

Project:

**“Barefoot on the Hills”,**  
Survey No. 103/1,104/1A, 1B, 2A, 2B, 232/1,2  
of Chelavoor Village & 43/10, 44/2, 45/1 of  
Kuttikaattoor Village, Kozhikode Taluk  
Kozhikode District, Kerala State  
11°16'52.22"N & 73°51'43.28"E

Environment Clearance:

F.No: 21-57/2018-IA-III  
dated : 20-09-2018

Submitted by:

M/s. Symbiosis Properties & Infrastructures India Pvt Ltd  
Parambalath Building, Golf Link Road,  
Malapparamba, Kozhikode

**“HALF YEARLY COMPLIANCE REPORT”**  
**(April 2024 to September 2024)**

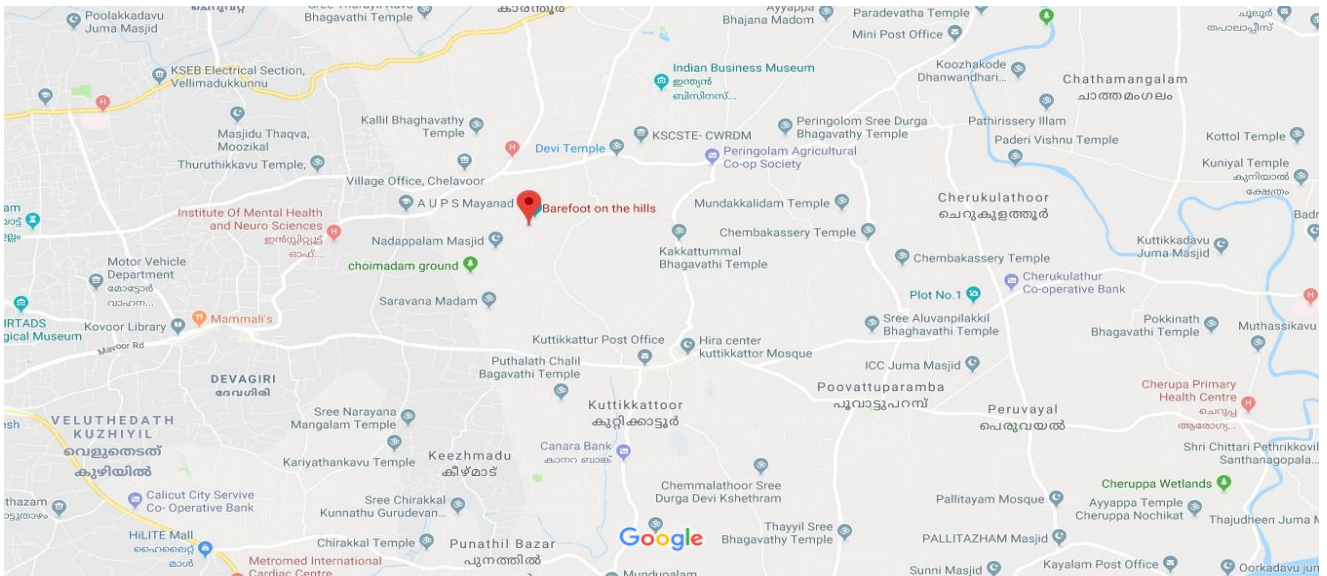
## INDEX

SL. NO	DESCRIPTION
1	DESCRIPTION OF THE PROJECT
2	CONTACT DETAILS AT PROJECT SITE:
-	Compliance for the conditions
PART A	SPECIFIC CONDITIONS: Construction phase:
-	Operation phase
PART - B	PART - B. GENERAL CONDITIONS:
-	ANNEXURES A: Copy of advertisement in local news paper B: Ambient noise level monitoring report C: Ambient air quality monitoring report

Half yearly Compliance submission for the conditions of the Environmental Clearance (EC) letter obtained from Ministry of Environment, Forest & Climate Change, Govt of India for Mixed Land Use project with 400 apartments, 30 individual villas, club house & commercial shops "Barefoot on the Hills", Survey No. 103/1,104/1A, 1B, 2A, 2B, 232/1,2 of Chelavoor Village & 43/10, 44/2, 45/1 of Kuttikaattoor village, Kozhikode Taluk, Kozhikode District, Kerala State vide F.No: 21-57/2018-IA-III dated 20<sup>th</sup> September, 2018

- **Project Developers:** M/s. Symbiosis Properties & Infrastructures India Pvt Ltd, Parambalath Building, Golf Link Road, Malapparamba, Kozhikode, Kerala- 673009
- **Project Location:** Barefoot on the Hills", Survey No. 103/1,104/1A, 1B, 2A, 2B, 232/1,2 of Chelavoor Village & 43/10, 44/2, 45/1 of Kuttikaattoor village, Kozhikode Taluk, Kozhikode District, Kerala State
  - **Project Description:** The proposed development is of mixed land use residential apartment project consists of 400 apartments and 30 individual villas with infrastructure including clubhouse. The Total plot Area of the project is about 78733sqm (19.45 acres). The Ground Coverage area is about 2,133.73 sq m (16.61%), Paved area is 6,345.95 sq m (49.39%), the area earmarked for landscape development is 4,368.32 sq m (34.00%). The built up area of the project is 41,992.37 sq m.

## LOCATION MAP



## PART-A SPECIFIC CONDITIONS

- The project proponent shall obtain all necessary clearance / permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

The layout approval has been obtained from the Chief Town Planner, Govt of Kerala and the local self-government authority- Kozhikode Corporation. Also building permit for separate villas has been obtained from Kozhikode Corporation.

- Consent to Establish/Operate for the project shall be obtained from the state pollution control board as required under the Air (Prevention and control of Pollution ) Act, 1981 and the water (Prevention and control of Pollution)Act, 1974.

Consent to Establish for the apartment projects received & subsequently to operate shall be obtained.

- The approval of the competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.

The buildings are been designed. A certificate from safety point of view shall be obtained from competent authority.

### **Topography and natural drainage**

- The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site. On wetland and water bodies, Check dams, bio- swales, landscapes and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

The layout is designed allowing natural drainage. The natural Depressions in the property are considered for rain water harvesting. The buildings are designed according to the natural terrain with minimum cutting & filling of soil.

### **Water requirement, Conservation, rain water harvesting, and Ground water Recharge**

- As proposed, fresh water requirement from Kerala Water Authority/ Rain water shall not exceed 159 KLD

The layout has been designed considering the maximum fresh water demand of 159KLD.

- A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

Sanction from the concerned authority for supply of fresh water is under process.

- The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MOEF & CC along with six monthly monitoring reports.

The water balance chart is being prepared shall be submitted along with the next Half Yearly Report considering the quantum of rainwater harvesting possibility. Recharge wells at different locations were done.

- At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. Would be considered as pervious surface.

The open spaces in the designed layout is more than 25%.

- Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape, irrigation, car washing, thermal cooling, conditioning etc. Shall be done.

The plumbing is being designed with dual pipe system- one for fresh water supply for drinking, bathing & washing and the other for flushing.

- Use of water saving devices/ fixtures (viz. low flow flushing systems use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

Water saving devices such as low consumption faucets etc. considered to be used.

- Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

Dual pipe system for plumbing considered as in (ix) ensuring separation of grey & black water

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

Water demand during construction phase is being reduced by using admixtures.

- The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Adequate number of rain water harvesting tanks/ponds shall be provided for harvesting after filtration.

The design is prepared as per the local byelaws for rainwater harvesting

- As proposed, no ground water shall be used during construction/ operation phase of the project.

No ground water is being used for construction

- Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

CWGA approval shall be obtained for ground water usage.

### **Solid Waste Management**

- The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016. And the Plastics Waste (Management) Rules, 2016 shall be followed.

All solid waste, e-waste, plastic waste management rules shall be followed

- Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

The excavated soil is stock piled for use in manufacture of solid mud blocks for masonry taking all precautions from the safety of local community point of view. Mud block making at site procedures are under process

- Separate wet and dry bins must be provided in each unit and at the ground level of facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Bio gas generation plant/ bio bin systems. As proposed 500sqm area shall be provided for solid waste management within the premises which will include area for segregation,

composting. The inert waste from the project will be sent to dumping site.

Separate wet & dry bins used for degradable & non-degradable waste disposal.

- Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the state pollution control board.

Hazardous waste (used lubricants) being disposed to authorized agencies only

- A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W generated from project shall be obtained.

All solid waste being handled within the premises. The non-degradable waste is collected and disposed to authorized agencies for recycling.

### **Sewage Treatment Plant**

- Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment ie; Ultra Filtration. The treated effluent from STP shall be recycled/ re used for flushing and gardening. Treated effluents shall be totally reused and recycled without causing any health impacts. As proposed no treated water shall be discharged to municipal drain.

Sewage treatment plant if being designed for the entire project. The tertiary treatment is proposed.

- The project/ activity shall be dove tailed with the sewage collection and disposal facilities to be created by the municipal corporation/ competent state authorities so that all sewage generated in the construction and operation phases is disposed accordingly. Necessary permission from the municipal authority shall be obtained.

The sewage generated during construction & operational phases is proposed to be treated & reused for irrigation & flushing.



- No sewage or untreated effluent water would be discharged through storm water drains.

The treated effluent is used for irrigation & flushing and is not discharged into the storm water drains.

- The installation of the sewage treatment plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the ministry before the project is commissioned for operation periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

The Sewage Treatment System is proposed and prior sanction would be obtained from State Pollution Control Board. The project is not yet commissioned for operational purpose

- Sludge from the onsite sewage treatment including septic tanks, shall be collected, conveyed and disposed as per the ministry of Urban Development, CENTRAL Public Health and Environmental Engineering Organization (CPHEEO) manual on sewerage and sewage treatment systems 2013.

Bio-toilets (designed by DRDO) are being used during construction phase where in no sludge is generated.

## **Energy**

- Compliance with the Energy Conservation Building Code(ECBC) of Bureau of energy efficiency shall be ensured. Building in the states which have notified their own ECBC, shall comply with the state ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. Shall be incorporated in the building design. Wall, window and roof u- values shall be as per ECBC specifications.

Energy conservation methods such as passive solar design is considered for minimizing energy requirement.

- Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

All lighting fixtures considered with LED to reduce energy consumption.

- Solar wind or other renewable energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level /local building bye-laws requirement whichever is higher. Follow super ECBC requirement of ECBC2017 and provide compliance report.

Renewable energy proposed for the project. A hybrid system (solar & wind) being considered.

- Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher, residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

Solar power is being used for lighting the yards/common areas and is proposed to be used for lighting the apartment units. Solar water heaters are being considered for meeting the hot water demand to the maximum.

- Use of environment friendly materials in bricks, blocks and other construction materials shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks and other environment friendly materials. Fly Ash should be used as building material in the construction as per the provision of Fly Ash notification of September, 1999 and amended as on 27<sup>th</sup> August ,2003 and 25<sup>th</sup> January 2016. Ready mixed concrete must be used in building construction.

The building structures built using materials which give maximum thermal insulation to reduce power consumption.

- A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.

Application moved to the Kerala State Electricity Board for supply of adequate power.

### **Air Quality and Noise**

- Construction site shall be adequately barricaded before the construction begins. Dust, smoke and other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/wind breaking walls all around the site ( at least 3 m height) .Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution in the site as well as taking out debris from the site. Sand, murrum, loose soil , cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

Construction site has been barricaded with sheets & green cover. The building & roads under construction are provided with dust control measures by covering materials being transported.

- Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding mandatory implementation of dust mitigation measures for construction and demolition activities of projects requiring environmental clearance shall be complied with.

Dust mitigation measures as per notification being adopted.

- All construction and demolition debris shall be stored at the site ( and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of

the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

Debris generated from construction waste being stockpiles at site for use in filling in plinth of buildings. Workmen involved in handling the debris/construction waste are provided with masks

- The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to environmental (protection) prescribed for air and noise emission standards.

Diesel generators are low sulphur emission type and have acoustic enclosure to avoid noise pollution.

- The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

Stack height provided as per norms and DG with acoustic enclosures only considered for use

- For indoor air quality the ventilation provisions as per National Building Code of India.

Ventilations as per NBC considered during design.

- Ambient noise levels shall conform to residential standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase. So as to conform to the stipulated standards by CPCB / SPCB.

Diesel generator provided with acoustic enclosure.

## **Green Cover**

- No tree can be felled / transplanted unless exigencies demand where absolutely necessary, tree felling shall be with prior permission from the Tree Authority constituted as per the Kerala Preservation of trees Act, 1986 (Act 35 of 1986). Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department Plantations to be ensured species (cut) to species (n planted).

Trees are conserved wherever possible. Tree felling done only where absolutely necessary.

- A minimum of 1 tree for every 80 Sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/ or invasive species should not be used for landscaping. Where the trees need to be cut with prior permission from the concerned local authority. Compensatory plantation in the ratio of 1:10( ie; planting of 10 trees for every 1 tree that is cut ) shall be done and maintained .Plantations to be ensured species (cut) to species ( planted) .As proposed 45,543.17 sqm(about 58%) area shall be provided for green belt development.

Trees planted and maintained as specified- 1 tree for every 80m of land area. Separate site based study is conducted with external agencies to analyze the suitable plantation as per the terrain.

## **Top Soil Preservation and Reuse**

- Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

The top soil is excavated and stockpiled for reuse, application of soil for soft landscaping

## **Transport**

- A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI) shall be prepared to include motorized, non-motorized, public and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - Traffic calming measures
  - Proper design of entry and exit points
  - Parking norms as per local regulation.

A comprehensive mobility plan being prepared earmarking all network of roads, including hierarchy of roads & segregation of vehicular & pedestrian traffic, traffic calming measures, proper entry & exit points & parking norms as per local regulations.

- A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 5kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 5Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the state urban development department and the P.W.D/ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

A detailed traffic management plan including the improvements to be done is being prepared in consultation with the concerned departments.

- Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

All vehicles transporting materials for construction are checked for pollution control certificates. The vehicles are being operated only during non-peak hours

### **Environment management Plan**

- An environmental management plan (EMP) as prepared and submitted along with the Form- 1/1A shall be implemented to ensure compliance with the environmental conditions specified above. A dedicated environment monitoring cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like sewage treatment plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation , water efficiency and conservation, solid waste management, renewable energy etc are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure

Environment Management Plan as proposed is planned to be implemented. An Environment Monitoring Cell is being constituted as part of project team

### **Others**

- Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

Provisions for housing of construction labour arranged. Bio-toilets as per design of DRDO provided for sanitation.

- A first aid room shall be provided in the project both during construction and operations of the project.

First Aid provisions are being maintained at site

- The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2003.

Corporate Social Responsibility as per the Company's Act 2003 is not applicable as the turnover of the organisation is much lesser.

- As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018 and proposed by the project proponent an amount of Rs.4.18 Crore (@1.5% of project cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as promotion of education, health and medical care, solid waste management facility, rain water harvesting and avenue plantation. The activities such as CER shall be restricted to the affected area around the project. The entire activities proposed under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report and to the District Collector. It should be posted on the website of the project proponent.

A Corporate Environment Responsibility plan being prepared with a total outlay of 1.5% of the total cost of project. As a part, agriculture and dairy farm programs are planned at site and necessary initiatives are taken

## **PART B – GENERAL CONDITIONS**

- A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries Centre and Collector's Office/ Tehsildar's office for 30 days

A copy of Environmental Clearance order sent to all concerned offices.

- The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year – wise expenditure shall be reported to this Ministry and its concerned Regional office.

The funds being earmarked will be managed in separate account and yearly expenditure reported to the ministry shall be submitted



once the project is launched

- Officials from the concerned Regional office of MoEF&CC who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned APCCF, Regional office of MoEF&CC.

All co-operation provided to the MOEF officials for their earlier visits and will be continued as and how required

- In the case of any change (s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

No changes in the project proposed which would be an additional burden to the environment.

- The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the environment clearance under the provision of the Environmental (Protection) Act 1986 to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

If any additional safety measures are ordered, the same would be implemented.

- All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, The Forest Conservation Act 1980 and the Wildlife (protection) Act 1972 etc, shall be obtained as applicable by project proponents from the respective competent authorities.

All necessary clearances from concerned authorities are being obtained.

- These stipulations would be enforced among others under the provisions of the water ( Prevention and Control of Pollution) Act, 1974 the Air( Prevention and Control of Pollution ) Act 1981, The

Environment ( Protection ) Act 1986, The Public Liability ( Insurance ) Act 1991 and the EIA Notification 2006

The project is planned and will adhere to the stipulations of the Water (Prevention & Control of Pollution) Act, Air (Prevention & Control of Pollution) Act, Environment (Protection) Act

- The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental; Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and climate change at <http://www.envfor.nic.in>. The advertisement shall be made within seven days from the date of receipt of the clearance letter and a copy of the same shall be forwarded to the concerned Regional Office of this Ministry.

The Environment Clearance obtained for the project has been advertised in local newspaper, one in vernacular language already (copies already submitted along with the earlier Half yearly Compliance report)

- Any appeal against this clearance shall lie with the National Green Tribunal , if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act 2010.
- A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

A copy of the Environment Clearance has been submitted to all concerned local authorities.

- 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&CC , the respective Zonal office of CPCB and the SPCB . The criteria pollutant levels namely SPM, RSPM, SO<sub>2</sub>,NO<sub>x</sub> (ambient levels as

well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

The website is being updated with all relevant data. Once the same is ready the EC order shall be uploaded in the web site

- The environmental statement for each financial year ending 31<sup>st</sup> 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 along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

The environmental statement shall be submitted

# Standards



## TEST REPORT

ULR No.: TC1293924000019271F

LRI No.: SEAL24091160A

Date: 21-09-2024

Page 1 of 1

### CUSTOMER DETAILS

Customer Name & Address	<b>M/s Symbiosis Properties &amp; Infrastructure India (P) Ltd</b> Good Earth - Barefoot on the Hills Kozhikode District
Customer Reference	Test Request date: 12-09-2024

### SAMPLE DETAILS

Duct Category	Atmospheric Pollution	Sample Code	EN24090470
Sample Name	Ambient Air	Sample Received on	13-09-2024
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	14-09-2024
Sampled by	Lab Authorized Sampler	Test Completed on	20-09-2024

### DETAILS OF SAMPLING

Sampling Location	South - East Boundary	Date of Sampling	12-09-2024
Sampling Procedure	SEAL/CHL/SOP/7.3/02	Humidity	68 %

### SAMPLING SITE DETAILS

Re Survey No.	103/1,104/1 A	Re Survey No.	1/2,45/1
Village	Chelavoor	Village	Kuttikatoor
Taluk	Kozhikode	Taluk	Kozhikode
District	Kozhikode	District	Kozhikode
State	Kerala	State	Kerala

### TEST RESULTS-CHEMICAL DISCIPLINE

SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
1	Particulate matter, PM <sub>10</sub>	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	49.2	100 (Max)
2	Particulate matter, PM <sub>2.5</sub>	IS 5182 (Part 24): 2019	µg/m <sup>3</sup>	24.5	60 (Max)
3	Sulphur dioxide as SO <sub>2</sub>	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	<4.00	80 (Max)
4	Nitrogen Dioxide as NO <sub>2</sub>	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	<4.00	80 (Max)

Remarks:

\*\*\*End of Report\*\*\*

Shency Joy  
TM-Chemical  
Checked by:



Lajju P N  
Laboratory Head  
Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

**Standards Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 12939 & "A" Grade Laboratory approved by KSPCB.

'Standards' Bldg. No: 338/A,B,C,D,E (Behind BPCL Petrol Pump), Edayar, Muppathadam P.O., Ernakulam Dist. - 683 110

# Standards



## TEST REPORT

ULR No.: TC1293924000019272F

LRI No.: SEAL24091161A	Date: 21-09-2024	Page 1 of 1
------------------------	------------------	-------------

### CUSTOMER DETAILS

Customer Name & Address	M/s Symbiosis Properties & Infrastructure India (P) Ltd Good Earth - Barefoot on the Hills Kozhikode District
Customer Reference	Test Request date: 12-09-2024

### DETAILS OF MONITORING

Product Category	Atmospheric Pollution	Sample Code	EN24090471
Sample Name	Ambient Noise	Monitoring Commenced on	12-09-2024
Test Method	IS 9989:1981	Monitoring Completed on	13-09-2024
Monitoring Location	South - East Boundary	Monitored by	Lab Authorized Sampler

### SAMPLING SITE DETAILS

Re Survey No.	103/1,104/1 A	Re Survey No.	1/2,45/1
Village	Chelavoor	Village	Kuttikatoor
Taluk	Kozhikode	Taluk	Kozhikode
District	Kozhikode	District	Kozhikode
State	Kerala	State	Kerala

### MONITORING RESULTS - Leq

TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	38.3	14:00	51.4	22:00	37.1
07:00	41.1	15:00	51.7	23:00	36.1
08:00	45.4	16:00	52.9	24:00	38.7
09:00	49.0	17:00	53.3	01:00	39.4
10:00	51.4	18:00	47.8	02:00	39.1
11:00	54.5	19:00	44.2	03:00	39.8
12:00	51.7	20:00	40.3	04:00	38.7
13:00	51.0	21:00	39.8	05:00	40.5

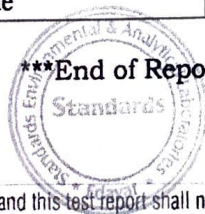
### TEST RESULTS-CHEMICAL DISCIPLINE

Sl. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time	dB(A)	49.8
2	Ambient Sound Level (Leq) Night Time	dB(A)	39.1

Remarks:

Shency Joy  
TM-Chemical  
Checked by:

\*\*\*End of Report\*\*\*



*Laiju P N*  
Laiju P N  
Laboratory Head

Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

### Standards Environmental & Analytical Laboratories

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017  
vide Certificate No. TC - 12939 & "A" Grade Laboratory approved by KSPCB.

'Standards' Bldg. No: 338/A,B,C,D,E (Behind BPCL Petrol Pump), Edayar, Muppathadam P.O., Ernakulam Dist. - 683 110

# Standards



## TEST REPORT

ULR No.: TC1293924000019273F

LRI No.: SEAAL24091162A	Date: 21-09-2024	Page 1 of 2
-------------------------	------------------	-------------

### CUSTOMER DETAILS

Customer Name & Address	<b>M/s Symbiosis Properties &amp; Infrastructure India (P) Ltd</b> Good Earth - Barefoot on the Hills Kozhikode District
Customer Reference	Test Request Date: 12-09-2024

### SAMPLE DETAILS

Product Category	Water	Sample Code	WT24090405
Sample Name	Ground Water	Sample Received on	13-09-2024
Sample Description by Customer	Open Well Water (South - East Boundary)	Temperature @ Receipt	4°C
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	13-09-2024
Sample Quantity & Packing	2 L & 125 ml in a Plastic Bottle	Test Completed on	20-09-2024
Information Provided by Customer	---	Sampled by	Lab Authorized Sampler

### SAMPLING SITE DETAILS

Re Survey No.	103/1,104/1 A	Re Survey No.	1/2,45/1
Village	Chelavoor	Village	Kuttikatoor
Taluk	Kozhikode	Taluk	Kozhikode
District	Kozhikode	District	Kozhikode
State	Kerala	State	Kerala

### DETAILS OF SAMPLING

Sample Source		Date of Sampling	12-09-2024
Sampling Procedure	SEAAL/QAD/SOP/7.3/01	Sample Temperature	27.4°C

### TEST RESULTS - CHEMICAL DISCIPLINE

Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
1	Colour	IS 3025 (Part 4): 2021	Hazen	1	5 (Max)

Shency Joy  
TM-Chemical  
Checked by:



Remya B  
TM-Biological  
Authorized Signatory

Laiju P N  
Laboratory Head  
Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

### Standards Environmental & Analytical Laboratories

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017  
vide Certificate No. TC - 12939 & "A" Grade Laboratory approved by KSPCB.

'Standards' Bldg. No: 338/A,B,C,D,E (Behind BPCL Petrol Pump), Edayar, Muppathadam P.O., Ernakulam Dist. - 683 110  
Tel: 0484 2546660 93872 72402 90743 41443 Web: www.sealabs.in E-mail: sealabs@gmail.com

# Standards



## TEST REPORT

ULR No.: TC1293924000019273F

LRI No.: SEAL24091162A

Date: 21-09-2024

Page 2 of 2

### TEST RESULTS - CHEMICAL DISCIPLINE

Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
2	Odour	IS 3025 (Part 5): 2018	---	Agreeable	Agreeable
3	Turbidity	IS 3025 (Part 10): 2023	NTU	0.8	1.0 (Max)
4	pH	IS 3025 (Part 11): 2022	---	6.74	6.50-8.50
5	Conductivity	IS 3025 (Part 14): 2013	$\mu\text{S/cm}$	132	---
6	Total Dissolved Solids	IS 3025 (Part 16): 2023	mg/L	88.4	500 (Max)
7	Total Hardness as $\text{CaCO}_3$	IS 3025(Part 21): 2009	mg/L	32.0	200 (Max)
8	Calcium as Ca	IS 3025(Part 40): 1991	mg/L	9.60	75 (Max)
9	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/L	1.95	30 (Max)
10	Chloride as Cl	IS 3025(Part 32): 1988	mg/L	10.6	250 (Max)
11	Total Alkalinity as $\text{CaCO}_3$	IS 3025 (Part 23): 2023	mg/L	33.3	200 (Max)
12	Iron as Fe	IS 3025(Part 53): 2003	mg/L	0.13	1 (Max)
13	Sulphate as $\text{SO}_4$	IS 3025 (Part 24/Sec 1): 2022	mg/L	1.23	200 (Max)

### TEST RESULTS - BIOLOGICAL DISCIPLINE

Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Total Coliform Bacteria	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml
2	<i>E.oli</i>	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml

Remarks:

\*\*\*End of Report\*\*\*

Shency Joy  
TM-Chemical  
Checked by:



Remya B  
TM-Biological  
Authorized Signatory

Laiju P N  
Laboratory Head  
Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

**Standards Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 12939 & "A" Grade Laboratory approved by KSPCB.

'Standards' Bldg. No: 338/A,B,C,D,E (Behind BPCL Petrol Pump), Edayar, Muppathadam P.O., Ernakulam Dist. - 683 110

Tel: 0484-2546660 93872 72402 90743 41443 Web: www.sealabs.in E-mail: sealab@gmail.com