has to obtain the requisite NOC from the local authority. Moreover, the project site is in Nagamangalam Village, Denkanikottai Taluk (Krishnagiri District) which is classified as 'Safe' in terms of Ground Water Development Status by the Central Ground Water Board (CGWB). Refer Figure 7.

Potential Impacts	Mitigation measures
	Therefore, the risk to the project from depleting ground water levels is low.
Maintain slope for natural drain	Design of proposed building components will enable efficient drainage of the sites and maintain natural drainage patterns. The siting of the buildings and allied commercial, involving physical construction shall be done to ensure no disruption of natural drainage patterns or flows into the nearby drains. The masterplan maintains the current contours of the site.
Stockpiling of construction materials.	Storage of construction material will be confined to work sites in a way to ensure that there is no obstruction to natural drainage pattern, and efficient drainage is maintained. Stockpiles will be covered to reduce dust generation
Sourcing of Construction Materials	All construction materials shall be sourced from government approved quarry sources and all construction materials shall be compliant with environmental regulations of India.
Impact on water availability for the local community	The project proposes to purchase water for construction/operational purposes. Therefore, there will not be an adverse impact on water availability for the local community. In addition, during the operational phase, the project proposes to provide 1 m wide water trenches all along the periphery of the site for collecting roof water. Roof top rainwater is to be collected in the proposed reservoir areas and it is proposed to provide adequate percolation pits. In addition, for wastewater generated during operations, Sewage treatment plant (STP) with treatment capacity of 490 KLD shall be provided at site for wastewater management. It is proposed that the treated water will be reused for flushing and the balance for water the OSR and greenbelt. Therefore, the risk from the project activities to the local water resources is low. Further the project is proposed to receive an IGBC-Platinum rating that encourages use of water in a self-sustainable manner through reduce, recycle, and reuse strategies.
Occupation and community health and safety	Occupational health and safety hazards from construction works will be mitigated through the OHS measures, many of which are mandatory by regulation. The project shall comply with IFC EHS Guidelines on Occupational Health and Safety. A comprehensive site-specific health and safety (H&S) plan will be developed and implemented in accordance with the above guidelines. The

Potential Impacts	Mitigation measures
	overall objective is to provide guidance to Contractors on establishing a management strategy and applying practices that are intended to eliminate, or reduce, fatalities, injuries and illnesses for workers performing activities and tasks associated with the project. The EPC Contractor shall undertake a COVID risk assessment of project area and prepare a COVID Response and Management Plan and furnish commitment for post-COVID health management for construction workers as per ICMR and MHA or the state government guidelines. A first aid room shall be provided in the project site during the entire construction and operation phases of the project. A medical facility shall be provided for continuous monitoring of the health of construction workers during COVID and post-COVID period.
Safety hazard	Safety measures will be adopted during the transportation of construction material to the construction site. There should be a fire fighting plan and all required safety plan.
Impacts due to Batching Plant operation	Batching plant will comply with the requirements of the current emission control regulations.
Soil & water pollution	The pollution preventive and control measures as mentioned in the CtE and CtO will be applied and will comply with prescribed statutory norms. The wastewater generated will be treated in the STPs (3 nos, 490 KLD). The treated water will be reused for flushing and watering the OSR, greenbelt and the future expansion area. Hence the risk of contamination is low.
Emissions from construction equipment & vehicles	This is anticipated during construction phase. The sources of air pollution will be from trucks transporting materials to the site, operation of diesel engine, and machinery use. The project will conduct regular ambient air quality monitoring tests and DG stack emission tests at the project site.
Waste disposal	The project will generate about 50 kg/day of municipal solid waste during the construction phase. The construction waste will be reused to the maximum and the excess will be disposed through authorized vendors. Adequate provisions shall be made for separate collection and disposal of E-Waste and Hazardous waste.
Impacts on Air/GHG Emissions	As per EC conditions, the project during construction phase shall use a low sulfur diesel, ensure regular air, and noise emission and use acoustically enclosed DG set with sufficient height.

Potential Impacts	Mitigation measures
	The risk from the project activities to air resources is classified as 'LOW'.
Influx of migrant workers	The project may hire migrant workers; however, no issues are anticipated. Further, the requisite permission/NOC to be obtained before hiring of migrant workers.
Operations & Maintenance Stage	
Site clearance and restoration	On completion of the works, all areas used for construction and camp activities shall be restored to their former conditions to the maximum extent possible after project completion.
Impact on communities due to prolonged construction	The impact on communities will be minimal as the project site will be barricaded during the construction phase. The only impact during the construction is the vehicular traffic caused by the construction activities.
Erosion hazards and dust generation	The topsoil removed during excavation shall be protected and stored by covering it by gunny bags etc. and shall be used to reclaim disturbed areas as soon as it is possible. Use of erosion controls (e.g., silt traps) along the drainage leading to the water drains. Maintenance of vegetative cover within unused land to prevent erosion and periodically monitor the area to assess erosion. The EPC contractor will take every precaution to reduce the levels of dust at construction sites All earth works to be protected / covered to minimize dust generation. Construction site shall regularly be wetted by sprinkling of water during dusty conditions especially during summer seasons and winds. Ambient Air Quality monitoring has to be performed as per the EMP
Waste Management	Solid waste and wastewater generated during the operational phases shall be efficiently managed. Sewage shall be treated using the STP that shall be installed. The treated water shall be used for Green Belt & OSR. Other bio-degradable and non-biodegradable waste shall be segregated and disposed through authorized vendors. Biodegradable waste shall be treated in organic waste convertor and used as manure for green belt. Construction waste shall be disposed through authorized vendors.
Infectious diseases/Spread of malaria	Solid waste and wastewater will be generated on site, which if not managed or treated properly might increase the risk of Malaria spread on site. This might cause a risk to the on-site personnel and construction workers.

Potential Impacts	Mitigation measures
	Proper solid waste management will be ensured on site and preventive measures will be adopted to ensure safety against malarial diseases.
Odour/ smell from Sewage Treatment Plant	The STP should be located away from the main buildings to prevent the problem of odor. The detailed design/ layout should have designated STP and the MSW areas, which should be located away from the main buildings to prevent the odor nuisance. STP design shall ensure negligible breakdowns with routine maintenance.
Monitoring of Environment Parameters	The project developer shall conduct regular monitoring of air, water, and noise quality through an approved monitoring agency.

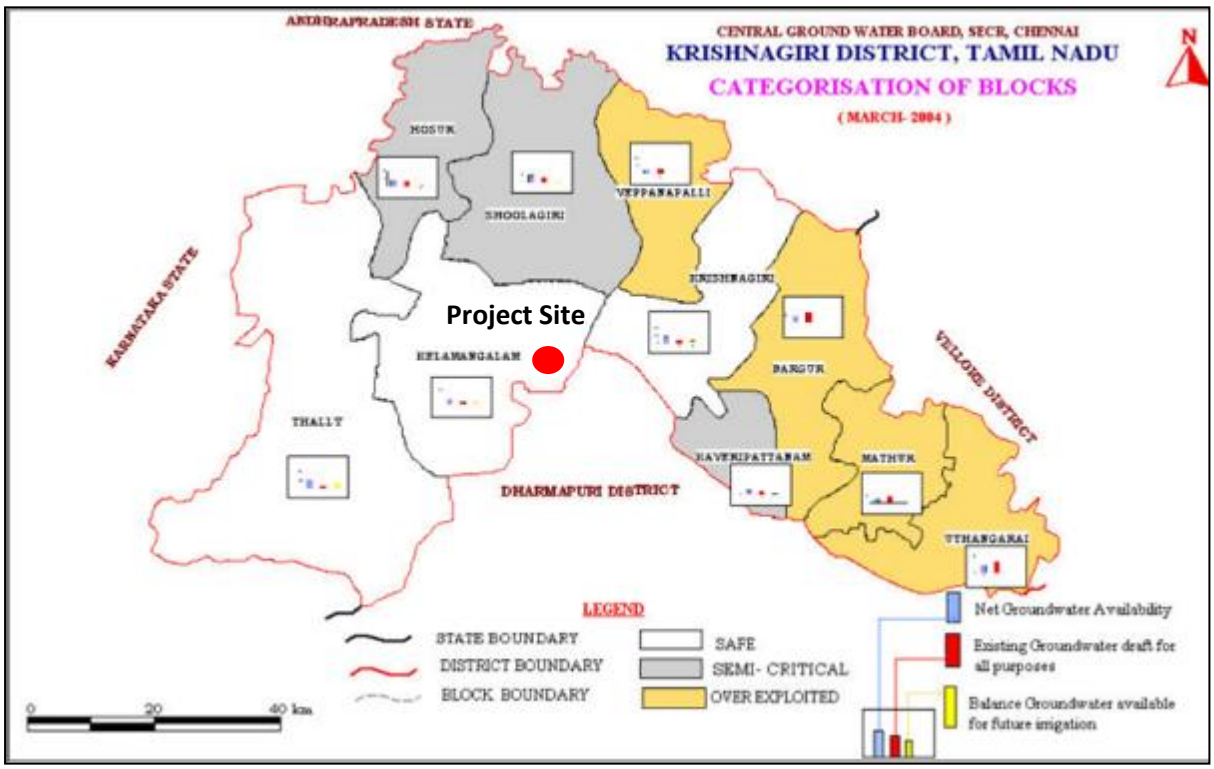


Figure 7 Map showing block wise ground water exploitation status

5 Analysis of alternatives

40. From a purely physical environmental point of view, the **Without project scenario** is preferable to any project implementation, since it would avoid creation of any of the adverse impacts associated with the project.

41. The project under consideration is an affordable industrial housing project, that provides TEPL women employees a safe and secure accommodation. The project also covers commercial and allied utilities. The project during the construction phase will also create employment for local people. It is concluded that the **Without project scenario** alternative is not feasible, and the potential socio-economic benefits of implementation of such project far outweigh the limited adverse impacts, all of which can be controlled and minimized to an allowable level.

5.1 Consideration of Alternatives

Provision of more hostels

42. The 'Without project scenario' alternative in the present case would mean that the employees of TEPL will have to stay at hostels in Hosur city ~20 km from the office location. Hence, the **Without project scenario** alternative is not feasible.

Reduction of Travel

43. The project shall reduce travel distance and frequent use of buses for employee travel which will reduce pollution and decrease carbon footprint. The project will also decrease commute time. Thereby providing more time for employees for self-development and increasing work life balance.

Location

44. The proposed site has no forest, no protected areas, no dense vegetation, no water bodies and no culturally important or heritage sites. There was no prior human settlement on the land hence the land acquisition involved no resettlement issues. The land is suitably located close to the place of employment. Hence there are no alternative suitable sites with similar minimum risk profile.

6 Institutional Arrangements

45. Vidiyal Residency Private Limited, has engaged Tata Consulting Engineers (TCE) as the Project Management Consultants (PMC) for the implementation of the project. The PMC has finalized a civil works contractor for the Engineering, Procurement, and Construction (EPC) of the project. The contractor is responsible for the efficient implementation of the Environmental Management Plan included as part of the tender documents. PMC shall ensure that the EPC contractor will maintain all relevant permits/approvals including the legal and regulatory compliances. The PMC will be responsible for the project supervision and execution, quality control, and EMP implementation during execution of the Project. The PMC shall appoint an environment specialist who shall be responsible for overseeing the implementation of the Environmental safeguards during the project period. The officer should have a bachelor's degree in environmental safety, occupational safety and health or any related fields and/or a minimum of five years of relevant experience. The officer shall have good knowledge of environmental regulations and policies of the GOI and funding agencies. The officer shall be responsible for coordinating with the PMC and ensure effective compliance with the EMP and submission of compliance reports to TNSF and all the other regulatory authorities. The officer shall have sound knowledge of environmental, social, and legal compliances and regulations of GOI and the funding agencies. The officer will be responsible for conducting the internal environmental monitoring and provide inputs on compliance checks. The officer will also prepare and implement site specific standard operating procedures manuals.

46. The contractor will depute one site Safety Health and Environment (SHE) officer. The SHE officer should have a bachelor's degree in environmental safety, occupational safety and health or any related fields and/or a minimum of five years of relevant experience. The officer shall have good knowledge of environmental regulations and policies of the GOI and funding agencies. The officer will be responsible for conducting the internal environmental monitoring and provide inputs on compliance checks. The officer will also prepare and implement site specific standard operating procedures manuals. In case new environmental impacts are identified or any compliances are not met, the same will be communicated to the PMC. The SHE will also ensure signages with contact information and potential safety risks are displayed at designated places in the local language. The officer will co-ordinate with environment specialist, PMC and EPC contractor and prepare a monthly progress report during the construction phase. Further, the requirement of the environmental clearance on submitting bi-annual report will also be compiled and submitted by the SHE officer.

7 Environmental Monitoring & Management Plan (EMP)

47. This chapter is based on the anticipated environmental impacts and mitigation measures for establishing compliance to EHS legal requirements. The associated impacts and mitigation measures with different activities are given in following table. The status of compliance will need to be updated in the semi-annual environmental monitoring report (EMR) (provided as annexure 5) since commencement to completion of the project.

7.1 EMP

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
	Location Impacts				
1.1	Location impacts pertain to siting of facilities for construction of new buildings/ dwelling units • Clearing of wild vegetation • Maintain slope for natural drain • Excess earth disposal	• The siting of facilities will be in line with the CMDA/ DTCP approved Master Plan. • The sites allotted for the construction of new buildings / belong to SPV. Hence there are no LA Issues anticipated. • Wild vegetation shall be cleared before construction. • Natural gradient shall be maintained for natural drain • The excavated excess earth/ soil (cut and filling) has to be disposed in an authorised/ identified landfill or disposal area.	• Identification of Disposal site for disposing debris and excavated soil	Contractor	PMC
1.2	Long term sustainability of the developments	• In accordance with the provisions in the project selection criteria, the project design shall include adequate provisions for ensuring effective maintenance and protection of the assets created so to ensure the long-term sustainability of the sites. • The designs will be worked out and implemented in accordance with the provisions.	• Designs Approvals • Work plan prepared	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• No construction activity of any kind shall be taken up in the Open Space Ratio (OSR) area. There should be a separate wall between the STP and OSR area.			
1.3	Land acquisition (Socio economic Impacts)	• No additional land will be required • Also, the sites are free without any inhabitation • Resettlement and/or land acquisition problems are not applicable since construction activities are in vacant site.	• NA	NA	NA
1.4	Clearing of trees/ Removal of vegetation	• All reasonable measures shall be undertaken to ensure that no native fauna is harmed or placed at risk during the clearing activities. • Felling of trees is to be avoided to the maximum extent possible. However, under unavoidable conditions if any of the trees are required to be cut/ felled, then prior permission as per existing procedure from Forest department, will be obtained and also it will be ensured appropriate compensation by way of compensatory plantation at 1:10 ratio.	• Tree count information and compensation ratio	Contractor	PMC
2.	**Design and Pre-Construction Impacts**				

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
2.1	Increased storm water runoff from alterations of the site's natural drainage patterns due to excavation works in the sites, construction of residential units, addition of paved surfaces and approach roads.	• Design of proposed building components will enable efficient drainage of the sites and maintain natural drainage patterns. The siting of the project components, involving physical construction shall be done to ensure no disruption of natural drainage patterns or flows into the nearby drain/nallah. • Adequate size and number of Recharge pits will ensure that no storm water is drained out of the site.	• Site drainage plan to be prepared and applied • Construction of drains and recharge pits to prevent water logging at site during rains	Contractor	PMC
2.2	Consents, permits, clearances, NOCs, etc.	• All the necessary approvals/ permissions/ clearances/ NOCs as required like CMDA/DTCP/Local bodies should be obtained before start of the construction activities.	• To get all the required approvals	Contractor	PMC
2.3	Selection of materials and construction technologies, if not carefully chosen, will adversely impact the visual appeal of the buildings	• Designs to be worked out in such a manner that exposed steel and concrete structures are avoided except where specifically stated • The design brief for all building components proposed will strictly conform to the Employer's requirements. • Any new landscaping elements will only utilize native species to protect local biodiversity	• List of approved quarry sites and source of material • List of trees/ shrubs for landscaping • List of materials to be procured for construction works included in BOQ	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
2.4	Integration of energy efficiency and energy conservation programs in design of building components	• The detailed designs for the building components shall ensure that environmental sustainability principles, including energy efficiency, resource recycling, waste minimization etc. are integrated, and designs accordingly worked out. • All the electrical and mechanical equipment used in the construction works shall be energy efficient and ISO certified as per the specifications.	• DPR and designs approved from competent authority • Use of energy efficient and ISO certified equipment in construction works • PUC for all construction vehicles	Contractor	PMC
2.5	Odour / smell from Sewage Treatment Plant (wherever provided), Solid waste collection area	• The detailed design/ layout should have designated STP and the MSW areas, which should be located away from the main buildings to prevent the odour nuisance.	• Designs approved from competent authority • MSW designed for daily collection • STP design shall ensure negligible breakdowns with routine maintenance	Contractor	PMC
2.6	Noise pollution from the pumps used for lifting water	• Pump house should be located away from the residential blocks, and it should be acoustic proof.	• Regular maintenance is required • Conducting frequent Noise monitoring	Contractor	PMC
2.7	Sourcing of water for construction activities	• Contractor shall purchase water from Urban Local Body (ULB) or TWAD or from any approved sources in compliant with environmental regulation of the	• Regular monitoring is required • Complaints, if any, from the local communities	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		county for the construction activities. • Use of groundwater for construction purpose should be restricted • Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices prevalent. • For any other arrangements for the source of water, the evidence for the same has to be furnished to the PMC	• Ground water level monitoring		
2.8	Installation of Diesel Generators	• As per the CPCB norms, place the Diesel Generators (DG's) in an acoustic enclosure or other sound insulation • Low Sulphur Diesel shall be used for operating diesel generator • Ensure Diesel gensets comply with the noise standards prescribed by the CPCB	• Standards prescribed by the CPCB	Contractor	PMC
3.	Pre-Construction Activities by Contractor				
3.1	EMP implementation and reporting	• Appoint Environment, Health, and Safety Supervisor to ensure EMP implementation • Timely submission of monthly monitoring reports including documentary evidence on EMP implementation such as	Unsatisfactory compliance with EMP	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		photographs and consultation records. Reporting shall include information about site restoration, noise and dust control, wastewater management, spills response, community and site health and safety, traffic control, tree cutting, construction of labour camps, storage areas, hauling roads, regulatory permissions, disposal areas for solid and hazardous wastes, sensitive features like schools and hospitals.			
3.2	Consents, permits, clearances, NOCs, etc.	• Obtain all necessary consents, permits, clearance, NOCs, etc. prior to the start of the respective work. • Ensure that all necessary approvals for construction to be obtained by the contractor are in place before the start of construction • Acknowledge in writing and provide a report on compliance of all obtained consents, permits, clearance, NOCs, etc.	All the project related clearances should be obtained as indicated in the Table 3	Contractor	PMC
3.3	Sources of construction materials (Impact on natural land contours, vegetation, disturbance to natural drainage	• Maximize the re-use of earth-cut materials, spoils, and construction & demolition debris / wastes	Contractor to prepare a list of approved quarry sites and sources of materials with the approval of PMC	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
	patterns, water logging, and water pollution.)	• Specify materials that are recycled, have recycled content or are from sustainable sources • Obtain construction materials only from government-approved quarries • Contractor to submit the documentation every month with the details of the material obtained from each source (quarry/ borrow pit) • Avoid the creation of new borrow areas, quarries, etc., for the project; if unavoidable, contractor to obtain all clearances and permissions as required under law with prior to approval by PMC			
3.4	Construction Camps – Location, Selection, Design and Layout	• The construction camps, if established exclusively for this contract, it shall be located at 500m away from the water bodies. The construction camps shall include separate female and male sanitation facilities, shelter, electricity, canteen, potable water (as per IS 10500), first aid, health care, and day crèche facilities. The premises must be adequately drained and must not be subject to periodic flooding.	• Location of construction camp approved by PMC • Construction camp having all the basic amenities with proper sanitary conditions drainage and watery supply	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• The camps must be located such that the drainage from and through the camps will not risk any domestic or public water supply. • All sites must be graded, ditched, and rendered free from depressions such that water may not get stagnant and cause a nuisance. • Dispenser shall be provided for the disposal of Sanitary Napkins • Municipal Solid Waste (MSW) generated from the construction camp shall be disposed on day-to-day basis. • Wastewater generated from the construction camp should be properly treated and disposed meeting the PCB requirements. • Comply with the ban on one time use and throwaway plastics under Tamil Nadu Government Order. • First Aid Room shall be provided in the project site during the entire construction phase of the project			
3.5	Stockpiling of materials	• Storage of construction material confined to work sites in a way to ensure that there is no obstruction to natural drainage pattern, efficient drainage is maintained	• Location of construction camp approved by PMC	Contractor and PMC	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• Stockpiles to be covered to reduce dust generation • Develop and implement the Materials Management Plan (including warehouses / storage)			
3.6	Establishment of baseline environmental conditions prior to start of civil works	• Conduct documentation of location of components, areas for construction zone (camps, staging, storage, stockpiling, etc.) and surroundings (within direct impact zones), locations of environmental monitoring (Include photos) • The monitoring parameters and the frequency of the monitoring should comply with the Environmental Monitoring Plan (Table 5)	• Baseline environmental profile including ambient air, noise, water quality as per the standards indicted in the monitoring plan (Table 5)	Contractor	PMC
3.7	Drinking water availability and water arrangement	• The contractor will be responsible for arrangement of water in every workplace in a suitable and easily accessible place for the whole construction period. • Sufficient supply of cold potable water (as per IS 10,500) to be provided and maintained. • If the drinking water is obtained from an intermittent public water supply, then, storage tanks will be provided.	• Records of drinking water supply to workers • Feedback from workers	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• The contractor shall ensure that its water consumption does not reduce the water supply to others • Periodical testing of water as per CPCB norms required.			
3.8	Identification of disposal sites	• Location of disposal sites identified by the contractor will be approved by the PMC and he will confirm that disposal of the material does not impact natural drainage courses or surface water bodies or low-lying areas and that no endangered / rare flora is impacted by such materials.	• Disposal site selected by the Contractor and approved by PMC • Records of materials disposed at disposal site • Logbook maintained for debris disposal	Contractor	PMC
3.9	Shifting of Utilities	• Identify and include locations and operators of these utilities in the detailed design documents to prevent unnecessary disruption of services during the construction phase. • Require contractors to prepare a contingency plan to include actions to be done in case of unintentional interruption of services. • If relocation is necessary, Contractor will coordinate with the providers to relocate the utility and communicate the dates and duration in advance to affected communities / persons / businesses.	• List showing utilities to be shifted • Contingency plan for services disruption	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
3.10	Social and Cultural Resources	• No cultural properties or religious structures shall be removed or relocated without the knowledge and written consent of the concerned parties or local administration as the case may be. Sites for the relocation of these religious structures shall be identified following the choice of the local administration • As far as possible, the architectural elements of the structure should be conserved/reflected/translated into the design of new structures following the wishes of the community • For any Chance find, consult Archaeological Survey of India (ASI) or Tamil Nadu Archaeology Department to obtain an expert assessment of the archaeological potential of the site. • Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	• Chance Find protocol	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
3.11	Circulation plan during construction in the densely populated areas	• Prior to mobilization and commencement of site activities, contractor has to prepare site work plan approved by Engineer so that no works or activities shall interrupt safe passage of local residents/ road users during construction stage, including development of alternative access routes, traffic regulations, signage etc., during construction. • The Contractor with support of the PMC will carry out dissemination of these information	• Site work plan prepared by contractor and approved by PMC • Traffic plan and records of road signages	Contractor	PMC
3.12	Access	• Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided • Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites. • Schedule transport and hauling activities during non-peak hours. • Locate entry and exit points in areas where there is low potential for traffic congestion. • Keep the site free from all unnecessary obstructions.	• Temporary Traffic management Plan	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• Drive vehicles in a considerate manner.			
3.13	Occupational health and safety	• Comply with IFC EHS Guidelines on Occupational Health and Safety • Develop comprehensive site-specific health and safety (H&S) plan. The overall objective is to provide guidance to Contractors on establishing a management strategy and applying practices that are intended to eliminate, or reduce, fatalities, injuries and illnesses for workers performing activities and tasks associated with the project. • Include in H&S plan measures such as: (i) type of hazards in the construction site. (ii) corresponding personal protective equipment for each identified hazard. (iii) H&S training for all site personnel (including labours); (iv)procedures to be followed for all site activities; and (v) Documentation of work-related accidents. • Provide medical insurance coverage for workers.	• Health and safety (H&S) plan	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• Contractor to nominate an on-site environment, health, and safety officer. • Contractor shall undertake a COVID risk assessment of project area and prepare a COVID Response and Management Plan (C-R&MP) and submit to PMC for approval.			
3.14	Site clearance activities including delineation of construction areas	• Commencements of site clearance activities shall be undertaken after permissions of PMC to minimize environmental impacts. • All areas used for construction and camp activities shall be restored to their former conditions after project completion and no impact to the baseline environment indicators have been confirmed.	Construction and workers camp sites should be restored as per the original situation	Contractor	PMC
3.14	Excessive disturbance to communities due to prolonged construction	• Meaningful consultations with communities to keep them informed of anticipated activities, in particular those that may result in disruption with respect to area access, utilities, and noisy or dust-generating activities that are likely to result in significant disturbance • Identify and adhere to strict construction schedule • Alert communities and residents if night-time construction work shall	Community Health and Safety	Contractor and PMC	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		occur nearby (no night-time construction within 500 m of the nearest household) and ensure alternative access is provided • Ensure communities are aware of Grievance Redress Mechanism (GRM) entry points • Create awareness of health & safety risks of transmittable diseases (HIV/AIDs / COVID-19), child labour, bonded labour or forced labour.			
4.	**Construction Impacts**				
4.1	Improper stockpiling of construction materials cause impacts starting from obstruction of drainage, disturbance/ safety hazard etc.	• Adequate safety precautions will be ensured during transportation of quarry material from quarries to the construction site. • Vehicles transporting material will be covered to prevent spillage. • Operations to be undertaken by the contractor as per the direction and satisfaction of Engineer.	• Proper stockpiling of construction materials • vehicles transporting construction materials covered to prevent spillage	Contractor	PMC
4.2	Impacts due to Batching Plant operation	• Batching plant shall comply with the requirements and specifications of the relevant current emission control legislation. • Batching plant shall be located away from residential/ settlements and commercial establishments, as per the PCB norms.	Batching Plants should be kept/ stationed 1000 m away from residential /settlements	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• The Contractor shall submit a detailed layout plan for all such sites and seek prior approval of PMC before entering into a formal agreement with a landowner for setting-up such sites. • Actions by PMC against any non-compliance shall be borne by the Contractor at his own cost. • Arrangements to minimize dust pollution through the provision of windscreens, mist spray units, and dust encapsulation shall have to be provided at all such sites. • Specifications of batching plant shall comply with the requirements of the relevant current emission control legislation and Consent / NOC for such plant shall be submitted to the PMC • No such installation by the Contractor shall be allowed till all the required clearances are obtained from the competent authority and the same is submitted to the PMC.			
4.3	Quarry, borrow areas operations	• If quarry, borrow areas are exclusively opened for the project, contractor shall ensure that they	• list of approved quarry sites and sources of materials	Contractor and PMC	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		qualify all the legal conditions to operate such areas. • Consent to Operate (CtO) for quarry sites has to be taken from Tamil Nadu Pollution Control Board (TNPCB) and a copy of the same has to be kept in record and submitted in PMC. • Contractor has to comply all the conditions stipulated in Consent to Operate document. • If contractor purchases the materials from other party, he has to ensure that quarry has obtained the necessary clearances and show proof when requested by PMC.	• CtE and CtO certificate obtained by contractors for quarry sites, batching plant and DG sets and submitted to PMC		
4.4	Stripping, stocking, and preservation of topsoil	• The topsoil from areas of cutting and areas to be permanently covered (proposed site construction of building) will be stripped to a specified depth of 150mm, translocated and stored in stockpiles. • The stockpiles will be covered with gunny bags or tarpaulin. Shall ensure watering at regular intervals. • The contractor to ensure that the topsoil is not trafficked either before stripping or when in	• Topsoil preservation plan prepared and approved by PMC • Record of topsoil excavated, preserved, and reutilized	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		stockpiles. Such stockpiled topsoil shall be used to cover the disturbed area and cut slopes, after completion of the construction activities.			
4.5	Soil and water pollution due to storage of fuels, lubricants, construction vehicles and construction wastes	• Fuel and lubricant storage areas shall be designed in such a way that oil may not contaminate soil or water. • The floor of storage area shall be protected by impermeable membrane and covered by roof so that it is not affected by rain. • Oil pumps should be used to take out the oil from the container and no oil spillage shall take place. • All the construction waste should be disposed properly after end of the day so that it may not create nuisance at site. • Soil and water pollution parameters shall be monitored as per the monitoring plan. • Dispose waste oil and lubricants that have been generated as per provisions of Hazardous Waste (Management and Handling) Rules, 1989. • Inspect all vehicles daily for fluid leaks before leaving the vehicle	• Proper storage of fuel and lubricants • Impermeable membrane used in flooring of storage yard to prevent soil and water pollution • Construction waste disposal records • Waste management plan	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		staging area, and repair any leaks before the vehicle resumes operation • Strictly prohibit open defecation by workers in nearby areas			
4.6	Siltation of drains/ water bodies due to spillage of construction wastes	• Silt fencing to be provided at construction sites during rain period to prevent sediments from the construction site to enter the watercourses/ nearby settlements. The number of units of silt fencing to be installed will be decided by the PMC based on site conditions. • Haul roads on the site and approaches to the watercourse (or drains leading to watercourses) shall be regularly cleaned to prevent the build-up of mud; areas of bare soil will be kept to a practical minimum to reduce silt runoff. • Extraneous construction wastes will be transported to the pre-identified disposal site for safe disposal.	• Site fencing • Numbers of Silt traps constructed at site • Proper drainage system provided at site • Regular cleaning of drains during rain period	Contractor	PMC
4.7	Emission from Construction Vehicles, Equipment and Machinery	• The discharge standards promulgated under the Environmental Protection Act will be strictly adhered to. • All vehicles, equipment and machinery used for construction	• PUC available for all vehicles	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		will conform to the relevant Standards. • All vehicles, equipment and machinery used for construction will be regularly maintained to ensure that pollution emission levels comply with the relevant requirements. • All the construction vehicles shall have Pollution Under Control (PUC) certificates to check air pollution.			
4.8	Erosion Hazards	The existing topography of the sites are to be maintained as far as possible. However, the Contractor will require to: • Save topsoil removed during excavation and use to reclaim disturbed areas as soon as it is possible to do so. • Use dust abatement such as water spraying to minimize windblown erosion. • Provide temporary stabilization of disturbed/excavated areas that are not active under construction. • Apply erosion controls (e.g., silt traps) along the drainage leading to the water drains. • Maintain vegetative cover within unused land to prevent erosion and	• Slope stability • Frequent monitoring during the piling operation • Monitoring noise and vibration	Contractor and PMC	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		periodically monitor the area to assess erosion. • Clean and maintain catch basins, drainage ditches and culverts regularly. • Conduct routine site inspection to assess the effectiveness and the maintenance requirements for erosion and sediment control systems			
4.9	Generation of Dust	• The contractor will take every precaution to reduce the levels of dust at construction sites to the satisfaction of the Engineer. • All earth works to be protected / covered in a manner acceptable to the satisfaction of the Engineer to minimize dust generation. • Clearance will be affected immediately by manual sweeping and removal of debris, or if so directed by the Engineer, the road surfaces will be hosed or watered using necessary equipment. • Construction site shall regularly be wetted by sprinkling of water during dusty conditions especially during summer seasons and winds. • Ambient Air Quality monitoring has to be performed as per the	• Records of housekeeping • Records of water sprinkling at site • vehicles carrying excavated soil covered • AAQ parameters (Particulate matter (PM10 & PM2.5), Sox, Nox, CO) to be monitored (\Table 5)	Contractor and PMC	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		Environmental Monitoring Program as indicated in the Table 5. • The contractor shall barricade the site in all the directions leading to the road and adjacent properties. • The barricades shall be erected in such a way to prevent dust, debris, etc. not to be carried away from the site. • The height of the barricades shall be as required but a minimum of 6m • The barricades are to be maintained till the completion of the Works.			
4.10	Noise from construction activities and equipment	• Maintenance of vehicles, equipment and machinery will be regular and to the satisfaction of the Engineer, to keep noise from these at a minimum. • All vehicles and equipment used for construction will be fitted with exhaust silencers. During routine servicing operations, the effectiveness of exhaust silencers will be checked and if found to be defective will be replaced. • Noise limits for construction equipment used in this project (measured at one meter from the edge of the equipment in free field) such as compactors, rollers, front	• Maintenance record of construction vehicles and equipment • exhaust silencers working properly • Records of noise monitoring as per EMP and as set out in Table 5.	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision

		loaders, concrete mixers, cranes (movable), vibrators and saws will not exceed 75 dB (A).
		• Notwithstanding any other conditions of contract, noise level from any item of plant(s) will comply with the noise standards specified by CPCB.
		• If specific noise complaints are received during construction, the Contractor may be required to implement one or more of the following noise mitigation measures, as directed by the Engineer:
		  • Shut off idling equipment.
		  • Reschedule construction operations to avoid periods of noise annoyance identified in the complaint.
		  • Notify nearby residents whenever extremely noisy work will be occurring.
		• Ambient Noise levels has to be monitored as per the Environmental Monitoring Program provided in table 5.			

4.11	Impacts on flora and fauna	• Strictly instruct workers not to cut trees for fuel wood	• Baseline information of the flora and fauna for the project area	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• Do not harm existing vegetation in the area except for those indicated in site plan • Limit activities within the work area. • Strictly prohibit poaching of birds and animals in the vicinity of work sites			
4.12	Material Handling at Site	• All workers employed on mixing asphaltic material, cement, concrete etc., will be provided with protective footwear and protective goggles. Workers, who are engaged in welding works, will be provided with welder's protective eye-shields. Workers engaged in stone breaking activities will be provided with protective goggles and clothing and will be seated at sufficiently safe intervals.	• Use of proper PPEs as work sites • Records of PPEs procured and issued for use	Contractor	PMC
4.13	Disposal of Construction Waste /Debris / Cut Material	• The waste generated will be reused in the construction activities, either as a fill material or otherwise, based on its suitability of reuse to the maximum extent possible. • Safe disposal of the extraneous material will be ensured in the pre-identified disposal locations. In no case, any construction waste will be	• Records of excavated soil and • Records of reuse and disposal of excavated soil • Disposal site identified and approved • AAQ parameters (Particulate matter (PM10 & PM2.5), SOx, NOx, CO) to be monitored	Contractor and PMC	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		disposed around the project locations indiscriminately. • Burning of municipal solid waste or hazardous waste shall be prohibited.			
4.14	Safety Measures During Construction	• Personal Protective Equipment (PPE) for workers on the project and adequate safety measures for workers during handling of materials at site will be taken up. • The contractor has to comply with all regulations regarding safe scaffolding, ladders, working platforms, gangway, stairwells, excavations, trenches and safe means of entry and egress. • Appropriate safety measures (including hard barriers) have to be adopted for the construction during the night-time (Lux level shall be equivalent to a minimum of two 500 watt flood lights)	• Use of PPEs • Records of PPEs procured and issued for use • Compliance of all regulations regarding scaffolding, ladders, and work at height	Contractor	PMC
4.15	Risk caused by Force Majeure	• All reasonable precaution will be taken to prevent danger of the workers and the public from fire, flood, drowning, etc. • All necessary steps will be taken for prompt first aid treatment of all injuries likely to be sustained during the course of work.	• Records of first aid facilities at site • Records of safety training to workers	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
4.16	Malaria Risk	• The Contractor will, at his own expense, conform to all anti-malarial instructions given to him by the Engineer; mosquito prevention at site should be done	• Records of use of mosquito prevention measures at site and work camps • Anti-malaria instructions to workers	Contractor	PMC
4.17	Clearing of Construction Camps & Restoration	• Contractor to prepare site restoration plans for approval by the Engineer. The plan is to be implemented by the contractor prior to demobilization. • On completion of the works, all temporary structures will be cleared away, all rubbish should be removed, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the site left clean and tidy, at the Contractor's expense, to the entire satisfaction of the Engineer.	• Restoration plan for site and work camps prepared • Restoration of site and work camps as per plan	Contractor	PMC
4.18	Influx of migrant workers	• Local labourer's to be given preference for job opportunities and each contractor should be bound by this commitment • Ensure labour-related regulations are met • In case of hiring outside labour, ensure that their working conditions as well as camps meet	• Health and safety risks • Chances of spread of sexually transmittable diseases like AIDS • Water pollution	Contractor	PMC

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		local regulations and the best practices of the industry • HIV/AIDS awareness campaign for the workers			
5	**Post- Construction, Operations & Maintenance Stage**				
5.1	Damage due to debris, spoils, and excess construction materials	• (i) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and • ii) All excavated roads shall be reinstated to original condition. • (iii) All disrupted utilities restored • (iv) All affected structures rehabilitated/compensated • (v) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up. • (vi) All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regressed using the guidelines set out in the revegetation specification that forms part of this document.	•	Contractor	VRPL

S. No.	Environmental Issues	Mitigation Measures	Indicators and Targets	Responsibility for Implementation	Responsibility for Supervision
		• (vii) The contractor must arrange the cancellation of all temporary services. • (viii) Request PIU to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.			
5.2	Waste Disposal	• Household waste to be segregated and sent to waste collection centres • Sewage waste to be treated through sewage treatment plant • Grey water to be used for watering green belt • Records of waste disposal	• Records of Waste Disposal	Operations and Maintenance Team	VRPL
5.3	Ambient Air, Noise and Water Monitoring	• Regular Monitoring of air, water, and noise levels due to the project	• Test Records	Operations and Maintenance Team	VRPL

Table 5- Environmental Monitoring Plan during Construction and Operation Stage

Monitoring Field	Monitoring Location	Monitoring Parameters	Frequency	Responsibility	Estimated Cost (In INR)/Test	Estimated Total Cost (In INR)/year
Ambient Air Quality	1 location	PM10, PM2.5, NO2, SO2, CO	Once before start of construction, Quarterly during construction stage,	Contractor	30,000	1,50,000 (1,20,000+30,000)

			except the monsoon period			
Ambient Noise Quality	1 location	Day time and night-time noise levels	Once before start of construction, quarterly during construction stage, except the monsoon period	Contractor	15,000	75,000 (60,000+15,000)
Surface and Groundwater Quality	2 locations	pH, Oil and grease, Cl, F, NO3, TC, FC, Hardness, Turbidity BOD, COD, DO, Total Alkalinity, TDS, Heavy Metals, Sulphates, Nitrates	Once before start of construction, quarterly during construction stage, except the monsoon period	Contractor	20,000	1,80,000 (1,60,000+20,000)

8 Information Disclosure, Consultation and Participation

48. The project is categorised as "B2[9]" project as per the EIA Notification- 2006, hence, does not require public hearing through SPCB/consultation. However, the active participation of stakeholders including local community, NGOs, etc., in all stages of project preparation and implementation is essential for successful implementation of the project. To improve the engagement with the community, a stakeholder engagement plan and disclosure mechanism will be formulated. This will ensure that the project is designed, constructed, and operated with utmost consideration to local needs, ensuring community acceptance, and will bring maximum benefits to the people.

49. The informal public consultations have been undertaken for the project prior to construction commencement and the local public shall were informed about the project. The details of the same are provided in (Annexure 6-Informal Public Consultations). Further, it is proposed that the same should be carried out during implementation till closure of the project and details shall be provided in semi-annual environmental monitoring report (EMR).

50. TNIFMC for TNSF shall disclose ESGMS performance including the environmental assessment, EMP, and semi-annual EMRs in the public domain in line ADB SPS 2009 Principle 5, 6 and 7 for environment.

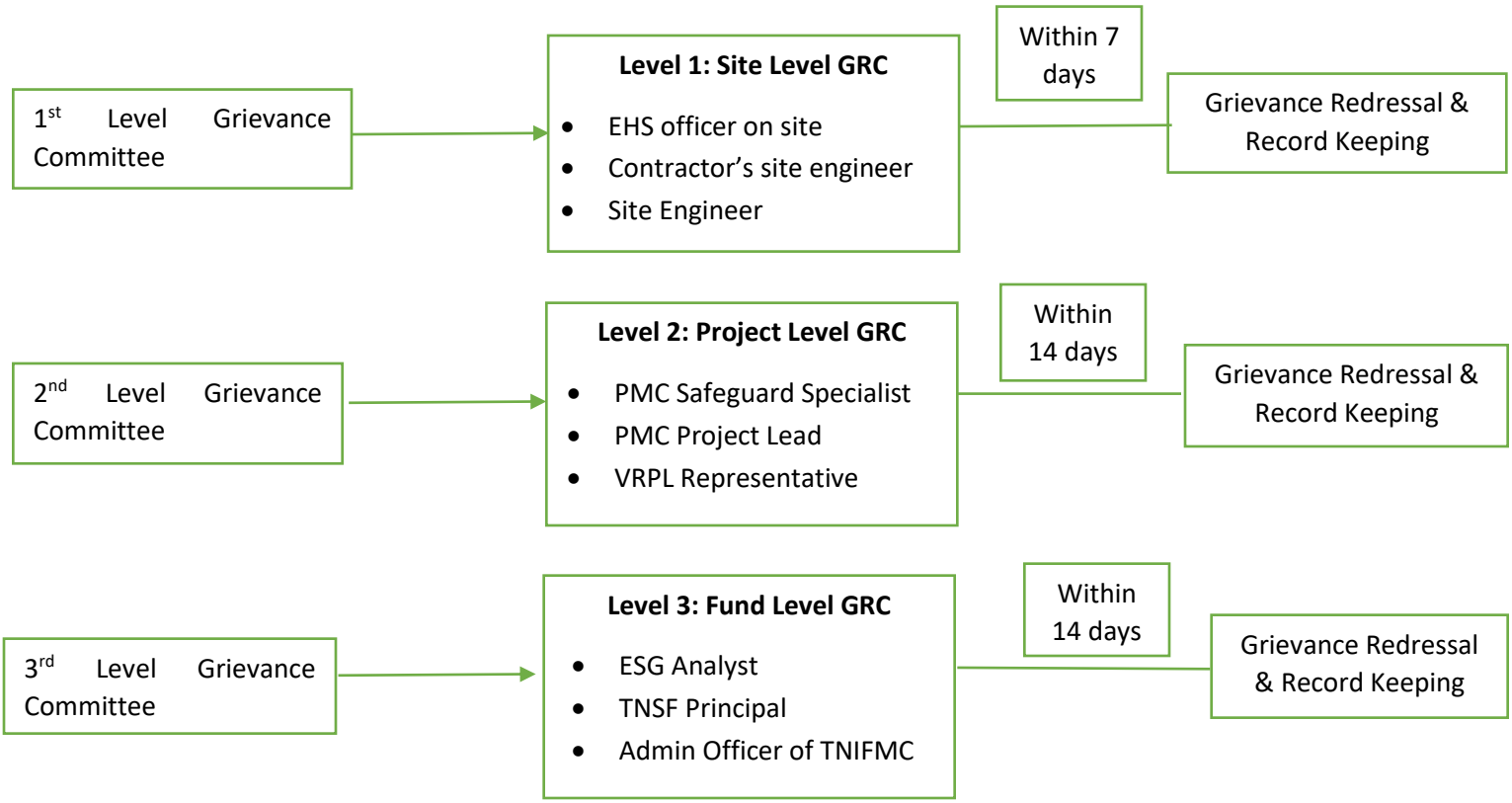
9 Grievance Redressal Mechanism

51. A Grievance Redress Mechanism for external stakeholders will be established to address matters related to environmental and social aspects of the project. The main objective of the Grievance Redressal Mechanism is to provide a time bound and transparent mechanism to voice and resolve complaints of the people affected in the project area. It is recognized that the Grievance Redress Mechanism provided does not impede or replace the grievance resolution process offered by the legal system of the country.

52. There will be three levels of Grievance Redressal Mechanisms- a) Site Level b) Project Level and c) Fund Level. At each of the levels, a minimum of 3 officers needs to be identified and their names and contact details need to be displayed in both English and Tamil in the project. At the site level, the contractor shall nominate 2-3 grievance redressal officers and their names, and the contact details shall be displayed at prominent locations in the site, in both English and Tamil. At **the project level, the PMC head** will be responsible for handling grievances. They will (i) record the complaints, categorize, and prioritize them; (ii) consult with all relevant stakeholders (including contractors, SHE officer), visit the project site, and do the required examination; (iii) settle the grievances in consultation with the complainant and the project staff; (iv) report to the aggrieved parties about the decision/solution; and (v) forward the unresolved cases to higher authorities for resolution. In case of complex complaints, the PMC head will inform the project director and VRPL and guide him about practical options for resolving the grievances. At the fund level, there will be a grievance redressal officer nominated who shall handle the grievances at the fund level.

[9] Building and Construction Projects - Schedule 8 (a): Built-up Area <1, 50,000 sq. mtrs (ie' 1,44, 247.12 Sq. m) - Category'B2'. Category B2 projects do NOT REQUIRE an EIA report and public consultation to be placed before the Appraisal Committee

Grievance Redressal Mechanism



53. The grievance resolution process, along with the log of grievances received and their resolutions provided will be periodically reviewed by the PMC team.

54. The Grievance Redressal Mechanism (GRM) shall be aligned to the World Bank and ADB's approach to grievance redressal in projects.

55. **Procedure** - The GRM covers three categories of stakeholders namely external stakeholders at the project site, those affected by the project, and the investors of the Fund.

Step 1: Nomination of Site Level Grievance Redressal Officer and Management Level Grievance Redressal Officer

a) There will be a nomination of one site Level Grievance Redressal Officer by the contractor in consultation with Project Lead and ESG team of TNSF. The site level GRO, ESG Analyst and Project Lead shall conduct a rapid review of contentious issues/ disputes related to the project such as, land ownership/rights, ethnic/community rights, or labor issues, and related stakeholders, relying on existing information from the project, relevant government departments and community around project site.

b) The review will map who the key stakeholders to these issues are and what the nature of the debate is (informed, polarized, etc). Attention will be paid to the local dispute resolution culture and, particularly, to the capacity and track-record of stakeholders to settle disputes through mediation or constructive negotiation.

c) There will be a nomination of one Management Level Grievance Redressal Officer by the Management in consultation with Project Lead and TNSF.

d) The names, positions/designations, contact numbers and email of the site Level, Management Level and Fund Level GROs will be displayed prominently in local language as well as in English, at the entrance to the project site.

Step 2: Receiving of grievances and complaints

a) The grievances can be received by any or all the following means: phone, post/courier, SMS, webpage, or face-to-face. The uptake channels should be publicized and advertised at the site and on the website of TNSF and project owner.

b) A Grievance Register (GR) will be maintained at the Project Site Office for recording the grievances. The site Level GRO will record the grievance/ complaint if communicated verbally by the aggrieved party.

c) It is important that all complaints are logged in writing and maintained in a database. A central log of all the grievances received through the above means will be maintained by the site Level GRO, in an excel file.

d) Staff members who receive complaints verbally should put them in writing into the central grievance log, for them to be tracked.

e) Any grievances received anonymously should also get recorded in the grievance log.

f) Every grievance received will be identified with a grievance number and the same shall be communicated to the aggrieved party as an acknowledgement verbally or in-writing by the site Level GRO within 24 hours of the receipt, also telling him/her when to expect further information.

The record of communication of the acknowledgement will be maintained by the site Level GRO in the central grievance log.

Step 3: Resolution of grievances and complaints

a. Grievances will be categorized by the Site Level GRO as high, medium and low priority according to the type of issue raised (e.g. physical and economic displacement, grievance from indigenous population, inconvenience caused by vehicular movements, accidents, near-misses, pollution, etc.) and the impact of the project on the environment/aggrieved party.

b. A high priority grievance may be those that can have an impact beyond the activity period and the impact may be irreversible if not acted upon immediately; medium priority grievances are those where the impact is fairly moderate and can be reversed with corrective measure; low priority grievances are those which are short-term and can be resolved through bare minimum or minor corrections.

c. Based on this categorization and seriousness of the issue raised, the Site Level GRO will prioritize the complaints for appropriate follow up action.

d. The Site GRO will review the grievances / complaints received and direct it to the appropriate function/ department for necessary action, keeping the project site head/ in-charge in loop.

e. It is anticipated that the majority of issues raised will be informational in nature or feedback that requires small course corrections; these should generally be handled at the site by the representatives of project owner.

f. Issues having to do with governance will be addressed at the Management level, with the involvement of the Management Level GRO.

g. The function/ department will revert to the Site GRO with their response as soon as possible but not later than 7 days of receipt of complaint, including any action deemed necessary, along with the site head's approval for the same.

h. In case, the Site Level GRO is not able to resolve the grievance, the grievance will be submitted to Management Level GRO and the total time to resolve should not more than 7 days (including site Level and Management Level GRO).

i. In case, after 7 days, if there are any unresolved issues, the complaint will be transferred to the Fund-Level Grievance Redressal Committee for resolution within the next 7 days.

j. The Site Level GRO will be accountable for the timely closure of all the grievances received from the external stakeholders at the site and those affected by the project at project site.

k. The Site Level GRO will communicate the response and action taken to the aggrieved party and obtain their acknowledgement.

l. Basis the acknowledgement received from the aggrieved party, the Site Level GRO will close the complaint in the grievance log.

m. The grievance log will be shared by the Site Level GRO with the Management Level GRO and Project Lead of TNSF on fortnightly basis.
n. The grievance log will also be included in the quarterly project progress reports submitted to TNSF's ESG Team.
o. The Project Lead in consultation with the Site Level GRO, Management Level GRO and Fund Level GRC will ensure that all the grievances are closed within the quarter.
p. The site will maintain at a minimum, a database on the following metrics:
    i. Number of complaints received
    ii. Number of complaints resolved
    iii. Details of the complaints that have gone to mediation (through arbitration or involvement of other parties like – community representatives, legal representatives, TNSF legal counsel, etc.)
    iv. Grievance and complaints received from investors
    v. The names displaying the Grievance Committee Members at Project and Site Level

The sample grievance redressal form is provided under Annexure 4.

10 Conclusions and Recommendations

56. This IEE report examined the project in a detailed manner and assessed the various existing environmental parameters in and around the project and the actions planned to minimize any temporary negative impact during the construction and operational phase and associated mitigation measures are proposed. The project site is not located in a sensitive ecosystem and is not significant from a historical and cultural perspective. The project will not cause any significant adverse environmental and social impacts during construction, or operation of the project. The risks to the project at this stage are low. Most of the associated impacts are site specific and manageable. They are expected to be limited to the construction and operations phase and will therefore be temporary in nature. Adequate mitigation actions will be undertaken in line with management and monitoring of the set of recommended mitigation measures. Land transfer for the project has already been completed without any dispute hence the physical and/or economic displacement of people shall not be required for project implementation.

57. Based on the REA checklist, the classification of the project as Category B is confirmed i.e. it is likely to have minimal or no adverse environmental impacts. Hence no further special study or detailed EIA needs to be undertaken to comply with ADB's SPS (2009).

58. The project has obtained the Environment Clearance from state competent authorities (EC approval attached in) and accordingly an Environmental Management Plan (EMP) has been developed. The EMP covers all aspects of construction phase and operational phase of the project. The EMP also has a detailed plan of implementation and monitoring the actions.

59. To manage the potential adverse environmental impacts, especially in the construction phase of the project, the recommendations provided in the EMP should be followed with due diligence. Some of important actions required are:

- Regular monitoring of the recommended mitigation measures shall also be carried out during the construction phase of the project. The EMP should be revisited in case new impacts are identified.
- Training of staff on EMP related issues.
- Activation of the Grievance Redress Committee and prompt response to public complaints.
- Develop a comprehensive stakeholder engagement and management plan for smooth disclosure of information.

Annexure 1- Photos

Photos inside the land parcel. The land no access control so has open access to all.

Photos inside the land parcel

Road on north side. Unbarricaded land.

Tree numbering done on site.

Rain water harvesting planned in this area.

Photos inside the land parcel

Some pre-existing temporary unused structures on site which are to be demolished.

Annexure 2: Rapid Environmental Assessment Checklist

Country/Project Title:	India/ Tamil Nadu, TEPL's Housing Facility for Industrial Workers
Sector Division:	Urban Development

Screening Questions	Yes	No	Remarks
A. Project Siting Is the project area			
• Densely populated?		**X**	The site is located in Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu. The nearby villages include Kelanmangalam – 9.2 km WNW, Sappadi – 8.70 km NNE, and Alisibam – 2 km E. The project area is at present uninhabited.
• Heavy with development activities?		**X**	Since Nagamangalam is a village area and located away from the city, therefore, there is not much development that has happened in the surrounding areas. The nearest town to the site is Hosur located at an aerial distance of approximately 18 kms (NW). The nearest city to the site is Bangalore located at an aerial distance of approximately 42 kms (NW).
• Adjacent to or within any environmentally sensitive areas?			

○ Cultural heritage site		X	Rayakottai Hill Fort is an ASI protected monument located at a distance of approximately 11.8 kms towards south-east of the site.
○ Protected Area		X	Mudumalai Tiger Reserve and Karaivetti Bird Sanctuary are the nearest protected areas from the project site and are located at an approx. aerial distance of 190 km south-west and 200 km south-east respectively from the project site. Udedurgam reserved forest at an approx. aerial distance of 5 km. However, the project will not have any impact on the forest
○ Wetland		X	There is no wetland in and around the project site
○ Mangrove		X	There are no coastal areas around the site.
○ Estuarine		X	There are no coastal areas around the site.
○ Buffer zone of protected area		X	Mudumalai Tiger Reserve and Karaivetti Bird Sanctuary are the nearest protected areas from the project site and are located at an approx. aerial distance of 190 km south-west and 200 km south-east respectively from the project site. Udedurgam reserved forest at an approx. aerial distance of 5 km. However, the project will not have any impact on the forest
○ Special area for protecting biodiversity		X	There is no special area for protecting biodiversity in and around the area.
○ Bay		X	There are no coastal areas around the site.
B. Potential Environmental Impacts Will the Project cause…			
• Impacts on the sustainability of associated sanitation and solid waste disposal systems and their interactions with other urban services.		X	The project includes construction of 14 towers with a total of 14,308 beds. Other buildings include commercial and utility buildings. The project is expected to generate about 50 kg/day of municipal solid waste during the construction phase. The construction waste will be reused to the maximum and the excess will be disposed to through authorized vendors.
• Deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased		X	The activity is within the permissible development activity and the local area plan.

waste generation to the point that both manmade and natural systems are overloaded and the capacities to manage these systems are overwhelmed?			
• Degradation of land and ecosystems (e.g., loss of wetlands and wild lands, coastal zones, watersheds and forests)?		X	The project site is far from these types of ecosystems.
• Dislocation or involuntary resettlement of people?		X	The project does not involve any dislocation or involuntary resettlement of the people.
• Disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable group?		X	The project is not located near any place of cultural importance.
• Degradation of cultural property, and loss of cultural heritage and tourism revenues?		X	The site has been proposed to be used for residential purposes. Rayakottai Hill Fort is a protected monument located at a distance of approximately 11.8 kms towards south-east of the site. However, the impact of the project will not degrade the cultural property, or the loss of cultural heritage and tourism revenues
• Degradation of aesthetic and property value loss?		X	The land is barren and vacant, so any loss of aesthetic and property value is very unlikely
• Occupation of low-lying lands, floodplains and steep hillsides by squatters and low-income groups, and their exposure to increased health hazards and risks due to pollutive industries?		X	The project will be used for residential purpose.
• water resource problems (e.g., depletion/degradation of available water supply, deterioration for surface and ground water quality, and pollution of receiving waters?	X		The total water requirement for the proposed housing facility is 1930 KD during the operation period and 35 KLD for construction period. For the construction period, the project shall source water from tankers or purchase from other sources. Moreover, in any situation, where the project needs to draw groundwater, requisite permissions need to be obtained for the same. As the project site is located in Nagamangalam Village, Denkanikottai Taluk (Krishnagiri District), the water level in the area is classified as 'Safe' in terms of Ground Water Development Status by the Central Ground Water Board (CGWB). Therefore, the risk to the project from depleting ground water levels will be low.

• Air pollution due to urban emissions?	X		This is anticipated during construction phase. The sources of air pollution will be from trucks transporting materials to the site, operation of diesel engine, and machinery use. Suitable mitigation measures are incorporated in the EMP including dust generation control and reduction. The project during the construction and the operational phases shall also conduct regular ambient air quality monitoring tests and DG stack emission tests.
• Risks and vulnerabilities related to occupational health and safety due to physical, chemical and biological hazards during project construction and operation?	X		This is anticipated during construction phase. Occupational health and safety hazards from construction works will be mitigated through the OHS measures, many of which are mandatory by regulation. The environmental management plan (EMP) of the project will provide measures to mitigate this impact.
• Road blocking and temporary flooding due to land excavation during rainy season?		X	Excavation works will be limited to foundation works with the site boundary, so it is not expected to cause any roadblock. It is proposed that the site drainage will connect to rainwater harvesting structures
• Noise and dust from construction activities?	X		This is anticipated but will be temporary during construction phase and limited to the project site. Suitable mitigation measures have been incorporated in the EMP including checks on the noise and dust generation activities. In addition, the monitoring of the ambient noise levels will be performed regularly on the project site through a NABL certified third party laboratory during the construction phase.
• Traffic disturbances due to construction material transport and wastes?	X		The nearby village road will be utilized for the transportation of material and personnel during construction phase. The impact on traffic disturbance will be temporary during construction phase only. During the construction activity, utmost care will be taken to control the noise levels within the standards. Negligible noise will be generated during operational phase.
• Temporary silt runoff due to construction?	X		This is anticipated if excavation works are undertaken during the rainy season. The EMP of the project will provide measures to avoid or minimize runoff, such as for example, avoiding or minimizing heavy excavation

			works during monsoon season, providing silt traps or canals around the site, etc.
• Hazards to public health due to ambient, household and occupational pollution, thermal inversion, and smog formation?		X	Not anticipated for a housing development project. The construction activities will be carried out within the site boundaries only.
• Water depletion and/or degradation?	X		During construction phase and operation phase, there will be demand for water use. However, the project plans to purchase water during construction phase. During operational phase, water requirements shall be met from water tankers, rainwater harvesting. Therefore, there is no threat of water depletion/degradation. Moreover, the treated water will be reused for flushing and watering the OSR, greenbelt and the future expansion area.
• Overpaying of ground water, leading to land subsidence, lowered ground water table, andsalinization?		X	The project site is located in Nagamangalam Village, Denkanikottai Taluk (Krishnagiri District) which is classified as 'Safe' in terms of Ground Water Development Status by the Central Ground Water Board (CGWB). Therefore, the risk to the project from depleting ground water levels will be low.
• Contamination of surface and ground waters due to improper waste disposal?			The pollution preventive and control measures as mentioned in the CtE and CtO will be applied and will comply with prescribed statutory norms. The wastewater generated will be treated in the STPs (3 nos, 490 KLD). The treated water will be reused for flushing and watering the OSR, greenbelt and the future expansion area. Hence the risk of contamination is low.
• Pollution of receiving waters resulting in amenity losses, fisheries and marine resource depletion, and health problems?		X	This is not anticipated. The project site is not near receiving bodies of water used for livelihood activities or drinking water supply.
• Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		X	There will be temporary influx of construction workers during the construction phase and permanent influx during the operation phase. Although the project may recruit migrant workers during the construction phase, the number will not be as many (few experts). Therefore, this project will not cause significant burden to the infrastructure such as the water supply and sanitation during construction phase. During the Operation phase water requirement will be sourced through municipal/tankers and

			wastewater generated will be treated in 3 STPs of 490 KLD.
• Social conflicts if workers from other regions or countries are hired?	X		Not anticipated as most workers will be local
• Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during operation and construction?	X		The proposed project is only construction of housing facility for industrial workers and there will not be any storage of hazardous chemicals (as per MSIHC rules). However, HSD will be used for DG sets and the waste/residue from the DG sets will be stored in the HDPE drums as per the hazardous guidelines.
• Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?	X		Anticipated during construction phase. During accidental spills if any, spill contingency plan will be adopted to prevent the release of pollutant into the environment and will be managed as per the MSIHC guidelines. The PMC shall submit structural stability certificate from reputed institutions before obtaining CTO The study area is not much susceptible to floods, landslides, cloud bursts, and cyclones. The project site falls under the Seismic Zone-II (least active) according to the Indian Standard Seismic Zoning Map. Therefore, suitable earthquake design will be followed

Checklist for Preliminary Climate Risk Screening

Country/Project Title	India, TATA Integrated industrial housing for TATA Electronics Pvt. Ltd. (Site: Nagamangalam, Krishnagiri)
Sector	Urban Development
Sub-sector	Urban Housing

Screening Questions		Score	Remarks
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather-related events such as floods, droughts, storms, landslides?	0	The site is not vulnerable to earthquakes, floods, landslides, cloud bursts, or cyclones.
	Would the project design (e.g., the clearance for bridges) need to consider any hydro- meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?	0	No such effect envisaged.

Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?	0	No such effect envisaged.
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?	0	No such effect envisaged.
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design lifetime?	0	No such effect envisaged.
	Cumulative score	0	

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high-risk project.

Result of Initial Screening (Low, Medium, High): Low

Other Comments: Exposure of the site to climate change related hazard is low.

Annexure 3: Environmental Clearance Extract

ENVIRONMENTAL CLEARANCE

PARIVESH

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

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

To,

The Director
VIDIYAL RESIDENCY PVT LTD
M/s. Vidiyal Residency Pvt Ltd,
SF. No. 308-327, Thimjepalli Village,
Kelamangalam-Rayakottai Road,
Hosur, Krishnagiri District,
TamilNadu - 635113 -635113

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

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/TN/MIS/254981/2022 dated 18 Apr 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22B038TN117178**
2.	**File No.**	8993/2022
3.	**Project Type**	New
4.	**Category**	B2
5.	**Project/Activity including Schedule No.**	8(a) Building and Construction projects
6.	**Name of Project**	Construction of Housing facility for industrial workers with a built-up area of 1,44,247.12 Sq. m. The Project is being taken up under Affordable Rental Housing Complexes ("ARHC") Scheme of Government of India.
7.	**Name of Company/Organization**	VIDIYAL RESIDENCY PVT LTD
8.	**Location of Project**	Tamil Nadu
9.	**TOR Date**	N/A

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

Date: 24/05/2022

(e-signed)
Tmt.P.RAJESWARI,IFS
Member Secretary
SEIAA - (Tamil Nadu)

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

This is a computer generated cover page.

EC Identification No. - EC22B038TN117178 File No. - 8993/2022 Date of Issue EC - 24/05/2022 Page 1 of 38

TMT.P.RAJESWARI, 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.No.8993/EC/8(a)/829/2022 dated: 26.04.2022

Sir/Madam,

Sub: SEIAA, TN - Environmental Clearance – Proposed construction of housing facility for industrial workers under Affordable Rental Housing Complexes (ARHC) scheme of Govt. of India at S.F.No:200, 201/2, 202/2, 203/1, 203/3, 204, 205, 206/1, 206/3, 207/1, 207/3, 208, 209, 210/1, 210/3, 211/1, 211/3, 212, 218, 273/1 & 273/3 of Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by M/s. Vidiyal Residency Private Limited - Issued - Regarding.

Ref: 1. Your application for Environmental Clearance dated: 10.02.2022
2. Online Proposal No. SIA/TN/MIS/254981/2021 Dt.04.02.2022
3. Minutes of the 257th SEAC meeting held on 25.3.2022
4. Minutes of the 501st SEIAA meeting held on 22.04.2022

*****

This has reference to your application 1st & 2nd cited, the proposed construction of housing facility for industrial workers under Affordable Rental Housing Complexes (ARHC) scheme of Govt. of India by M/s. Vidiyal Residency Private Limited under Category B2 and Schedule S.No.8(a) under the Environment Impact Assessment Notification, 2006, as amended.

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

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Annexure 1

<table>
<tr><th>S. No</th><th>Description</th><th>Details</th></tr>
<tr><td>1.</td><td>Name of the Project</td><td>Proposed construction of housing facility for industrial workers under Affordable Rental Housing Complexes (ARHC) scheme of Govt. of India</td></tr>
<tr><td>2.</td><td>Location</td><td>S.F.No:200, 201/2, 202/2, 203/1, 203/3, 204, 205, 206/1, 206/3, 207/1, 207/3, 208, 209, 210/1, 210/3, 211/1, 211/3, 212, 218, 273/1 & 273/3 of Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu
<table>
<tr><td>Latitude</td><td>Longitude</td></tr>
<tr><td>12°34'57.89"N</td><td>77°56'33.39"E</td></tr>
</table></td></tr>
<tr><td>3.</td><td>Type of Project</td><td>Building and Construction Projects Schedule 8 (a): Built-up Area <1, 50,000 sq. mtrs (ie. 1, 44, 247.12 Sq. m) - Category 'B2'.</td></tr>
<tr><td>4.</td><td>Total Plot Area (in sq. m)</td><td>Total Land Of Area - 2, 60, 698.74 Sq.m (64.62 Acre)
<table>
<tr><th>S.No.</th><th>Description</th><th>Area (Sq. m.)</th></tr>
<tr><td>1</td><td>Plinth Area</td><td>11,724.72</td></tr>
<tr><td>2</td><td>OSR area</td><td>26,069.87</td></tr>
<tr><td>2</td><td>Greenbelt area</td><td>39,155.54</td></tr>
<tr><td>3</td><td>Parking Area</td><td>4,383.73</td></tr>
<tr><td>4</td><td>Road/ paved</td><td>15,878.37</td></tr>
<tr><td>5</td><td>Utilities & Other area</td><td>6,522.25</td></tr>
<tr><td>6</td><td>Future Expansion</td><td>1,50,490.73</td></tr>
<tr><td>7</td><td>Reservoir Area</td><td>6,473.54</td></tr>
</table></td></tr>
</table>

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5.	Built up area	Total Built up Area – 1, 44, 247.12 Sq.m
6.	Cost of Project	Rs. 508 Crores
7.	Brief description of the project	The project involves proposed construction Housing facility for industrial workers in i) Type A - 6 nos, ii) Type B - 5 nos. & iii) Type C - 3 nos with total built up area of 1, 44, 247.12 Sq. m in plot area of 2, 60,698.74 Sq. m.\

Main Building

Block	Building Name	Lower - level Floor in Sq. m	Ground Floor in Sq. m	First Floor in Sq. m	Typical Floor in Sq. m(2 to 6)	Seventh Floor in Sq. m	Typical Floor in Sq. m (8 to 11)	Head Room/ Lift Machine Room/ Water Tank (Sq.m)	Total Block Area	No of Rooms
1	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
2	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
3	Dormitory Type C	214.886	809.375	777.964	4,032.475	806.494	3,225.98	143	10,010.714	209
4	Dormi		809.	777.	4,032.	806.	3,22	143	9,795.2	209

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	tory Type A		375	964	475	494	5.98		88	
5	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
6	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
7	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
8	Dormitory Type C	214.886	809.375	777.964	4,032.475	806.494	3,225.98	143	10,010.714	209
9	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
10	Dormitory Type C	214.886	809.375	777.964	4,032.475	806.494	3,225.98	143	10,010.714	209
11	Dormitory Type		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209

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	A									
12	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
13	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
14	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
Total Area & Total Rooms									1,37,724.865	2,856

Other Buildings (Commercial & Utilities)

Block	Building Name	Ground Floor in sq.m	First Floor in sq.m	Total Area in Sq.m
A	Commercial	481.683	481.683	963.366
B	Medical	464.515	-	464.515
C	Maintenance Office	278.709	278.709	557.418
D	Creche	279.298	-	279.298
E	Recreation	803.536	162.677	966.213
F	Central Kitchen	900.000	-	900.000
G	Security Main	86.520	-	86.520
H	Security Men	25.000	-	25.000
I	Above &UG STP	580.000	-	

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			J	UG STP	749.920	-	
			K	WTP	950.000	-	
			Total Utility Building Area		5,599.181	923.069	6,522.250
			Panel Room in transformer		447.295		
8.	a) Water requirement KLD	Construction Phase: Construction Activity – 18 KLD Labour for domestic – 17 KLD Operation Phase: Total water Requirement is 1930 KLD Fresh Water Requirement -1174KLD (Domestic -1028KLD & Utility/Kitchen – 146 KLD) Toilet Flushing – 528 KLD Green Belt – 228 KLD					
9.	b) Source	Fresh Water to be met from the (TWAD/Municipal/Tankers/ Borewell /Rain water Harvesting/ Reservoir)					
10.	Quantity of waste water generation KLD	Sewage generation – 1467 KLD					
11.	Details of waste water treatment Plants (Capacity &	Sewage Treatment Plant – 490KLD capacity 3 nos. (SBR Technology). **Under Ground STP -1 No.** 1. Bar Screen Chamber 2. Collection Tank 3. SBR Tank - 1 4. SBR Tank - 2 5. Decanting Tank 6. Sludge Holding Tank 7. Filter Press					

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	Compo nents)	8. Pressure Sand Filter 9. Activated Carbon Filter 10. Treated Water Tank. 11. Ultra Filtration Tank 12. Hypo Dosing System 13. UF Treated Water Tank. **Above & under Ground STP - 2 Nos.** 1. Bar Screen Chamber 2. Collection Tank 3. SBR Tank -1 (Above Ground Level) 4. SBRTank -2 (Above Ground Level) 5. Decanting Tank 6. Sludge Holding Tank 7. Filter Press 8. Pressure Sand Filter 9. Activated Carbon Filter 10. Treated Water tank (Above Ground Level) 11. Ultra Filtration Tank 12. Hypo Dosing System 13. UF Treated Water Tank.(Above Ground Level)
12.	Mode of Disposa l of treated water with quantity	**Total treated water from STP – 1467 KLD** Toilet Flushing – 528 KLD Green Belt & OSR - 228 KLD Remaining 711 KLD to be disposed after obtaining necessary permission from competent authority as per SEAC recommendation.
13.	Quantit	Construction Phase:

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	y of Solid Waste generated per day , Mode of treatment and Disposal of Solid Waste	

S. No.	Description	Quantity Kg/day	Mode of treatment / disposal
1	Biodegradable waste	20	Disposed through Village Bins
2	Non - Biodegradable waste	30	Disposed through Authorized Vendor
3	Construction Waste	25 -35	Disposed through Authorized Authority
4	STP sludge	35	Reused to the maximum possible & disposed through Authorized Vendor

Operation Phase:

S. No.	Description	Quantity Kg/day	Mode of treatment / disposal
1	Biodegradable waste	4430	Treated in Organic Waste Converter & used as manure for Green Belt.
2	Non - Biodegradable waste	5895	Handed over to authorized Vendor
3	STP sludge	500	Manure for Gardening

14.	Power requirement	3795 kVA from TANGEDCO
15.	Details of D.G. set with Capacity	Proposed D.G Sets 1 No. of 1250 kVA D.G set 4 Nos. of 1010 kVA D.G set
16.	Air Pollutio	Proposed stack height is 45 m above ground level.

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	n Control Measures (Stack)	
17.	Details of Green Belt Area	39,155.54 Sq.m
18.	Details of Parking Area	4,383.73 Sq.m
19.	Provision for rain water harvesting	Proposed to provide 1m wide rain water trenches all along the periphery of the site. Roof top rain water to be collected in the proposed reservoir area & proposed to provide adequate percolation pits.
20.	EMP Cost (Rs.)	Capital Cost – Rs. 320 Lakhs Operating Cost – Rs. 27.5 Lakhs
21.	CER cost.	Rs.2 Crores as per SEAC minutes as committed vide affidavit.

Types of Vehicle	Vehicle Nos.
Buses	100
Car Parking	11
Two wheeler parking	1100

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Affidavit

We, M/s. Vidiyal Residency Private Limited Propose to construct housing facility for industrial workers with a built-up area of 1,44,247.12sq.m under Affordable Rental Housing Complexes("ARHC") Scheme of Government of India at S.F.No:200, 201/2, 202/2, 203/1, 203/3, 204, 205, 206/1, 206/3, 207/1, 207/3, 208, 209, 210/1, 210/3, 211/1, 211/3, 212, 218, 273/1 & 273/3 of Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu.

We hereby solemnly declare and sincerely affirm that we have applied for getting environment clearance to SEIAA, Tamil Nadu for construction of housing facility for industrial workers with a built-up area of 144247.12 sq.m under Affordable Rental Housing Complexes("ARHC") Scheme of Government of India at S.F.No:200, 201/2, 202/2, 203/1, 203/3, 204, 205, 206/1, 206/3, 207/1, 207/3, 208, 209, 210/1, 210/3, 211/1, 211/3, 212, 218, 273/1 & 273/3 of Nagamangalam Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu, hereby take oath and state as under in this affidavit.

I. The total water requirement is as follows:

   a. During construction phase: 35 KLD (Construction activity— 18 KLD & Labour's —17KLD), and

   b. During Operation phase: 1,930 KLD (Fresh water —1,174 KLD, Flushing - 528 KLD &

      Greenbelt - 228 KLD). We have received in-principle approval from TWAD for 1 MLD of fresh water and remaining fresh water requirement will be met from Borewell and rainwater harvesting.

II. Sewage quantity generated would be 1,467 KLD, which would be collected through sewerage system (pipe drain) for treatment in STP. Out of 1,467 **KLD** of treated water, 528 KLD would be used for flushing, 228 KLD would be used for Greenbelt (in project area and OSR) and the remaining 711 KLD will be supplied to M/s. TATA Electronics Private Limited for manufacturing process, after tertiary treatment.

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III. We are liable for the operation and maintenance of STP from the date of operation of the project.

IV. Total solid waste generation would be as follows:

a. During construction phase: Municipal solid waste of 50 kg/day (Organic - 20 kg/day,

Inorganic - 30 kg/day) & Construction waste of 25-35 kg/day, and

b. During operation phase: Municipal solid waste of 10,325 Kg/day (Organic — 4,430 kg/day & Inorganic — 5,895 kg/day) in which Organic waste will be composted through organic waste converter and used as a Manure for Greenbelt. Inorganic waste will be disposed through authorized recyclers.

V. All mitigation measures committed for the flood management, Evacuation plan, Solid waste disposal, Sewage & effluent treatment & disposal etc., will be followed strictly.

VI. The total power requirement which will be sourced from **TANGEDCO** for the proposed project is 3,795kVA. Back-up power supply will be through DG sets-1 x 1250 kVA & 4 x 1010 kVA with a stack height of 45 m AGL.

VII. In addition, solar water heaters of 15 No's and 25 No's of solar streetlights will be provided, which otherwise would have run on conventional electricity.

VIII. There will be easy public access for OSR area.

IX. Rainwater from the rooftop will be drained through rainwater vertical down take pipes. Water will be taken along the natural source and collected in a reservoir and adequate pits will be provided to enhance the ground water recharge based on the sub soil condition.

X. No waste of any type will be disposed-off in any other way other than the approved one.

XI. Total Green belt area in the project site is 39,155.54 Sq. m (15.02%) & OSR area is 26,069.87 Sq.m (10.00%). Indigenous Species will be selected for greenbelt development.

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XII. As per the Committee recommendation. Mls. Vidiyal Residency Private Limited will spend Rs. 2.00 Crores (Two crores) for CER activities mentioned as below:

Proposed CER Activities – Vidiyal Residency private Limited
Focus Villages: Lalikal, Nagamangalam, Balepuram, Nalralapalli and haleseebam, koothanapalli, sigaralapalli in Krishnagiri District

S.No	Activities	Budget (INR lakh)	Remarks
1	Construction of community hall with library and e-seva center	24	Land to be identified and provided by nagamangalam panchayat
2	Establishment of solid waste management center	15	Land to be identified and provided by nagamangalam panchayat
3	Farmer awareness programs on soil enrichment, water conservation and increasing productivity	16	To work with farmer produce organizations and local farmers
4	Rejuvenation of Nagamangalam lake	29	To work closely with village & govt officials based on the overall plan
5	Smart classroom for school in few of the focus	35	
6	Solar streetlamps for few of the focus villagers	16	Installation support required from respective gram panchayats
7	Sports ground renovation for schools in few of the focus villages	10	Levelling, removals of stones, soil replacement and compacting, and provision of basic sports kit
8	Upgrading anganwadi in few of the focus villages	6	

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9	Water supply & rest room for schools and local hospitals in few of the focus villages	44	Installation support required from respective gram panchayats
10	Women skill development on dairy and animal husbandry	5	Work along with shreeja milk co-operative for upskilling women dairy farmers

Area Breakup detail

Sl.No	Description	Area
1	Total plot Area	2,60,698.74Sq.m (26.07 Ha.)
2	Plinth Area	11,724.72 Sq. m
3	OSR area	26,069.87sq.m
4	Greenbelt area	39,455.54sq.m
5	Parking Area	4,383.73sq.m
6	Road	15,878.37sq.m
7	Utilities & Other area	6,522.25sq.m
8	Future Expansion	1,50,490.73sq.m
9	Reservoir Area	6473.54sq.m
10	Built up Area	1,44,247.12sq.m (Residential – 1,37,726.485 Commercial & utilities – 6,522.250)

Built-up Area Breakup Details

Main Building

Block	Building Name	Lower - level Floor in Sq.	Ground Floor in Sq.m	First Floor in Sq. m	Typical Floor in Sq. m(2 to 6)	Seventh Floor in Sq. m	Typical Floor in Sq. m (8 to	Head Room/ Lift Machine Room/	Total Block Area	No of Rooms

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		m					11)	Water Tank (Sq.m)		
1	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
2	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
3	Dormitory Type C	214.886	809.375	777.964	4,032.475	806.494	3,225.98	143	10,010.714	209
4	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
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6	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
7	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209

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8	Dormitory Type C	214.886	809.375	777.964	4,032.475	806.494	3,225.98	143	10,010.714	209
9	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
10	Dormitory Type C	214.886	809.375	777.964	4,032.475	806.494	3,225.98	143	10,010.714	209
11	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
12	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
13	Dormitory Type B		798.810	777.964	4,032.475	806.494	3,225.98	143	9,784.523	195
14	Dormitory Type A		809.375	777.964	4,032.475	806.494	3,225.98	143	9,795.288	209
Total Area & Total Rooms									1,37,726.865	2,856

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Other Buildings (Commercial & Utilities)

Block	Building Name	Ground Floor in sq.m	First Floor in sq.m	Total Area in Sq.m
A	Commercial	481.683	481.683	963.366
B	Medical	464.515	-	464.515
C	Maintenance Office	278.709	278.709	557.418
D	Creche	279.298	-	279.298
E	Recreation	803.536	162.677	966.213
F	Central Kitchen	900.000	-	900.000
G	Security Main	86.520	-	86.520
H	Security Men	25.000	-	25.000
I	Above &UG STP	580.000	-	
J	UG STP	749.920	-	
K	WTP	950.000	-	
Total Utility Building Area		**5,599.181**	**923.069**	**6,522.250**
Panel Room in transformer		**447.295**		

Plot Coverage = (Total Plinth Area / Total plot Area) x100 = (17323.901/2,60,698.74) x 100 = **6.645%**

FSI = (Total Built-up Area / Total Plot Area) x 100 = (1,44,247.12/2,60,698.74) x 100 = **0.553.**

Declaration

The above-named deponent to hereby verify that the statement made by me under para (I) to (XII) is true and correct to the best of my knowledge and belief. Nothing is false and nothing is concealed in it. I am responsible for any misrepresentation of facts.

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SEAC Recommendations:

Proposed construction of housing facility for industrial workers under Affordable Rental Housing Complexes ("ARHC") Scheme of Government of India at SF.No.200, 201/2, 202/2, 203/1, 203/3, 204, 205, 206/1, 206/3, 207/1, 207/3, 208, 209, 210/1, 210/3, 211/1, 211/3, 212, 218, 273/1 & 273/3 at Nagamangalam Village Denkanikottai Taluk, Krishnagiri District by M/s Vidiyal Residency Pvt Ltd- for Environmental Clearance- (SIA/TN/MIS/254981/2022, dated: 04.02.2022)

The proposal was placed for appraisal in this 257th meeting of SEAC held on 25.3.2022. The project proponent gave a detailed presentation. The details of the project furnished bythe proponent are given on the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, M/s Vidiyal Residency Pvt Ltd, has applied for Environmental Clearance for the proposed construction of housing facility for industrial workers under Affordable Rental Housing Complexes ("ARHC") Scheme of Government of India at SF.No. 200, 201/2, 202/2, 203/1, 203/3, 204, 205, 206/1, 206/3, 207/1, 207/3, 208, 209, 210/1, 210/3, 211/1, 211/3, 212, 218, 273/1 & 273/3 Nagamangalam Village Denkanikottai Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 8(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006.
3. The project consists 14 Blocks, G+1st to 10 floors - with total plot area is about 260698.74 Sq.m with Proposed built- up area of 144247.12 sq.m .

This subject was placed before 257th SEAC meeting held on 25.3.2022. Based on the presentation made and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

1. The proponent shall obtain fresh water supply commitment letter and disposal of excess treated sewage from TWAD/competent authority before obtaining CTO
2. The project proponent shall provide sewage treatment plant and treated water shall be utilized for flushing and green belt proposed and excess treated water shall be disposed after obtaining necessary permission from the Competent Authority.
3. The proponent shall provide adequate organic waste disposal facility such as organic

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waste convertor waste within project site as committed and non- Biodegradable waste to authorized recyclers as committed.

4. The height of the stacks of DG sets shall be provided as per the CPCB norms.
5. The project proponent shall submit structural stability certificate from reputed institutions like IIT, Anna University etc. To TNPCB before obtaining CTO.
6. The proponent shall make proper arrangements for the utilization of the treated water from the proposed site for Toilet flushing, Green belt development & OSR.
7. The proponent shall provide the separate wall between the STP and OSR area as per the layout furnished and committed.
8. The proponent shall made compensatory plantation as per 1:10 ratio, which are affected during execution of the project.
9. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the **appendix**, in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
10. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper espacement as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
11. The Proponent shall provide rain water harvesting sump of adequate capacity for collecting the runoff from rooftops, paved and unpaved roads as committed.
12. The project proponent shall allot necessary area for the collection of E waste and strictly follow the E-Waste Management Rules 2016, as amended for disposal of the E waste generation within the premise.
13. The project proponent shall obtain the necessary authorization from TNPCB and strictly follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended for the generation of Hazardous waste within the premises.
14. No waste of any type to be disposed off in any other way other than the approved one.

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15. All the mitigation measures committed by the proponent for the flood management, to avoid pollution in Air, Noise, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
16. The project proponent shall furnish commitment for post-COVID health management for construction workers as per ICMR and MHA or the State Government guidelines as committed for during SEAC meeting.
17. The project proponent shall provide a medical facility, possibly with a medical officer in the project site for continuous monitoring the health of construction workers during COVID and Post - COVID period.
18. The project proponent shall measure the criteria air pollutants data (including CO) due to traffic again before getting consent to operate from TNPCB and submit a copy of the same to SEIAA.
19. The 100% of terraces shall be covered with solar panel.
20. Solar energy should be at least 20% of total energy utilization. Application of solar energy should be utilized maximum for illumination of common areas, street lighting etc.
21. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
22. The rent for women's workers will be charged 50% only.
23. The PP shall use a minimum of 10 Electric Busses for transporting the workers to the factory.
24. The PP shall provide adequate capacity of RWA pits inside the premises.
25. As per the MoEF&CC Office Memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020, the proponent shall include demolishing plan & its mitigation measures in the EMP and adhere the same as committed.
26. As accepted by the Project Proponent the CER cost is Rs. 2 crore and the amount shall be spent for (1)Construction of community hall with library and e-Seva center, (2)Establishment of solid waste management centre, (3)Farmer awareness programs on

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soil Enrichment, (4) Water conservation and increasing productivity, (5)Rejuvenation of Nagammangalam lake, (5)Smart classroom for schools in few of the focus villages, (6)Solar streetlamps for few of the focus villages,(7) Sports ground renovation to schools in few of focus villages, (8) Upgrading Anganwadi in few of the focus villages, (9)Water supply & rest room for schools and local hospitals in few of the focus villages and (10) Women skill development on dairy and animal husbandry at Lallikal, Nagamangalam, Balepuram, Nalralapalli and Haleseebam, Koothanapalli, Sigaralapalli in Krishnagiri district before obtaining CTO from TNPCB.

SEIAA Recommendations:

The subject was placed in the 501st Authority meeting held on 22.04.2022. After detailed discussions, the Authority accepted the recommendation of SEAC and decided to grant of Environmental Clearance subject to the conditions as recommended by SEAC & normal condition in addition to the following conditions:

1. All the construction of Buildings shall be energy efficient and conform to the green building norms.
2. The proponent shall provide the adequate play area for the children within the premises.
3. The proponent shall provide the adequate parking facility for all the vehicles of workers & visitors within the premises, with clear traffic plan and to ensure no traffic violation in the surrounding areas due to this proposed building.
4. The project proponent shall furnish the action taken to provide adequate parking space for visitors of all inmates including clean traffic plan.
5. All biosafety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as committed in EIA/EMP.
6. The disaster management and disaster mitigation standards to be seriously adhered avoid any calamities.
7. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
8. The activities should in no way cause emission and built-up Green House Gases. All actions to be eco friendly and support sustainable management of the natural resources within and outside the campus premises.

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9. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.
10. The proponent shall ensure that provision should be given for proper utilization of recycled water.
11. The proponent shall ensure that all trees & biodiversity listed in EIA report to be protected within the premises. All trees within the premises should be numbered and retained and more indigenous trees planted. The proponent shall maintain the flora and fauna listed.
12. The proponent shall ensure that the proposed activities regard to pre construction and post construction should not cause any environmental damages regard to water environment, air quality, temperature rise and should be carbon neutral building.
13. All the Buildings shall be energy efficient and confirm the green building norms.
14. The proponent shall ensure that the all activities of EMP shall be completed before obtaining CTO from TNPCB.
15. The proponent shall ensure that the activities undertaken should not result in carbon emission, and temperature rise, in the area.
16. The proponent shall ensure that the all eateries should have sound environmental friendly practices with adequate safe drinking water facilities and facilities for garbage disposal vehicles.
17. The proponent shall ensure sufficient waste bins, toilets and the waste generated shall be efficiently managed as indicated in EIA/EMP.
18. The proponent shall provide and ensure the green belt plan should be implemented as indicated in EMP. There should be sufficient grass lawns and play facility for children.
19. The proponent shall ensure that no treated or untreated trade effluent/sewage shall be discharged outside the premises of lakes and other water bodies under any circumstances.
20. The proponent shall ensure that the green belt plan, traffic plan, fire safety layout plan, energy conservation plan should be implemented as indicated in EIA/EMP and as viewed during SEAC presentation.

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21. The project proponent shall ensure that no ecological risks and impact on aquatic environment and fresh water systems are caused due to management of plastics and micro-plastics within the premises.
22. The project proponent shall provide adequate area for Bio-Medical Waste (BMW) Collection, Segregation, and Storage and disposal of BMW generated to CBMWT&DF adhering provisions of Bio-Medical Waste Management Rules, 2016 time to time.

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:

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

1. 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, ETP, Solid Waste Management facility, E-waste management facility, DG sets, etc., should be made in the earmarked area only. In any case, the location of these utilities should not be changed later on.
3. The Environmental safeguards contained in the application of the proponent /mentioned during the presentation before the State Level Environment Impact

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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 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

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& Development Rules , 2010 framed under MMDR Act 1957,National Commission for protection of Child Right Rules ,2006 and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law, including the Hon'ble National Green Tribunal relating to the subject matter.

12. The Environmental Clearance shall not be cited for relaxing the other applicable rules to this project.
13. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, Chennai, the respective Zonal Office of CPCB, Bengaluru and the TNPCB. The criteria pollutant levels namely; PM_{10}, $PM_{2.5}$, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored.
15. The SEIAA, TN may cancel the Environmental Clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the Environmental Clearance.
16. The Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance.
17. The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection, even during the subsequent period.
18. The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.

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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 shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.
22. The Project Proponent has to provide adequate nos. of rain water harvesting pits to recover and reuse the rain water during normal rains as reported.
23. The project activity should not cause any disturbance & deterioration of the local bio diversity.
24. The project activity should not impact the water bodies. A detailed inventory of the water bodies and forest should be evaluated and fact reported to the Forest Department & PWD for monitoring.
25. All the assessed flora & fauna should be conserved and protected.
26. The proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.
27. Necessary permission shall be obtained from the competent authority for the drawl / outsourcing of fresh water before obtaining consent from TNPCB.
28. The proponent shall appoint an Environmental Engineer with necessary qualification for the operation and maintenance of STP (Sewage Treatment Plant) and GWTP (grey water Treatment Plant)
29. The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.
30. All the mitigation measures committed by the proponent for the flood management, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
31. No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.

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32. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.

33. The safety measures proposed in the report should be strictly followed.

Part - B – Specific Conditions – Pre construction phase:

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

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11. The Project Proponent shall provide car parking exclusively for the visiting guest in the proposed residential apartments as per CMDA norms.
12. The project proponent shall ensure the entry of basement shall be above maximum flood level.
13. The proponent shall prepare completion plans showing Separate pipelines marked with different colours with the following details
    i. Location of STP, compost system, underground sewer line.
    ii. Pipe Line conveying the treated effluent for green belt development.
    iii. Pipe Line conveying the treated effluent for toilet flushing
    iv. Water supply pipeline
    v. Gas supply pipe line, if proposed
    vi. Telephone cable
    vii. Power cable
    viii. Strom water drains, and
    ix. Rain water harvesting system, etc. and it shall be made available to the owners
14. A First Aid Room shall be provided in the project site during the entire construction and operation phases of the project.
15. The present land use surrounding the project site shall not be disturbed at any point of time.
16. The green belt area shall be planted with indigenous native trees.
17. Natural vegetation listed particularly the trees shall not be removed during the construction/operation phase. In case any trees are likely to be disturbed, shall be replanted.
18. During the construction and operation phase, there should be no disturbance to the aquatic eco-system within and outside the area.
19. The Provisions of Forest conservation Act 1980, Wild Life Protection Act 1972 & Bio diversity Act 2002 should not be violated.
20. There should be Firefighting plan and all required safety plan.
21. Regular fire drills should be held to create awareness among owners/ residents.

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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:**
   i) All the laborers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.
   ii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.
   iii) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.
3. **Water Supply:**
   i) The entire water requirement during construction phase may be met from private tankers
   ii) Provision shall be made for the housing labour within the site with all necessary infrastructures and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
   iii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The treatment and disposal of waste water shall be through dispersion trench after treatment through septic tank. The

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MSW generated shall be disposed through Local Body and the identified dumpsite only.

iv) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices prevalent.

v) Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators / pressure reducing devises / sensor based control.

4. Solid Waste Management:

i) In the solid waste management plan, the STP sludge management plan for direct use as manure for gardens is not acceptable; it must be co-composted with biodegradables.

ii) Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.

iii) Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed as per the solid waste management rules 2016.

iv) No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.

v) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016 and subsequent amendment.

5. Top Soil Management:

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.

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

7. **Diesel Generator sets:**

i) Low Sulphur Diesel shall be used for operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986, and the Rules framed thereon.

ii) The diesel required for operating stand by DG sets shall be stored in barrels fulfilling the safety norms and if required, clearance from Chief Controller of Explosives shall be taken.

iii) The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, cooling water tower etc.

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

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 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.

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v) The project proponent should ensure that adequate Air Pollution Control measures shall be provided from buses and other vehicles, which will be entering the bus terminal. Further, water sprinkling system shall be provided and same shall be used at regular interval to control the dust emission within the project site.

9. Building material:

i) Fly-ash blocks should be used as building material in the construction as per the provision of Fly ash Notification of September, 1999 and amended as on 27th August, 2003 and Notification No. S.O. 2807 (E) dated: 03.11.2009.

ii) Ready-mix concrete shall alone be used in building construction and necessary 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.

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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 proponent has to earmark the greenbelt area with dimension and GPS coordinates for the green belt area all along the boundary of the project site with at least 3 meter wide and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval.

iii) The proponent shall develop the green belt as per the plan furnished and area earmarked for the greenbelt shall not be alter at any point of time for any other purpose.

14. Sewage Treatment Plant:

i) The Sewage Treatment Plant (STP) installed should be certified by an independent expert/ reputed Academic institutions for its adequacy and a report in this regard should be submitted to the SEIAA, TN before the project

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is commissioned for operation. Explore the less power consuming systems viz baffle reactor, etc., for the treatment of sewage.

ii) The Proponent shall install STP as furnished. Any alteration to satisfy the bathing quality shall be informed to SEIAA-TN.

iii) The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.

iv) The project proponent shall continuously operate and maintain the Sewage treatment plant and Effluent treatment plant to achieve the standards prescribed by the CPCB.

v) The project proponent has to ensure the complete recycling of treated Sewage &Effluent water after achieving the standards prescribed by the CPCB.

vi) The project proponent has to provide separate standby D.G set for the STP/GWTP for the continuous operation of the STP/GWTP in case of power failure.

15. Rain Water Harvesting:

i) The proponent shall ensure that roof rain water collected from the covered roof of the buildings, etc shall be harvested so as to ensure the maximum beneficiation of rain water harvesting by constructing adequate sumps so that 100% of the harvested water shall be reused.

ii) Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and grease, etc.

iii) The Project Proponent has to provide adequate nos. of rain water harvesting pits to recover and reuse the rain water during normal rains as reported.

i) The project activity should not cause any disturbance & deterioration of the local bio diversity.

16. Building Safety:

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

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

1. There should be Firefighting plan and all required safety plan.
2. Regular fire drills should be held to create awareness among owners/ residents.
3. Hazardous waste such as batteries, small electronics, CFL bulbs, expired medicines and used cleaning solvent bottles should be segregated at source, collected once in a month from residences and disposed as per the SWM Rules 2016.
4. The building should not spoil the green views and aesthetics of surroundings and should provide enough clean air space.
5. Solar energy saving shall be increased to atleast10% of total energy utilization.
6. The Project proponent has to spend the CER as committed in the affidavit. The above activity shall be carried out before obtaining CTO from TNPCB.
7. The EMP cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually
8. The EMP cost shall be printed in the Brochure / Pamphlet for the preparation of the sale of the property and should also mention the component involved.
9. The Project proponent shall get due permission from the wetland Authority before the commencement of the work, if applicable.
10. The Project proponent should discuss with the wet land Authority, Tamil Nadu Forest Department, PWD and support lake restoration cum improvement, awareness and conservation programs.
11. The project activities should in no way disturb the manmade structures.
12. The Proponent shall do afforestation/ restoration programme contemplated to strengthen the open spaces shall preferably include native species along with the financial forecast for planting and maintenance for 5 years.
13. "Consent to Operate" should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA-TN.
14. Raw water quality to be checked for portability and if necessary RO plant shall be provided.

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15. The Proponent should be responsible for the maintenance of common facilities including greening, rain water harvesting, sewage treatment and disposal, solid waste disposal and environmental monitoring including terrace gardening for a period of 3 years. Within one year after handing over the flats to all allottees a viable society or an association among the allottees shall be formed to take responsibility of continuous maintenance of all facilities with required agreements for compliance of all conditions furnished in Environment Clearance (EC) order issued by the SEIAA-TN or the Proponent himself shall maintain all the above facilities for the entire period. The copy of MOU between the buyers Association and proponent shall be communicated to SEIAA-TN.
16. The ground water level and its quality should be monitored and recorded regularly in consultation with Ground Water Authority.
17. Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. The treated sewage shall conform to the norms and standards for bathing quality laid down by CPCB irrespective of any use. Necessary measures should be made to mitigate the odour and mosquito problem from STP.
18. The Proponent shall operate STP continuously by providing stand by DG set in case of power failure.
19. It is the sole responsibility of the proponent that the treated sewage water disposed for green belt development/ avenue plantation should not pollute the soil/ ground water/ adjacent canals/ lakes/ ponds, etc
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.

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24. Spent oil from D.G sets should be stored in HDPE drums in an isolated covered facility and disposed as per the Hazardous & other Wastes (Management & Transboundary Movement) Rules 2016. Spent oil from D.G sets should be disposed off through registered recyclers.
25. The proponent is required to provide a house hold hazardous waste / E-waste collection and disposal mechanism.
26. The proponent shall ensure that storm water drain provided at the project site shall be maintained without choking or without causing stagnation and should also ensure that the storm water shall be properly disposed off in the natural drainage / channels without disrupting the adjacent public. Adequate harvesting of the storm water should also be ensured.
27. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
28. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
29. The Environmental Clearance is issued based on the documents furnished by the project proponent. In case any documents found to be incorrect/not in order at a later date the Environmental Clearance issued to the project will be deemed to be revoked/ cancelled.

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Copy to:

1. The Additional Chief Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110032.

Annexure 4: Sample Grievance Form

(To be made available in Local Language-Tamil)

The Proposed Housing facility for industrial workers welcomes complaints, suggestions, queries, and comments regarding program implementation. We encourage persons with a grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback.

In case you want to include your personal details but want information to remain confidential, please type CONFIDENTIAL above your name.

Date	Place of Registration	
Contact Information/Personal Details		
Name	Gender	Age
Home Address		
Village/Town		
District		
Phone no.		
E-mail		
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your Grievance below: If included as an attachment/note/letter, please mention here:		
How do you want us to reach you for feedback on your comment/grievance?		

For Official Use only

Registered by: (Name of Official registering grievance)			
Verified through	Letter	E-mail	Verbal/Telephonic
Reviewed by: (Names/Position of Official(s)reviewing grievance)			
Action Taken:			
Whether Action Taken Disclosed:			
Means of Disclosure			

Annexure 5: Environmental Monitoring Report Template

Quarterly Environmental Monitoring Report

Introduction

- Overall project description and objectives
- Environmental categorization of each subproject as per ADB Safeguard Policy Statement(SPS 2009)

Project Safeguards Team

- Identify the role/s of Safeguards Team including schedule of on-site verification of reports submitted by consultants and contractors.

Name	Designation/Office	Email Address	Contact Number	Roles
1. PMU				
2. PIDs				
3. Consultants				

Overall Project and Subproject/Package Progress and Status

- Description of Sub-projects and Indicate
  - Status of design – preliminary design or final design,
  - Status of implementation - under bidding, contract awarded but no works yet, contract awarded with works (on-going construction), civil works completed, and/orOperation & Maintenance (O&M)

Package Number	Subproject Name / List of Works	Type of Contract (specify if DBO, DB or civil works)	Status of Design (specify if Preliminary Design, Final Detailed Design	Contract Status (specify if under bidding or contract awarded)	Status of Implementation (specify if Contract awardedwith works (On- going Construction), Completed Works, or O&M phase)	If On-going Construction	
						%Physical Progress	Expected Completion Date

- For package with "Contract Awarded", provide name/s and contact details ofcontractor/s' nodal person/s for environmental safeguards.

Package-wise Contractor/s' Nodal Persons for Environmental Safeguards

Package Name	IEE Cleared by ADB (provide date)	Contractor	EHS Nodal Person	Email Address	Contact Number

Status of IEE per Subproject/Package

- Provide status of updated/final IEE per package.

Package-wise Implementation Status

Package Number	Final IEE based on Detailed Design				Site-specific EMP or Construction (C-EMP) approved by Chief Engineer?10 (Yes/No)	Remarks
	Not yet due (detailed design not yet completed)	Submitted to ADB (provide date of submission)	Disclosed on project website (provide link)	Final IEE provided to Contractor/s (Yes/No)		

Compliance Status with National/State/Local Statutory Environmental Requirements

Package Number	Statutory Environmental Requirements	Status of Compliance (Specify if obtained, submitted and awaiting approval, application not yet submitted)	Validity Date(s) (if already obtained)	Action Required	Specific Conditions that will require environmental monitoring as per environmental clearance, consent / permit to establish

Compliance Status with Environmental Loan Covenants

Schedule No. and Item (see Project Loan Agreement and list provisions / paragraph relevant to environmental safeguards, core labour standards, occupational EHS, community health andsafety)	Covenant	Status of Compliance	Action Required

Compliance Status with the Environmental Management Plan (refer to EMP tables inapproved IEE/s)

- Confirm in IEE/s if contractors are required to submit construction EMPs (C-EMP). If not,describe the methodology of monitoring each package under implementation.

- Provide over-all compliance of the contractors with C-EMP. This should be supported by contractors' monthly monitoring reports to PID(s) and/or verification reports of PID(s) or project consultants. Include as an Appendix supporting documents such as **signed** monthly environmental site inspection reports prepared by consultants and/or contractors.

Overall Compliance with C-EMP

Package Number	Status of C-EMP Implementation *(Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfactory)*	Action Proposed and Additional Measures Required

- Provide description based on site observations and records:
  - Confirm if any dust was noted to escape the site boundaries and identify dust suppression techniques followed for site/s.

- Identify muddy water was escaping site boundaries or muddy tracks were seen on adjacent roads.
- Identify type of erosion and sediment control measures installed on site/s, condition oferosion and sediment control measures including if these were intact following heavyrain.
- Identify designated areas for concrete works, chemical storage, construction materials, and re-fuelling. Attach photographs of each area.
- Confirm spill kits on site and site procedure for handling emergencies.
- Identify any chemical stored on site and provide information on storage condition. Attach photograph.
- Describe management of stockpiles in each work site (construction materials,excavated soils, spoils, etc.). Provide photographs.
- Describe management of solid and liquid wastes on-site (quantity generated,transport, storage and disposal). Provide photographs.
- Provide information on barricades, signages, and on-site boards. Provide photographs.
- **Provide information on construction / workers camp(s). Provide photographs.**
- **Provide information on work-related accidents and incidents. Describe actions implemented.**
- Provide information on if there are any activities being under taken out of working hours and how that is being managed.

- Provide list of trainings on environmental safeguards, core labor standards, and Occupational environment, health and safety conducted during the reporting period. Include ADB-organized workshop, trainings, seminars, etc)

Trainings, Workshops and Seminars Conducted

Date	Topic	Conducted by	No. of Participants (Total)	No. of Participants (Female)	Remarks

- Provide the monitoring results as per the parameters outlined in the approved EMP (orC-EMP when applicable).

Summary of Environmental Monitoring Activities (for the Reporting Period)

Impacts (List from C-EMP)	Mitigation Measures (List from C-EMP)	Parameters Monitored (As identified in the C-EMP)	Method of Monitoring (Visual, Actual Sampling, etc.)	Location of Monitoring (Provide GPS Coordinates)	Date of Monitoring Conducted	Person Who Conducted the Monitoring
Design Phase						
Pre-Construction Phase						

Construction Phase						
Operational Phase						

Monitoring of Environmental Impacts on Project Surroundings

- Confirm records of pre-work condition of roads, agricultural land or other infrastructure priorto starting to transport materials and construction.

Package Number.	Status of Pre-Work Conditions (Recorded / Not Recorded)	Baseline Environmental Conditions (air water, noise) Documented(Yes / No)	Action Proposed and Additional Measures Required

- Provide information on monitoring activities conducted during reporting period. If not conducted, provide justification. Compare results with baseline and internationally recognizedstandards.[11]

Air Quality Monitoring Results

Site No.	Date of Testing	Site Location (Provide GPS Coordinates)	Parameters (as required by statutory clearances or as mentioned in the IEE)				Remarks
			PM_{10} µg/m^3	$PM_{2.5}$ µg/m^3	SO_2 µg/m^3	NO_2 µg/m^3	

Water Quality Monitoring Results

Site No.	Date of Sampling	Site Location	Parameters (as required by statutory clearances or as mentioned in the IEE)						Remarks
			pH	Conductivity µS/cm	BOD mg/L	TSS mg/L	TN mg/L	TP mg/L	

[11] ADB Safeguard Policy Statement (SPS) Appendix 1, para 33: During the design, construction, and operation of the project the borrower/client will apply pollution prevention and control technologies and practices consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's Environment, Health and Safety Guidelines. These standards contain performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in the SPS

Noise Quality Monitoring Results

Site No.	Date of Testing	Site Location	LA_{eq} (dBA) (as required by statutory clearances or as mentioned in the IEE)		Remarks
			Day Time	Night Time	

Information Disclosure, Participation and Consultations

- Confirm PMU/PID/contractors provide project-related information to stakeholders, communities and/or affected people before and during construction works.12
- Provide information on consultations conducted during reporting period such dates, topics discussed, type of consultation, issues/concerns raised, safeguards team member present. Attach minutes of meetings (ensure English translation is provided), attendance sheet, and photos.

Date of Consultation	Location	Number of Participants (specify total, male and female)	Issues/Concerns Raised	Response to issues/concerns

Grievance Redress Mechanism

- **Grievance Redress Mechanism.** Provide information on establishment of grievance redress mechanism and capacity of grievance redress committee to address project- related issues/complaints. Include as an Appendix Notification of the GRM (package-wiseif applicable).
- **Complaints Received during the Reporting Period.** Provide information on number, nature, and resolution of complaints received during reporting period. Attach records as per GRM in the approved IEE. Identify safeguards team member/s involved in the GRM process. Attach minutes of meetings (ensure English translation is provided).

Summary of Key issues/concerns identified during the Reporting Period and Remedial Actions

- Provide corrective action plan which should include all issues/concerns, actions requiredto be implemented, responsible entities, and target dates.

Status of Corrective Actions from Previous Monitoring Report(S)

- Provide information on corrective actions to be implemented as reported in the previous Monitoring Report(s). Include status of implementation of feedbacks/comments/suggestions as provided by ADB, if any.

Corrective Action Plan Status

Issues/Concerns	Corrective Action	Status	Remarks

Appendices

- **Photos**
- **Records of consultations**
- **Copies of environmental clearances and permits (if not provided in the previous Monitoring Reports)**
- **Environmental site inspection report (if not provided in the previous Monitoring Reports)**
- **Other**

Annexure 6- Informal Public Consultations

Minutes of meeting for informal interview conducted with nearby villagers

Interview Date: 1st November 2022

Participants:

Vidiyal Residency Private Limited ("**VRPL**")	Mr. Sambhav Jain
Villagers	From Lallikal, Nagamangalam, Neelagiri, Kompalli, Kothoor villages

Villagers Profile:

Males	Females	Total
10	5	15

A public consultation was held at VRPL site on 1st November 2022 to ascertain the impact of upcoming housing facility on the nearby village and its residents.

Below are the major highlights that are recorded based on the discussions.

Highlights:

- Villagers said that they are aware about the development work of a project, and since the project is on the land owned by government, they don't have any issues. However, they requested to make sure that the project doesn't affect their land in future because of any discharge or any other activities in the premises.
- Villagers sought information on the people who will be residing in the facility, and it was communicated to them that the facility is majorly for the young girls considering their safety and well-being. It was appreciated by the locals, and they also asked that if they may get jobs in the project site once the construction is complete. It has been clarified to them that the local villagers would be given preference in recruitment for any roles required for the project.
- Local people informed that because of this project they are already benefitting monetarily from the project: Few of them got employment opportunities (in construction work) and few of them are setting up small kirana stores to support workers at the site, and few of them are selling snacks at the site.
- Villagers requested the company to look into the prospect of improving condition of the present road leading to the main road and increase the width of the road as the traffic is expected to increase post the project. They have been informed that a proposal for this is already under consideration with the government authorities and the road is expected to be widened.
- Villagers also requested for installation of streetlights or any other measures to improve visibility during night, as currently there is no visibility and as the road condition is not good.
- Villagers requested the company to create avenues of employment. The same shall be considered by the Company favorably.

Attendance Sheet

Sl. No.	Name	Gender	Area/ location	Contact No	Signature
1	N. Thirumalesh	Male	Lalikkal	9894444 641	N.THIRUMALESH
2	T.Aruna	Female	Lalikkal	9047413355	T.Aruna.
3	S. Ajith	Male	MKA. Ajith	9360815595	[illegible]
4	Govindaraj	Male	Calikal	7895474152	Govindaraj
5	P.manivannan	male	nagamangalam	9025416538	manivan
6	Raja N	Male	Nagamangalam	9442119233	[illegible]
7	நதீபம்மா	female	லாலிக்கல்	9965313005	நதீபம்மா
8	நரேந்திரன்	male	லாலிக்கல்	8124108201	நரேந்திரன்
9	Thiruven kumar	male	Neelagiri	7094597211	[illegible]
10	P. நவீன் குமார்	male	லலிக்கல்	9698656566	P. [illegible]
11	Narayanappa	male	Kompalli	96554154	Narayanappa
12	P. murugesh	male	Lalikkal	9965307836	P. Murugesh
13	L. Sneha	Female	Lalikal	9894317368	[illegible]
14	Sampurna. R	Female	Lalikal	90258479	[illegible]
15	ஜெயஸ்ரீ	Female	Kothoor	7639493389	ஜெயஸ்ரீ.

Attachments: Photos of Consultation

Photos