COMPLIANCE REPORT
OCTOBER 2024 - MARCH 2025

M/S MALABAR INSTITUTE OF MEDICAL SCIENCES LTD

KANNUR DISTRICT
KERALA

Aster
MIMS HOSPITAL
We'll Treat You Well
KANNUR

4558

MIMS/KNR/EC/2025-2026
29th may 2025

The Additional Principal Chief Conservator of Forests (C)
Ministry of Environment, Forests & Climate Change,
4th Floor, E& F Wing, Kendriya Sadan,
Koramangala, Bangalore - 560034

Respected Sir,

Sub :- **Environment Clearance – Expansion of M/s Malabar Institute of Medical Sciences ltd. at survey nos. 48/1, 50/3 and others, Chembilode Village & Panchayat, Kannur Taluk & District, Kerala.– Submission of Compliance Report – Second half - Reg.**

Ref. No.1 :- **F. No. 21-2/2022-IA-III Dt. 29-03-2022**
Ref. No.2 :- **EC identification No. - EC22A038KL110532 dt. 04-04-2022**
Ref. No.3 :- **Proposal No. IA/KL/MIS/250024/2022**

The expansion of existing hospital project was accorded Environmental Clearance for **30,370.28 sq. m** of built-up area on **04-04-2022**, vide **EC identification No. - EC22A038KL110532 and F. No. 21-2/2022-IA-III** by Ministry of Environment Forest and Climate Change, Govt. Of India. As per the condition stipulated in EC order, the half yearly compliance report of **Second half** (October 2024 – March 20245) to the specific conditions and standard conditions of the Environment Clearance is enclosed.

Thanking you,
Yours respectfully,

for M/s Malabar Institute of Medical Sciences ltd. Kannur

For Malabar Institute of Medical Sciences Ltd.

(Dr. Anoop Nambiar)
Chief Operating Officer

(Dr.Anoop Nambiar)
Chief Operating Officer

Aster MIMS Kannur
Chala East, Chala, Kerala- 670621

T: 0497 283 8000, 0497 283 1000
www.asterhospitals.in

COMPLIANCE REPORT

TO

THE CONDITIONS

OF

ENVIRONMENT CLEARANCE ORDER

(F. NO. 21-21/2022-IA-III)

EC Identification No. EC22A038KL110532

FOR THE PERIOD OF

October 2024 – March 2025

PREPARED BY

ENVIRONMENTAL ENGINEERS & COUNSULTANTS PVT. LTD.
A1- 198, Janak Puri
New Delhi – 110 058, India

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INTRODUCTION

M/s Malabar Institute of Medical Sciences ltd is a proposed expansion of existing hospital situated at **survey nos. 48/1, 50/3 and others, Chembilode Village & Panchayat, Kannur Taluk & District, Kerala**. The construction project was accorded Environmental Clearance for **30,370.28 sq.mtr** of built-up area on 04-04-2022 vide **EC identification No. - EC22A038KL110532 and F. No. 21-2/2022-IA-III by** Ministry of Environment, Forest and Climate Change.

The half yearly compliance report needs to be submitted as part of Miscellaneous condition No.4 of Environmental Clearance order by the project proponent. The compliance report to conditions of the Environmental Clearance for the period of **October 2024 – March 2025** (Second half) is being submitted.

The project proponent has completed all construction work in connection with the hospital project and the project is in operational phase. The Photograph of the hospital project is attached as **Plate No.1.**

COMPLIANCE REPORT

PART - A

SPECIFIC CONDITIONS

SPECIFIC CONDITION

01	**Abstraction of groundwater shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 147 KLD during operational phase.**	**Complied**

The construction work completed in the project site. The fresh water requirement will not exceed 147 KLD during its operational phase. Since the proposed project area lies in safe zone the permission from CGWA is not necessary for abstraction of ground water.

02	**As proposed, wastewater shall be treated in an onsite STP of total 200KLD. At least 146 KLD of treated water from the STP shall be recycled and reused for flushing (104 KLD), for horticulture (1 KLD) and for boiler (15 KLD) and for make-up water requirement for cooling towers attached with the HVAC system (26 KLD). There shall be no discharge of treated water outside the project premises, as committed.**	**Complied**

The Project proponent has constructed STP. The waste water generated from proposed hospital building will be treated in the STP at project site. At least 146 KLD of treated water from STP will be recycled and reused for cooling towers attached with HVAC, flushing, gardening and other purposes in the project site. There will no discharge of treated water from the project site. The PP is re use treated water from the existing STP. The Cumulative capacity of STP is 400 KLD with MBR technology. The photograph of the STP is attached as **Plate No.2.**

03	**The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flashing, and quality of water being supplied through spray faucets attached to toilet seats.**	**Noted**

To know the implementation of conditions related to quality and quantity of recycled and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing, comparative biological studies from toilet seats using recycled treated water and freshwater for flushing, the project opponent will conduct a 3rd party study.

04	**Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/ greenery will be 30,000 sqm. As committed, at least 2174 trees shall be maintained within the site and the project vicinity in consultation with the local authority. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 square metres of land should be planted and maintained. The existing trees will be counted for this purpose. Plantation to be ensured species (cut) to species planted. 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.**	**Noted**

The project proponent has included native plants in the landscape plan and water intensive and invasive species was not used. Area for greenery has assured as per the details provided at EAC. The PP has started to plant various saplings in the hospital campus.

05	**The local bye-law provisions on rainwater harvesting should be followed. If local bye-law provisions is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, RWH tank of Total 118 KL capacity shall be provided by PP for rainwater harvesting after filtration.**	**Complied**

The construction of rain water harvesting tank is a mandatory provision in KMBR in Kerala. The project proponent has constructed RWH facility with the capacity with 150 KL in the project site as part of water conservation.

06	**The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate**	**Complied**

	area earmarked for segregation of solid waste, as per SWM Rules 2016. As committed, Biodegradable waste shall be utilised through biogas generation unit/ bio- bin system to be installed within the site. Inert waste shall be disposed off as per norms at authorised site. The recycled waste shall be sold to authorised vendors / recycles. Construction and Demolition C&D waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio – medical waste shall be disposed as per Bio Medical Waste (Management & Handling) Rules, 2016. The radiation safety guidelines of Atomic Energy Regulation Board (AERB) Bhabha Atomic Research Centre (BARC) with regard to the management and disposal of radio active waste shall be followed.	

The project proponent has constructed separate facility for segregation, handling and management of bio degradable and non - bio degradable waste in hospital project site. The bio degradable waste is being disposed off to a waste management company named Green worms waste management Pvt. Ltd. which is approved by PCB. The non bio degradable waste is sold to the local vendor. All solid waste and construction and Demolition waste generated from the project site was manged as per the waste management Rules enacted in 2016. The bio medical waste is being handled through IMAGE. The copy of MOU with Green worms waste management Pvt. Ltd is attached as **Annexure A.**

07	**A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of the service of the roads within a 05 kilometers radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of old development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 5 kilometers 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**	**Noted**

	the PWD/ 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 and traffic decongestion plan is prepared up to ensure that the current level of the service of the roads within a 05 kilometers radius of the project is maintained and improved upon after the implementation of the project.

08	**The PP shall provide electric charging points in parking areas for E vehicles as committed.**	**Complied**

The project proponent has provided electric charging points in parking areas for E Vehicles as committed.

09	**As committed, solar energy installation of 267.5 kWp capacity to meet about 10% of the total demand load shall be implemented.**	**Complied**

As part of promotion of renewable energy, the project proponent has installed solar panels on the roof of the building with capacity of 50 KW and solar water heater with capacity of 3000 liter. The generation of power from solar is estimated about 10 percentage of total demand load in the project site.

11	**The environmental clearance to the project is primarily under provisions of EIA Notification, 2006. The project proponent is under obligation to obtain approvals/ clearances under any other Acts, Regulations, Statutes as applicable to the project.**	**Complied**

The project proponent has got all necessary approvals from various department and authorities. The proponent has started the construction project only after obtain of all needed approvals and licenses/ clearances. The Project proponent has completed the construction in tune with the applicable rules and regulation.

COMPLIANCE REPORT

PART – B

STANDARD CONDITIONS

I. STATUTORY COMPLIANCES

01	**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.**	**Complied**

The PP has completed the construction activity in the project site in 2024. The construction was done in accordance with the local building byelaws. At present the project proponent has obtained all clearances / approvals / licenses for the construction of hospital project. The construction work was started only after obtaining of all necessary clearance and approvals in connection with a building project. The list of obtained licenses and approvals are provided below:-

Sl. No	Approvals/Licenses	Annexure
01	EC order	01
02	Building permit	02
03	Consent for Establishment	03
04	NOC from Fire and Rescue services	04

02	**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 lightning etc.**	**Complied**

The project proponent has obtained structural stability certificate from an approved structural engineer. The project proponent was construct the building as per the guidelines in National Building Code. The copy of structural stability certificate is attached as **Annexure No.4A**

03	**The project proponent shall obtain Forest Clearance under the provisions of Forest (conservation) Act, 1980, in case of the diversion of forest land for non - forest purpose involved in the**	**Not needed**

	project.	

There is no forest land involved in the project. Therefore, no forest clearance is necessary for the instant project.

04	**The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.**	**Not needed**

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Compliance:

The instant project site is not coming under the purview of National Board for Wild Life since the project is not located within 10 Km of the National Park and Wild Life Sanctuary.

05	**The project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (prevention & Control of Pollution) Act, 1981 and the water (prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.**	**Complied**

The project proponent has obtained consent to Establish from State Pollution Control Board. The copy of the consent is attached as Annexure No.2.

06	**The project proponent shall obtain the necessary permission for drawl of groundwater / surface water required for the project from the competent authority.**	**Noted**

Since the project area is in safe zone it is not mandatory to get permission from CGWA for drawl of ground water. The project proponent will have consultation with Local Self Government if the project is intending to draw water from ground. The PP is having existing wells in the hospital project site.

07	**A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.**	**Complied**

The power supplying agency in Kerala is Kerala State Electricity Board (KSEB). There is no other agency in connection with supply of power. The construction of the project has competed the connection from Kerala State Electricity Board has obtained for un interrupted power supply.

08	**All other statutory clearances such as approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained as applicable, by project proponents from the respective competent authorities.**	**Complied**

Compliance:

The project proponent has obtained all necessary permission to start the construction commercial building. The approvals/licenses are provided as Annexures. The project proponent uses DG sets in operational phase but the volume of diesel stored in project site is below 1000 liters therefore approval from Chief Controller of Explosive is not necessary.

09	**The provisions of the Solid Waste Management Rules, 2016, E Waste (Management) Rules, 2016, and the Plastic Waste Management Rules, 2016, shall be followed.**	**Complied**

Compliance:

To handle and management of all type of wastes generated from the project site has been collected, segregated and disposed in line with the provisions of the Solid Waste Management Rules, 2016, E Waste (Management) Rules, 2016, and the Plastic Waste Management Rules, 2016. All rules for handling and management of various wastes generated from the project site is being followed in this operational phase. The area allocated for waste management is attached as **Plate No.3.**

10	**The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.**	**Complied**

Compliance:

The project proponent has followed the Energy Conservation Building Code for Commercial Building by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservations:

1	**Notification GSR 94 (E) 25-012-018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.**	**Complied**

The project proponent has implemented dust mitigation measures like sprinkling, covered vehicle with building material , covering of loose soil stacked at project site, wind breakers, and regulation in grinding, earth cutting like dust emitting works in its construction phase.

2	**A Management Plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.**	**Complied**

The project proponent has prepared a management plan in connection with application for obtaining EC. The measures laid down in the management plan has executed in the project site for contain the current exceedance in ambient air quality at the site.

3	**The project proponent shall install system to carryout Ambient Air quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM_{10} $PM_{2.5}$ covering upwind and downwind directions during the construction period.**	**Complied**

To monitor the quality of ambient air quality in the project site, the project proponent monitors the PM_{10} and $PM_{2.5}$ covering upwind and downwind directions during the construction period. This is being submitted along with the Half yearly Compliance report.

4	**Diesel power generating sets proposed as source of back power should be of enclosed type and confirmed to rules made under the Environment (Protection) Act, 1986. The height of stack of DG**	**Complied**

	sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	

The Diesel power generating sets proposed as source of back power is of enclosed type and confirmed to rules made under the Environment (Protection) Act, 1986. The place of DG and its stack height is decided in consultation with the Pollution Control Board.

5	**Construction site shall be adequately barricaded before the construction begins. Dust smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site, (at least 3 metre height). Plastic / tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.**	**Complied**

The project proponent installed proper barricade well before commencing of construction of building. Dust smoke and other air pollution prevention measures was provided such as screens for the building under construction, continuous dust/ wind breaking walls all around the site, (at least 3 metre height). Plastic / tarpaulin sheet covers were provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site. Currently the construction works were completed.

6	**Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.**	**Complied**

Plastic / tarpaulin sheet covers has been provided for sand, cement, murram loose soil and other construction materials prone to causing dust pollution stored at the site.

7	**Wet jet shall be provided for grinding and stone cutting.**	**Complied**

Grinding and stone cutting was done in sheds at project site and wet jet was used to prevent dust emission.

8.	**Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.**	**Complied**

To suppress dust emission from the unpaved surfaces and loose soil stored at project site was adequately sprinkled water.

9.	**All construction and demolition debris shall be stored at the site (and not dumped in on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules, 2016.**	**Complied**

All construction and demolition debris was stored at the site this won't dumped on the roads or open spaces out side the site. The waste was managed as per the provision stipulated in the construction and Demolition water management rules, 2016.

10	**The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall confirmed to Environmental (Protection) prescribed for air and noise emission standards.**	**Complied**

The project proponent used low sulphur diesel which is available in the market for diesel generator sets.

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

Compliance:

The project proponent finalized the place, stack height of D G sets in consultation with PCB. The gaseous emissions from DG set was dispersed through adequate stack height Acoustic enclosure has provided to the DG sets to mitigate the noise pollution.

12	**For indoor air quality the ventilation provisions as per National Building Code of India.**	**Complied**

Compliance:

The Project proponent has provided adequate ventilation. Since it is hospital project proponent need to maintain the air quality inside the project well within the standard.

III. <u>Water quality monitoring and preservation:</u>

1	**The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, Bio-swales, landscape and other sustainable urban drainage system (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.**	**Complied**

There is no construction to obstructing the natural drainage through the site, on wetland and water bodies. The natural drain system is maintained for ensuring unrestricted flow of water.

2	**Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.**	**Complied**

Compliance:

The building designed based on its topography. There is proper drainage system for storm water management. Minimum cutting and filling was done.

3	**Total fresh water use shall not exceed the proposed requirement as provided in the project details.**	**Complied**

The fresh water usage is limited as mentioned in the proposal and there is no exceedance. The used water is being reused by STP .

4	**The quantity of freshwater 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.**	**Being Complied**

The project proponent has installed water meters to monitor and record the fresh water usage, water recycling, rain water harvested in the project site. This is being submitted at Regional office of MoEF&CC along with Half Yearly Compliance Report.

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

The local body does not supply water for the commercial project. It is available from Kerala Water Authority. The project can obtain a certificate from the source of water.

6	**At least 20 percentage of the open spaces as required by the local building bye-laws shall be previous. Use of grass pavers, paver blocks with at least 50% opening, landscape, etc. would be considered as pervious surface.**	**Complied**

As per local Building bye-law it is mandatory to leave open spaces in the project site. The project proponent will provide at least 20 percentage as open spaces as pervious surface.

7	**Installation of dual pipe plumbing for supplying fresh water for**	**Complied**

	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 project proponent has installed STP for existing hospital project for treating used water so that dual plumbing has been fixed in the project site. The same is complied for new construction.

8	**Use of water saving devices / fixtures (viz. low flow flushing systems. Use of low flow faucet, tap aerators, etc.) for water conservation shall be incorporated in the building plan.**	**Complied**

As part of conservation of water, the project proponent has installed water saving devices / fixtures for water conservation. This has been incorporated in the building plan. Water saving fixtures are installed in the existing hospital project.

9	**Separation of grey and Blackwater 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.**	**Complied**

The project proponent has provided dual plumbing system in the project site for separation of grey and blackwater in the project site. Dual plumbing is installed in the existing hospital project.

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

The project proponent has been using pre mixed concrete, curing agents during construction phase to reduce water consumption and other pollutions. Batching plant, rain water harvesting etc is being adopted as part of conservation measures.

11	**Rain water harvesting recharge pits/storage tanks shall be**	**Noted**

	provided for ground water recharging as per the CGWB norms.	

As part of conservation of water, the PP has constructed rain water harvesting tanks in the existing project site and same was constructed for the new building.

12	**A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5000 squares of built up area and storage capacity of minimum one day of total freshwater requirement shall be provided. In areas where groundwater recharge is not feasible, the rainwater should be harvested and stored for reuse. The groundwater shall not be withdrawn without approval from Competent Authority.**	**Complied**

The project proponent has constructed rain water harvesting tank in the project site to harvest roof top rain water. The Rain water from the harvesting tank is being used for the domestic purposes in the hospital.

13	**All recharge should be limited to shallow aquifer.**	**Noted**

Since the ground water table is high in the region, the ground water recharge is not feasible therefore the project proponent did not propose ground water recharge in connection with the commercial building project. .However the PP is trying to do ground water recharge by using rain water.

14	**No groundwater shall be used during construction phase of the project.**	**Complied**

The project proponent did not use ground water during construction phase of the project.

15	**Any groundwater 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 groundwater abstraction or dewatering.**	**Noted**

Since the proposed site is in safe zone the permission from CGWA is not mandatory however the project proponent had consultation with ground water department of the state in connection with the abstraction of ground water. No dewatering process happened in the project site.

16	**The quantity of freshwater 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 Regional Office, MOEF&CC along with six monthly Monitoring reports.**	**Being Complied**

The project proponent has installed water meters to monitor and record the fresh water usage, water recycling, rain water harvested in the project site. This will be submitted at Regional office of MoEF&CC along with Half Yearly Compliance Report.

17	**Sewage shall be treated in the STP with tertiary treatment.**	**Complied**

The project proponent has constructed STP for recycling of used water with MBR technology. The treated water is being used for flushing, gardening and other purposes.

18	**No sewage or untreated effluent water would be discharged through storm water drains**	**Complied**

The PP has installed STP for treating all waste water generated from the proposed hospital project. Therefore no sewage or untreated water is being discharged to the public drain.

19	**Onsite sewage treatment of capacity of treating 100 percentage waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape,**	**Being Complied**

	flushing, cooling tower and other end uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.	

All sewage generated from the project site is being treated in the STP proposed in the project site. The installation of the Sewage Treatment Plant (STP) will be certified by an independent expert and a report in this regard will be submitted to the Ministry before the project is commissioned for operation

20	**Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.**	**Complied**

The treated water from STP is being monitored in each month to know the levels of each parameters. The project proponent will make an agreement for upkeeping the STP unit and mitigate odour problem from STP.

21	**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 Sewage and Sewage Treatment System, 2013.**	**Noted**

The project proponent has installed a dewatering machine as part of STP in the project site to reduce the sludge. The proponent can make the sludge in form of cake and this can be used as manure in the garden.

IV. Noise Monitoring and Prevention

1	**Ambient noise levels shall conform to residential area/ commercial area/ industrial area/ silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the**	**Complied**

	ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ SPCB.	

The project proponent had implemented adequate measure to reduce sound and air pollution during the construction phase. Sprinkling with water, covering of loose soil and construction site , wet jets for grinding, avoiding open space for grinding and other noise generating works etc are implemented.

2	**Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as part of six - monthly compliance report.**	**Complied**

To monitor the ambient noise level, the project proponent has been conducted noise monitoring with the help of laboratory having approval from Pollution Control Board. The results of noise level is being submitted along with the half yearly compliance report.

3	**Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.**	**Complied**

To reduce impact of noise, Acoustic enclosures for DG sets, noise barriers for ground- run bays, ear plugs for operating personnel has provided as mitigation measures.

V. <u>Energy Conservation Measures:</u>

1	**Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall come play with the state ECBC.**	**Noted**

The project proponent has complied the guidelines of Energy Conservation Building Code of Bureau of Energy Efficiency.

2	**Outdoor and common area lighting shall be LED**	**Complied**

The all lightening installed at out side and inside of the project are LED to reduce the energy consumption. The PP has been using LED for the existing project.

3	**Concept of passive solar design that minimize energy consumption in buildings by using design elements such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated into building design. Wall, window and roof U-values, shall be, as per ECBC specifications.**	**Complied**

The instant project is hospital building. All building is getting daylights from its roof part, the design of the building is prepared accordingly. The wall, window and roof U – values will be as per the ECBC specification. The design of the building is as per conservation of energy.

4	**Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.**	**Complied**

The project proponent has incorporated the LED for the lightening of the outside and common area of the commercial building for energy conservation.

5	**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.**	**Complied**

As part of promotion of renewable energy, the project proponent has installed solar panels and streetlights to generate electricity equivalent to 1 percentage of the demand load. The PP has installed solar panels in the project site. In the existing hospital , the PP has installed solar for generate renewable energy.

6	**Solar power shall be used for lighting in 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 percentage of the hot water demand of the commercial and institutional building or as per the recruitment of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.**	**Complied**

The instant project is a hospital project. Separate electric meter has installed for solar power. The project proponent has provided facility for solar water heaters in the project site.

VI. Waste Management:

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

The project proponent has installed a bio bin / bio gas plant to dispose the bio degradable waste generated from the existing hospital project site. The Non Bio degradable waste is being sold to the local vendor. Therefore, the project proponent does not ask the support of Local Self Government or other public authority to treat the solid waste generated from the commercial project.

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

The disposal of muck during construction phase did not create any adverse impact on the neighboring community. The project proponent had taken extreme care while disposing the

generated muck from the project site.

3	**Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.**	**complied**

To collect the waste generated from each apartment, the project proponent has provided separate wet and dry bind for proper collection and segregation. Solid waste has segregated into wet garbage and inert materials.

4	**Organic waste compost / vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.**	**Complied**

The PP has installed facilities for disposing bio degradable waste like Organic waste converter, Bio - bin or bio gas plant.

5	**All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.**	**Complied**

The non bio degradable waste is being sold to the local vendors for recycling. A written tie up is there with the agency concerned during operational phase. In construction phase the PP is being handed over the non bio degradable waste to the recyclers.

6	**Any hazardous waste generated during the construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.**	**Complied**

All hazardous waste generated from the project site is being disposed off with the help of an agency with the approval of State Pollution Control Board. The project proponent has earmarked an area for the collection of Hazardous waste. This waste is being handled and managed as per the provision stipulated in Hazardous waste Rules 2016.

7	**Use of environment friendly materials in bricks, blocks and other**	**Complied**

	construction materials, shall be required for at least 20 percentage 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.	

The project proponent is being used environment friendly materials in bricks, blocks and other construction materials, for at least 20 percentage of the construction material quantity.

8	**Fly ash should be used as building materials in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January 2016, Ready mixed concrete must be used in building construction.**	**Complied**

Fly ash added materials was used in the construction of proposed commercial building. Ready mixed concreate was used in the project site to reduce consumption of water and other pollution.

9	**Any wastes from construction and demolition activities thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.**	**Complied**

All waste in connection with construction and demolition activities is being managed in conform to the Construction and Demolition Waste Management Rules, 2016.

10	**Used CFLs &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.**	**Noted**

The used CFLs & TFLs are be properly collected and disposed off as per the prevailing guidelines to avoid mercury contamination. The project proponent is intending to use only LED lightings in the proposed project site. All used LEDs are disposed as per the guidelines.

VII. GREEN COVER

01	**No tree can be felled/ transplanted unless exigencies demanded. Where absolutely necessary, tree felling shall be with prior permission from the concentred regulatory authority. Old trees should be retained based on grith and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (Cut) to Species (Planted)**	**Noted**

All possible trees are maintained at the project site. The trees existed in the project site were not in the list of prior permission to be taken form the concerned regulatory authority. It is assured that, tree saplings are planted as compensation for felling trees in the project site.

02	**A minimum of 1 tree for every 80 Sq.m 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.**	**Noted**

The PP has planted 1 tree for every 80 sq.m of land and maintain. Native heavy foliage, broad leaves and wide canopy cover is being selected for planting.

03	**Where the trees need to be cut with prior permission from the concern local authority, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.**	**Noted**

The project proponent started to plant 10 tree saplings as compensation of 1 tree that is cut. The green belt development is based on the details provided during appraisal of the project. The tree saplings which are going to be planted will be maintained in good manner as parts if its land scape and green belt development. Procedures with Forest department will follow for uprooting the trees.

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

As part of conservation of fertile soil in the project site, the project proponent had striped the topsoil to a depth of 20 cm from areas proposed for buildings, roads, paved areas and external services. The soil was stockpiled, appropriately in designed areas and reapplied during plantation of the proposed vegetation on site.

VIII. <u>Transport:</u>

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

A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), was prepared to include motorized, non motorized, public and private networks. Road were

designed with due consideration for environment and safety of users. The above mentioned criteria will be used during the design of the road.

2	**Vehicles hired for bringing construction materials 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.**	**Complied**

The all vehicles come to the project site for loading and unloading of various materials are in good condition and have pollution check certificate. The transportation is being regulated during peak hours.

3	**A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of the service of the roads within a 05 kilometers radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of old development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 5 kilometers 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 PWD/ 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.**	**Noted**

A detailed traffic management and traffic decongestion plan is prepared to ensure that the current level of the service of the roads within a 05 kilometers radius of the project is maintained and improved upon after the implementation of the project.

IX. Human Health Issues:

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

The project proponent was provided mask to the all labours working in the project site as part of health and safety.

2	**For indoor air quality, the ventilation provisions as per National Building Code of India.**	**Complied**

The instant hospital building is having adequate ventilation provisions as per National Building code of India.

3	**Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management plan shall be implemented.**	**Complied**

The project proponent has prepared a disaster management plan. The emergency preparedness plan is based on the Hazard Identification and Risk Assessment.

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

The project proponent has provided housing outside the instant project site. All other necessary infrastructure like mobile toilet, medical health care, cooking facility for construction labours. The housing will be in the form of temporary structures and it can be removed after completion of the project.

5	**Occupational health surveillance of the workers shall be done on a regular basis.**	**Complied**

The occupation health surveillance of the workers in the project site is being done on a regular basis. A health and safety person having certificate will be deployed by the project proponent during the construction phase.

6	**A first Aid Room shall be provided in the project both during construction and operations of the project.**	**Complied**

A first aid room was provided in the project site during construction phase.

X. <u>Miscellaneous:</u>

1	**The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within 7 days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.**	**Complied**

The project proponent had prominently advertised the issue of EC and its details in two local news papers one of which in English daily and other in Malayalam daily. The advertisement published in newspaper is attached as **Annexure No. 5.**

2	**The copies of the environmental clearance shall be submitted by the project proponent to the Heads of local bodies, Panchayat and Municipal Bodies in addition to the relevant offices of the government who in turn has to display the same for 30 days from the date of receipt.**	**Complied**

The copy of environmental clearance was submitted by the project proponent to the Heads of local bodies.

3	**The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half -yearly basis.**	**Complied**

The project proponent will upload the status of compliance of the conditions stipulated in EC and monitored results of various parameters of Ambient Air, Noise and Water in the website of the company. This has been updated on half yearly basis. The copy of the same is attached as **Annexure No. 6 to 09.**

4	**The project proponent shall submit six monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.**	**Complied**

The project proponent is being submitted six monthly reports on the status of the compliance of the stipulated environmental conditions on Parivesh Portal. Since the portal having problem to upload the details soft copy of compliance report is being submitted at Regional Office of MoEF&CC.

5	**The company shall have a well laid down environmental policy, duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviations/ violation of the environmental/ Forest/ wildlife norms/ conditions. The company shall have confined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and over shareholders stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.**	**Complied**

The project proponent has prepared an Environmental Policy duly approved by the board of directors. The policy is prepared based on the instruction laid down in the EC order. The instant project is for construction of a commercial building.

6	**A separate Environmental Cell both at the project and company headquarter level with qualified personnel shall be set up under the control of senior executive, who will directly report to the head of the organization.**	**Complied**

The project proponent has constituted an Environmental Cell both at the project and company headquarter level with qualified personals. A senior executive is the head of the cell and who can directly report to the head of the company.

7	**Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. year wise progress of implementation of action plan shall be reported to the Ministry Regional Office along with the Six Monthly Compliance Report.**	**Complied**

The action plan for implementing EMP and environmental conditions along with responsibility matrix of the company is being prepared. The funds earmarked for environmental protection measures shall be kept in separate account. The progress of implementation of action plan will be reported to the Ministry Regional Office along with Half Yearly Compliance report.

8	**The project proponent shall submit the environmental statement for each financial year in form -V to the concerned state Pollution Control Board as prescribed under the Environment (Protection) Rules 1986, as amended**	**Complied**

	subsequently and put on the website of the company.	

The project proponent has submitted environmental statement for each financial year in form -V to the state Pollution Control Board as prescribed under the Environment (Protection) Rules 1986,. The same has been updated in the website of the Company.

9	**The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.**	**Complied**

The land preparation work has been started in the project site such as clearing the land and install fencing around the project. The project proponent has got building permit to start the construction activities in the project site. The copy of building permit is attached as Annexure No.2.

10	**The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.**	**Complied**

The all stipulations made by the State Pollution Control Board and State Government is being strictly followed.

11	**The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.**	**Complied**

The project proponent is being abide all the commitments and recommendations made in the EIA / EMP report and during presentation at Expert Appraisal Committee.

12	**No further expansion or modifications in the plant shall be**	**Noted**

	carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MOEF&CC).	

The project proponent will apply for fresh EC in case the management decided for further expansion or modification of the project.

13	**Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the Provision of Environmental (Protection) Act, 1986.**	**Noted**

The project proponent did not conceal any data in connection with obtaining Environmental Clearance. The data submitted at EAC were true and correct.

14	**The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.**	**Noted**

The project proponent is being implemented all conditions stipulated in the EC order.

15	**The ministry reserves the right to stipulate additional conditions If found necessary. The company in a time bound manner shall implement these conditions.**	**Noted**

The project proponent is willing to adhere additional condition if the competent authority found necessary at any stage of construction or operation.

16	**The Regional Office of this ministry shall Monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports.**	**Complied**

The project proponent has extended full support to the officers of the Regional Offices of Ministry of Environment Forest and Climate Change during their inspection at project site. This will be done in future.

17	**The above conditions shall be enforced, inter-alia under the Water (prevention & control of Pollution) Act, 1974, the Air (prevention & control of Pollution) Act, 1981, the Environment (Protection) Act, 1986. Hazardous and other waste (management and transboundary movement) Rules, 2016 and the Public Liability Insurance Act, 1991, along with their amendments and rules and any other orders passed by the Honorable Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.**	**Will be Complied**

The conditions stipulated in the EC order is being implemented by the project proponent. In addition, the project proponent will adhere the provision of all rules and regulations in India in connection with construction of commercial project.

18	**Any appeal against this EC shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act 2010.**	**Noted**

There is no appeal against this EC order filed in NGT within a period of 30 days.

ANNEXURE

Annexure A

GREEN WORMS WASTE MANAGEMENT PVT. LTD.

ADDENDUM

AGREEMENT TO DRY WASTE SERVICE

With reference to the Agreement No: AMK/MOU/23-24/21 dated 04th day of July 2022 between Aster MIMS Kannur, a unit of Malabar Institute of Medical Sciences Ltd, a company incorporated under the provisions of Companies Act 1956 with CIN: U85110KL1995PLC008677, having its registered address at Malabar Institute of Medical Sciences Ltd. Mini By-pass Road, Govindapuram P.O, Calicut – 673016, Kerala, India, India represented by its authorized signatory Dr. Anoop Nambiar, Chief Operating Officer, Aster MIMS Kannur, hereinafter referred to as the "Company" on the first part.

AND

Green Worms Waste Management Private Limited, having its registered address at 140 B, The crest Building Varakkal Junction. West Hill, Chungam, Kozhikode- 673005(hereinafter called as the Licensee) which expression shall unless it be repugnant to the context or meaning thereof be deemed to mean and include its successors and assignee's of the second part, have mutually agreed to extend the period of Agreement for the time period from **5th July 2024 to 4th January 2024.**

All other conditions remain the same as mentioned in the initial contract AMK/MOU/23-24/21.

GREEN WORMS WASTE MANAGEMENT PVT. LTD. WEST HILL CALICUT 673 005

Dr. Anoop Nambiar
Chief Operating Officer
Aster MIMS Hospital, Kannur

For Malabar Institute of Medical Sciences Ltd.

(Dr. Anoop Nambiar)
Chief Operating Officer

Director
Green Worms Waste Management Pvt Ltd.

72/1183, The Crest Building, Varakkal Road, West Hill, Kozhikode, Kerala - 673005
M: +91 9656363513, +91 9847696113, E: info@greenworms.org / accounts@greenworms.org, W:www.greenworms.org

കേരളം केरल KERALA DZ 131244

DRY WASTE SERVICE AGREEMENT WITH

This Dry waste collection service agreement (hereinafter referred to as the **'Agreement'**), is made and entered on 04th July 2022 and renewed from 05th July 2023 to 04th July 2024.

By and Between:

GREEN WORMS WASTE MANAGEMNET PRIVATE LIMITED and having its registered office at 140B The Crest Building Varakkal Junction, West Hill Chungam KOZHIKODE - 673005,Kerala, India and PAN: AAHCG3811F (hereinafter referred to as **"Green Worms"**, which expression shall unless repugnant to the context include its successors in interest and permitted assigns) of the FIRST PARTY

AND

MALABAR INSTITUTE OF MEDICAL SCIENCES LTD (ASTER MIMS KANNUR), Chala East- Kannur, Kerala 670621 GSTNo:32AACCM3480H2ZO (Hereinafter referred to as **"Aster MIMS Kannur"** which expression shall unless repugnant to the context include its successors in interest and permitted assigns) of the SECOND PARTY

Recitals

Green Worms and **Aster MIMS Kannur** are collectively referred to as "Parties" and each individually as "Party"

31 Oct 2023

ADDL. SUB TREASURY
10 JUL 2023
KOZHIKODE

No. 4246 Kerala, Value Rs: 100/-
Date 15.07.2023
Name Greenworms waste management pvt Ltd
Edakkad-Puthiyangadi Stamp Vendor Westhill Kozhikode
M. Sadanandan

കേരളം केरल KERALA DZ 131245

WHEREAS, Green Worms is engaged in the business of Consultancy, Waste processing and Waste Management Services and has its collection centre located at 15/11, Puthiyangadi Desam, West hill, Kozhikode, Kerala- 673005

WHEREAS, Aster MIMS Kannur is well reputed hospital at Kannur, Kerala with all facilities and infrastructure and manned with highly qualified specialist and professionals in all fields of patients care and seeking for high quality waste management services.

WHEREAS, Green Wormsis desirous to engage in the waste management processing, collection of dry waste materials and disposing waste materials according to strict regulation of environment and statutory norms.

WHEREAS, the Green Worms has represented and willing to provide professional waste management services according to the stipulations provided in this agreement.

1. Definitions

1.1. **Agreement:** The Agreement shall mean this Agreement together with the Annexures hereto and shall include any modifications and alterations hereto made in writing, after the date of execution of this Agreement.

1.2. **Banned Waste Materials:** Any item mentioned in the list of banned or prohibited goods set out in the Annexure B

No. 4247 Kerala, Value Rs: 100/-
Date. 15.07.2023
Name. Greenworms
Edakkad-Puthiyangadi Stamp Vendor
M. Sadanandan

31/07/2023
waste management pvt Ltd
Westhill Kozhikode

ADDL. SUB TREASURY
10 JUL 2023
KOZHIKODE

1.3. **Day**: Means a Calendar Day

1.4. **Dry Waste**: The list of waste materials mentioned in the Annexure A

1.5. **Diaper and Sanitary napkins** will not come under general waste category, ASTER MIMS KANNUR has to segregate these kinds of waste from the source itself and handover to authorized vendors except barscreen waste.

1.6. **Pollution Control Board:** The Pollution Control Board constituted under the relevant statutory act, either under the Central or State Law

1.7. **Processing:** A methodology of managing waste-materials used for the purpose of the disposal and destruction of the waste materials

1.8. **Proper Disposal:** the disposal, destruction or recycling has to conform to the environmental standards provided in the statutory norms, rules, ordinances, bye-laws, orders, guidelines of the Government or any other relevant body

1.9. **Services:** shall mean and include providing all services in the course of removing, collection, loading, transportation, unloading, proper disposal of the waste materials

1.10. **Service Charge:** shall mean the charge payable by ASTER MIMS KANNUR to Green Worms, in relation to the Services provided by Green Worms as per the terms and conditions set out in this Agreement.

1.11. **Waste Material:** shall mean the waste materials mentioned in the Annexure A, B

2. Role and Responsibilities of the Parties

2.1. Green Worm shall have the risk, cost and responsibility of removing, collection, loading, transportation, and unloading, proper disposal of Dry Waste materials from **ASTER MIMS KANNUR.**

2.2. Green Worms shall its own cost transport all the packaged dry waste on daily basis as per the guidelines set by the PCB/ LSGD/ Health Dept of Government of Kerala.

2.3. Green Worms shall be sole responsible agency for the proper disposal of the waste according the statutory norms, guidelines, orders, rules, amendment provided by the PCB/ LSGD/ Health Dept of Government of Kerala.

2.4. The Green Worms upon information of the **ASTER MIMS KANNUR** shall clear all the waste without any delay compound from ASTER MIMS KANNUR.

2.5. The Green Worms shall carry out its Services and obligations under this agreement in high standards of professionalism and adhere to the applicable statutory norms, rules, regulations, orders, guidelines.

2.6. Green Worms shall carry out the whole responsibilityof staffs allocated for collection and segregation of waste to thearranged inhospital premises.

2.7. The **ASTER MIMS KANNUR** has the duty to support, coordinate and store the waste materials from various parts of the hospital to the single storage facility situated at the premise of the hospital on daily basis.

2.8. The **ASTER MIMS KANNUR** has responsibility of providing and supplying all the plastic scrap, metal and old corrugated carton of the hospital premise except other Engineering items to the Green Worms for the mentioned in Annexure A without imposing any other incidental charge on the supplied plastic scraps.

2.9. Notwithstanding any other provision, the plastic scraps generated from the hospital should only be supplied to the Green Worms for the period of the agreement in legal force.

2.10. It shall be the responsibility of **ASTER MIMS KANNUR** to ensure that the waste materials mentioned in the Annexure B (Banned or Prohibited Waste Materials) are not stored or given to the Green Worms for the purpose of the disposal.

2.11. The Green Worm shall have the right to repudiate and claim the cost of the transportation, loading, unloading the banned waste materials from **ASTER MIMS KANNUR.** The **Green Worms** shall also be responsible to comply with the environmental regulations and other statutory norms, regulations, orders and rules relating to the storage of the waste materials mentioned in the Annexure A.

2.12. The Green worms shall not under any circumstances transfer or assigns wholly or partially the terms and conditions of this agreement after the completion of the above period .

2.13 The legal risk of transfer shall be handed over the Green worms after the dry waste materials loaded to the vehicle provided by the Green worms.

2.13. Green worms shall produce PCB consent copy and all other related statutory approvals in the name of Green worm for verification and documentation purpose.

2.14. The food waste coming from hospital of **ASTER MIMS KANNUR** has to be segregated and dispose under Green Worms.

2.15. Green worms can only collect and dispose the general waste from the hospital premises, not other than any sister outlets, canteens or cottages excluding hostel & Aster clinic waste.

2.16. The material mentioned in Annexure C can be collected by Green Worms if required from the hospital management for a pay back mechanism.

31/07/2023

2.17. Any other waste like construction debris, garden waste, slurry sludge other than Annexture A can be collected on additional charges if required from the hospital management.

2.18. Green worms will dipose food waste, caneen slurry waste, STP Barscreen waste on a daiy basis from Aster MIMS Kannur. Canteen Slurry waste & STP Barscreen waste 20kg drum/day each has to be collected and stored by Hospital staff.

2.19. Green Worms Segregated and packed waste will disose or taken out in every 3 days from Aster MIMS Kannur.

2.20. The sludge cake will be dispose in every 3days (60kg for 3 days) by Green Worms. Cake manufacturing, packing & storing is under Hospital Scope. Hospital has to make sure that the cake should be in pure dry condition.

3. Duration of the Agreement

3.1. The waste processing agreement is valid for one years and shall commence on 05th July 2023,and shall remain in force till the expiry of the agreement or termination by either of the parties, whichever is earlier.

3.2. The waste processing agreementcan be renewed after the completion of fixed tenure provided in the S.3.1 only after the mutual consent of the parties.

4. Terms of the Payment

4.1. The price rate for the disposal of Dry waste materials mentioned in Annexure A shall be decided from time to time, after the due consultation and mutual written agreement between the parties.

4.2. Subject to S. 2.11 & 2.14, the Service Charge against the **Aster MIMS Kannur** shall comprise of the cost for transportation, loading, unloading, disposal, destruction, or any other cost related to the agreement

4.3. The Service Charge shall be **Rs 2,10,000 +18% GST**fixed cost per month for the waste collection from **Aster MIMS Kannur**.

4.4. The Green Worms shall issue Monthly Tax invoice to the **Aster MIMS Kannur** before 3rd of every subsequent month.

4.5. The **ASTER MIMS KANNUR** shall make the payment within 30 days of the date of receipt of invoice and the payment period can only be extended with mutual written consent of both the parties.

4.6. The procedure for the payment in accordance with S.4.1, 4.3, 4.5,& 4.6 must be made through via Bank Neft /Cheque.

31/07/2023

ANNEXURE A

1. MLP- Multi Layer Plastic
2. Non MLP
3. Tetra Pack
4. HM HDPE
5. Poly Propylene (PP)
6. Pet Bottles &Old Corrugated Cartoons
7. Metals (Non-Engineering Items)
8. Glass / Glass bottles [including broken Glass]
9. Sludge cake
10. Food waste
11. Canteen slurry waste- 20kg drum er day
12. STP Barscreen waste- 20kg drum per day

Annexure B- Banned or Prohibited Waste Materials

- Radioactive waste
- Asbestos-containing waste
- Explosives and ammunition / weapons
- Anatomical medical waste
- Construction Debris.
- Slurry Sludge
- Diapers & Sanitary Napkins

Annexure C- Acceptable Scrap Items

Metals Scrap Material	Bulk volume
PET Bottles	Bulk volume
Aluminum	Bulk volume
E waste	Bulk volume

31/07/2023

MOU with Green worms for Sold waste management

Annexure No.1

ENVIRONMENTAL CLEARANCE

PARIVESH

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

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Regional Director
MALABAR INSTITUTE OF MEDICAL SCIENCES LIMITED
Chala East, Kannur, Kerala-670621.,,Kannur,Kerala-670621

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 Ministry vide proposal number IA/KL/MIS/250024/2022 dated 23 Jan 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A038KL110532**
2.	**File No.**	21-2/2022-IA-III
3.	**Project Type**	Expansion
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	8(a) Building and Construction projects
6.	**Name of Project**	Environmental Clearance for the proposed expansion of existing Hospital project developed by M/s Malabar Institute of Medical Sciences Ltd.
7.	**Name of Company/Organization**	MALABAR INSTITUTE OF MEDICAL SCIENCES LIMITED
8.	**Location of Project**	Kerala
9.	**TOR Date**	N/A

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

Date: 04/04/2022

(e-signed)
Dharmendra Gupta
Scientist F
IA - (INFRA-2 sector)

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.

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F. No. 21-2/2022-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 110003
29th March, 2022

To,

Shri Farhan Yashin
Regional Director,
M/s Malabar Institute of Medical Sciences Ltd.
Chala East, Kannur-670621, Kerala
E. mail: mims.kannur@asterhospital.com

Subject: **Environmental Clearance for Proposed expansion of existing Hospital project with increase in built- up area from 23,421.68 sqm. to 30,370.28 sqm. at Chembilode Village & Panchayat, Kannur Taluk & District, Kerala by M/s Malabar Institute of Medical Sciences Ltd. – regarding.**

Sir,

This has reference to your Application/Proposal No. IA/KL/MIS/250024/2022; received on 23rd January, 2022 through Parivesh Portal for Environmental Clearance (EC) for Proposed expansion of existing Hospital project with increase in built- up area from 23,421.68 sqm. to 30,370.28 sqm., at Chembilode Village & Panchayat, Kannur Taluk & District, Kerala by M/s Malabar Institute of Medical Sciences Ltd.

2. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006; as amended and notified under the Environment (Protection) Act, 1986 (29 of 1986), the above-mentioned project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to non-existence of SEIAA in Kerala, the proposal required appraisal at Central level by sectoral EAC.

3. Accordingly, the abovementioned proposal for Environmental Clearance has been examined by the Expert Appraisal Committee (Infra-2) first in its 81st meeting held on 31st January, 2022 and in its 83rd meeting held during 28th February, 2022 and 2nd March, 2022.

4. The details of the project, as per the application and documents submitted by the project proponent, and also as informed during the above-mentioned meeting of EAC (Infra-2) are as under:

i. The project is located at Survey Nos. 48/1, 50/3 & 51/4, 49/185, 49/141, 49/123, 49/184, 49/126, 49/109, 49/170, 49/182, 49/183, 49/134, 49/135, 49/122, 49/110, 49/162, 49/124, 50/2, 48/120, Chembilode Village & Panchayat, Kannur Taluk & District, Kerala.

ii. The proposal is for 'Expansion'.

iii. Earlier, the project has obtained Environmental Clearance (EC) from MoEF&CC vide F. No. 21-19/2018-IA-III dated 15.06.2018. The construction work for the built-up area of 23,421.68 sqm. is completed at site based on the EC obtained. The building has also obtained occupancy certificate vide letter dated 25.01.2019and the hospital is functioning. Management has now decided to expand the existing project and the total cumulative built-up area after expansion will be 30,370.28 sqm. (Existing built-up area 23,421.68 sqm. + proposed built-up area 6,948.6 sqm.).

iv. Certified Compliance Report (CCR) was issued by Integrated Regional Office, MoEF&CC, Bangalore vide file no. EP/12.1/2018-19/05/KER/288 dated 17.01.2022 and it is stated that "the status of compliance of project is rated as SATISFACTORY".

v. With the proposed expansion, the total plot area will be 18,348 sqm. and total construction (Built-up) area will be 30,370.28 sqm. The project will comprise of 2 nos. hospital building blocks. Maximum height of the building is 30.75 m. The details of buildings are as follows:

Building Block	Max. No. of Floors	Max. Height (m)	Built-up area (sqm.)
Existing Hospital Block	B + G + 7 floors	29.80 m	23,421.68
Proposed Hospital Block	G + 8 floors	30.75 m	6,948.60
Total			**30,370.28**

vi. The details of the proposed expansion are given as follows:

S. No.	Particulars	Details as per EC accorded MoEF&CC in 2018 (A)	Details as per additional facility proposed (B)	Cumulative details (A+B)	Remarks

1.	Survey Nos.	48/1, 50/3 & 51/4	49/185, 49/141, 49/123, 49/184, 49/126, 49/109, 49/170, 49/182, 49/183, 49/134, 49/135, 49/122, 49/110, 49/162, 49/124, 50/2, 48/120	48/1, 50/3 & 51/4, 49/185, 49/141, 49/123, 49/184, 49/126, 49/109, 49/170, 49/182, 49/183, 49/134, 49/135, 49/122, 49/110, 49/162, 49/124, 50/2, 48/120	Addition of Survey Nos. 49/185, 49/141, 49/123, 49/184, 49/126,49/109, 49/170, 49/182, 49/183, 49/134, 49/135, 49/122, 49/110, 49/162, 49/124, 50/2, 48/120
2.	Plot area	1.0672 ha	0.9702 ha.	1.8348 ha* (18,348 sqm.) Net area available for the project	EC obtained plot area (a) = 1.0672 ha. Additional land area (b) = 0.9702 ha. Total land area (a + b) = 2.0374 ha. Land area left for road widening = 0.2026 ha. Net area available for the project = 2.0374 ha. - 0.2026 ha. = 1.8348 ha.
3.	Facilities	240 Beds	100 Beds	340 Beds	Addl. 100 beds
4.	Built-up area	23,421.68 sqm.	6,948.6 sqm.	30,370.28 sqm.	Increase in BUA of 6,948.6 sqm.
5.	FSI/FAR area	21,238.83 sqm.	6,884.98 sqm.	28,123.81 sqm.	Increase in FSI/FAR area of 6,884.98 sqm.
6.	Max. height of the building	29.80 m.	30.75 m.	30.75 m.	Proposed building increase the height

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7.	Max. no. of floors	B + G + 7 floors	G + 8 floors	B + G + 7 floors (existing building) & G + 8 floors (proposed building)	Proposed building is G + 8 floors
8.	No. of buildings	1 no.	1 no.	2 nos.	1 addl. building block
9.	Connected power load	2,292.72 kW	382.28 kW	2,675 kW	Increase in 382.28 kW connected power load
10.	Capacity of D.G. Sets & nos.	600 kVA × 3 nos. = 1,800 kVA	500 kVA x 1 nos. = 500 kVA	600 kVA × 3 nos. + 500 kVA x 1 nos. = 2,300 kVA	Increase of 500 kVA D.G. capacity
11.	Parking facilities	228 Cars + 470 T.W.	86 Cars + 30 T.W.	314 Cars + 500 T.W.	Increase of parking facilities for 86 Cars + 30 T.W.
12.	Solid waste generation	348 kg/day	162 kg/day	510 kg/day	Increase of SW generation 162 kg/day
13.	Bio-medical waste generation	168 kg/day	36 kg/day	204 kg/day	Increase of BMW generation 36 kg/day
14.	Daily fresh water requirement	115 KL	32 KL	147 KL	Increase in fresh water req. of 32 KL
15.	Daily domestic water req.	142 KL	60 KL	202 KL	Increase in Dom. water req. of 60 KL
16.	Daily sewage generation	114 KL	48 KL	162 KL	Increase in sewage generation of 48 KL
17.	STP capacity	137 KLD	63 KL	200 KL	Increase of STP capacity of 63 KL
18.	Project cost	₹ 91 Crores	₹ 47 Crores	₹ 138 Crores	Increase of project cost of ₹47 Cr.
19.	Employment potential	About 700 jobs	About 350 jobs	About 1,050 jobs	Increase of job potential

vii. During construction phase, total water requirement is expected to be 25 KLD which will be met by recycled water from portable STP/stored rain water (tank) for construction purposes and well water/Kerala

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Water Authority (KWA) supply for meeting the domestic water requirement expected to be 7 KLD. During the construction phase, portable STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.

viii. During operational phase, total water demand of the project is expected to be 293 KLD and the same will be met by 147 KLD fresh water from stored rain water tank/KWA/well water and 146 KLD recycled water. Wastewater generated (162 KLD) will be treated in STP of total 200 KLD capacity. 146 KLD of treated wastewater will be generated which will be completely recycled and re-used within the project for flushing (104 KLD), for gardening (1 KLD), for boiler (15 KL) and for make-up water requirement for cooling towers attached with the HVAC system (26 KLD).

ix. About 510 kg/day solid waste will be generated in the project. The biodegradable waste (about 255 kg/day) will be processed in bio-gas generation plant (existing)/bio-bin system (proposed) and the non-biodegradable waste generated (about 255 kg/day) will be handed over to authorized local vendor. An area equivalent of about 125 sqm. for about 15 days storage of non-biodegradable waste would be provided. The hazardous waste (used oil & discarded batteries attached to D.G. sets) will be stored in the designated services area and will be disposed to CPCB/SPCB authorized vendors.

x. From the hospital, about 204 Kg/day bio-medical waste would be generated. The bio-medical waste would be segregated at source by providing appropriate colour coded bins/containers as per the colour coding provided in the Bio-Medical Waste (Management & Handling) Rules, 2016. The segregated Bio-medical waste from the existing hospital is outsourced through Kerala State Pollution Control Board authorized agency (M/s Indian Medical Association Goes Eco Friendly, IMAGE) and the same arrangement will be continued for the proposed facility also. An MoU is made between PP & IMAGE.

xi. The use of unsealed radioisotopes regularly gives rise to radioactive waste, which has to be disposed of in a responsible and safe manner. The waste includes disposable containers (vials, syringes etc.) partially decayed or surplus unsealed sources. The radioactive waste would be stored in a "Decay Room" and the radiation level checked through "Dose Calibrator". All the radiation safety guidelines of Atomic Energy Regulatory Board (AERB) Bhabha Atomic Research Centre (BARC) with regard to the disposal of radioactive waste would be followed. A radiation safety officer will be employed to ensure the radiation safety guidelines.

xii. Old sheds/structures with total built-up area of about 100 sqm. existing within the site will be demolished for the development of the proposed site. The salvageable materials from the demolition debris would be recovered. The remaining demolition debris and the

construction debris would be used for site preparatory works.

xiii. The excavated soil will be used for back filling work, topsoil will be preserved for landscaping and the remaining excavated earth will be used for internal road construct ion work.

xiv. The total power requirement during operation phase is 2,675 kW (connected load) and will be met from Kerala State Electricity Board (KSEB) & DG Sets (600 kVA × 3 nos. + 500 kVA × 1 nos.) as a standby power backup arrangement.

xv. Solar PV installation of total 267.5kWp capacity (40 kWp existing + 227.5 kWp proposed) shall be provided to meet 10% of the connected load.

xvi. Rooftop rainwater of buildings will be collected in RWH tanks of total 118 KL capacity (73 KL existing + 45 KL proposed) for harvesting after filtration.

xvii. Parking facility for 314 cars + 500 two wheelers is proposed to be provided against the requirement of 313 cars + 391 two wheelers (according to local norms). Provision for charging for electrically operated vehicles (20%) is proposed.

xviii. Total landscape area proposed at site will be 558 sqm. 230 trees are proposed within the site of which 88 trees are existing and 142 trees will be planted. There is no existing tree at the site where the proposed new hospital building needs to be constructed. Therefore, no tree cutting/transplantation is proposed.

xix. The project is not located in Critically Polluted area.

xx. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.

xxi. Chembilode village is not included in the list of Villages in ESA of the Western Ghats as per Appendix 3 of the report of the High Level Working Group (HLWG) on Western Ghats.

xxii. Forest Clearance is not required.

xxiii. No court case is pending against the project.

xxiv. CRZ Clearance is not required.

xxv. Expected timeline for completion of the project - About 12 months.

xxvi. Investment/Cost of the project is ₹138 Crores.

xxvii. Employment potential – About 100 persons during construction phase and about 1,050 persons during operation phase.

xxviii. Benefits of the project – The project would provide better health infrastructure facilities & supporting infrastructure facilities to the people. Direct and indirect employment opportunities; The potential for employment and access to new services may draw people to the area around the project. There will be an increase in economic activity and employment for the local community, local skills development. Employment opportunities generation and revenue to the State.

5. The EAC (Infra-2) also noted that the project has obtained Certified Compliance Report (CCR) from Integrated Regional Office, MoEF&CC, Bangalore vide file no. EP/12.1/2018-19/05/KER/288 dated 17.01.2022 wherein the status of compliance of the project has been rated as satisfactory.

6. The EAC (Infra 2), based on information and clarifications provided by the project proponent and detailed discussions held on the issues, has recommended granting environment clearance to the project. The aforesaid recommendation of EAC (Infra-2) is subject to certain specific conditions, as stipulated during its 83th meeting held during 28th February and 02nd March, 2022.

7. Based on recommendations of EAC (Infra-2), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project for Proposed expansion of existing Hospital project with increase in built- up area from 23,421.68 sqm. to 30,370.28 sqm. at Chembilode Village & Panchayat, Kannur Taluk & District, Kerala by M/s Malabar Institute of Medical Sciences Ltd., under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the following specific and standard conditions:

A. Specific Conditions:

i. Abstraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 147 KLD during operational phase.

ii. As proposed, wastewater shall be treated in an onsite STP of total 200 KLD capacity. At least 146 KLD of treated water from the STP shall be recycled and re-used for flushing (104 KLD), for horticulture (1 KLD), for boiler (15 KLD), and for make-up water requirement for cooling towers attached with the HVAC System (26 KLD). There shall be no discharge of treated water outside the project premises, as committed.

iii. The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

iv. Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/greenery will be 558 sqm. As proposed, at least 230 trees shall be maintained within the site during the operation phase of the project. The landscape planning should include plantation of native species. A minimum of 01 tree for every 80 sqm., of land should be planted and maintained. The existing trees will be counted for this purpose. Plantations to be ensured species (cut) to species (planted). 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.

v. 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. As proposed, RWH tank of total 118 KL capacity shall be provided for rain water harvesting after filtration.

vi. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through the Bio-Gas generation plant/bio-bin unit to be installed within the site. Inert waste shall be disposed off as per norms at authorized site. The recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016. Bio-medical wastes shall be disposed as per Bio-Medical Waste (Management & Handling) Rules, 2016. The radiation safety guidelines of Atomic Energy Regulatory Board (AERB) Bhabha Atomic Research Centre (BARC) with regard to the management and disposal of radioactive waste shall be followed.

vii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

viii. The PP shall provide electric charging points in parking areas for e-vehicles as committed.

ix. As committed, solar energy installation of 267.5kWp capacity to meet 10 % of the connected load shall be implemented.

x. The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.

B. Standard Conditions:

I. Statutory compliance:

i. 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.

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

iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.

iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.

vi. The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.

vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

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

x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservation:

i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$) covering upwind and downwind directions during the construction period.

iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG

sets may be decided with in consultation with State Pollution Control Board.

v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

vii. Wet jet shall be provided for grinding and stone cutting.

viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.

x. 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.

xi. 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.

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

III. Water quality monitoring and preservation:

i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv. 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.

v. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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.

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

xi. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xiii. All recharge should be limited to shallow aquifer.

xiv. No ground water shall be used during construction phase of the project.

xv. 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.

xvi. 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.

xvii. Sewage shall be treated in the STP with tertiary treatment.

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

xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP)

shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

xxi. 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.

IV. Noise monitoring and prevention:

i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, car plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

ii. Outdoor and common area lighting shall be LED.

iii. 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.

iv. 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.

v. 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.

vi. 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.

VI. Waste Management:

i. 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.

ii. 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.

iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

iv. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.

v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

vi. 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.

vii. 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.

viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

x. 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.

VII. Green Cover:

i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).

ii. 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.

iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv. 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.

VIII. Transport:

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

ii. 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.

iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different

scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
ii. For indoor air quality the ventilation provisions as per National Building Code of India.
iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
v. Occupational health surveillance of the workers shall be done on a regular basis.
vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Miscellaneous:

i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
v. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should

prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/ wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/ forest/wildlife norms/conditions and/or sharcholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report

viii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

ix. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.

xvii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.

xviii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

8. The Environmental Clearance is being granted to M/s Malabar Institute of Medical Sciences Ltd., for Proposed expansion of existing Hospital project with increase in built- up area from 23,421.68 sqm. to 30,370.28 sqm. at Chembilode Village & Panchayat, Kannur Taluk & District, Kerala.

9. This issues with the approval of the Competent Authority.

(Dr. Dharmendra Kumar Gupta)
Director (S)

Copy to:

1. Principal Secretary, Government of Kerala, Department of Environment & Climate Change (DoECC), Devikripa, Pallimukku Pettah P.O., Thiruvananthapuram– 695024, Kerala
2. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office (Southern Zone), Ministry of Environment, Forest and Climate Change, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bengaluru – 560034, Karnataka
3. Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. Member Secretary, Kerala State Pollution Control Board, Head Office, Pattom. P. O., Thiruvananthapuram-695004, Kerala
5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
6. Guard File/Record File/Notice Board/MoEF&CC website.

(Dr. Dharmendra Kumar Gupta)
Director (S)

Signature Not Verified
Digitally signed by Dharmendra Gupta
Scientist F
Date: 4/4/2022 1:08:47 PM

EC Identification No. - EC22A038KL110532 File No. - 21-2/2022-IA-III Date of Issue EC - 04/04/2022 Page 18 of 18

Proposal No IA/KL/MIS/250024/2022 Page 17 of 17

Copy of Environmental Clearance

Annexure No.2

SANKETHAM Building Permit

Date:24/01/2023 Page 1 of 3

APPENDIX B2

[See rule 6(17)&9(4)]

SITE APPROVAL AND BUILDING PERMIT

Chembilode Grama Panchayat Kannur

Permit No. : A2-BA(30203)/2023 Dated: 24/01/2023

Ref:- Application No. : A2/7356/2022 Dated: 26/07/2022 from Sri/Smt : FARHAAN YASIN MALABAR INSTITUTE OF MEDICAL SCIENCE, CHALA EAST , Chala East.P.O, Kannur, Kerala-670621, India

Site approval and permission is granted for the Erection in near the building No. 16/198 in Survey/Re survey No S-21/3 R-48/115,122, S-21/3 R-48/236,237, S-21/3 R-48/248,249,247, S-27/2 R-48/120, S-27/2 R-50/138,50/136,135,133,131, S-27/2,4 R-51/132,50/137, S-27/3 R-50/116,118, S-27/3 R-50/119,123, S-27/3 R-50/124,125, S-27/3 R-50/126,129, S-27/3,21/3 R-50/127,48/241, S-27/4 R-51/131, S-29/2 R-49/185,124,162,110,122,135,134,183,182,170,109,126, S-29/2,27/2 R-49/184,49/123,49/141,50/130 Village Chembilode Taluk Kannur District Kannur for New Construction Medical/Hospital(6937.78 Sqm), Existing Building Medical/Hospital(23421.7 Sqm)

purpose subject to the conditions stated below :

1 New Construction, Total building Area 30359.5 in Sqmeter. and Permitted area 6937.78 sqm. 1.The Permit is issued subject to the conditions mentioned in Appendix I [Permit is Valid Upto Five Years-(23/01/2028)]

(1) Adequate safety measures shall be ensured for protection against damage to health, life, buildings and property of the workers and inhabitants around, during and after building construction. The owner and the developer shall be solely responsible for any such damages.

(a) Setbacks (m) (minimum & average)

Building	Front	Rear Side	Side - 1	Side 2
1st Construction	6.86	35.48	7.86	11.28

(b) Plot Area (sq m) - 17841

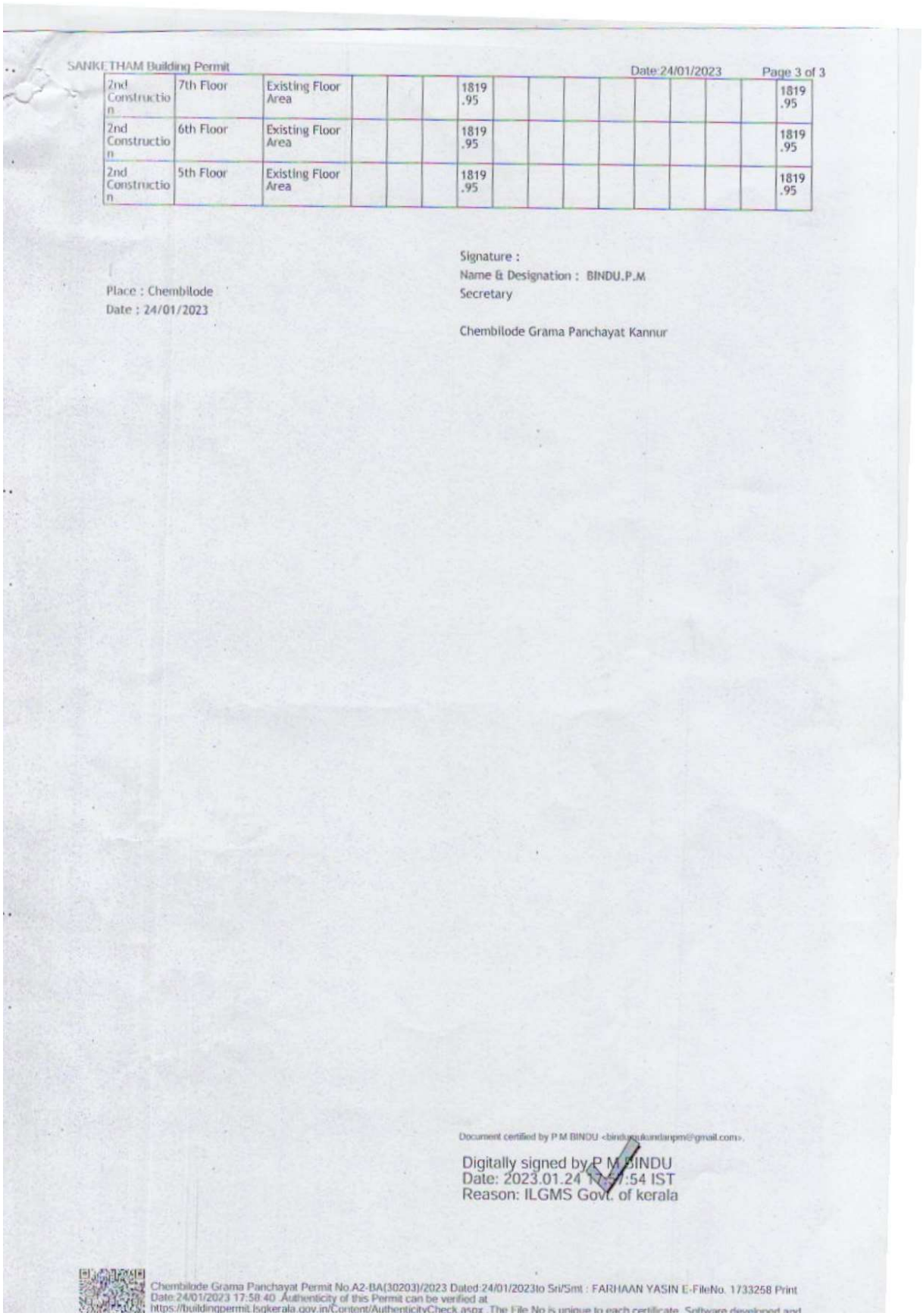
(c) FSI : 1.55 Coverage : 22.78

(d) Details of proposed building

Construction	Floor	AreaType	Residential	Special Residential	Educational	Medical/Hospital	Assembly	Office/Business	Mercantile/Commercial	Industrial G1	Industrial G2	Storage	Hazardous	Multiplex Complex	Total
1st Construction	Ground Floor	Building Area				848.88									848.88
1st Construction	1st Floor	Building Area				739.69									739.69
1st Construction	5th Floor	Building Area				780.06									780.06
1st Construction	4th Floor	Building Area				739.69									739.69
1st Construction	3rd Floor	Building Area				780.06									780.06
1st Construction	2nd Floor	Building Area				739.69									739.69
1st Construction	9th Floor	Building Area				90.64									90.64
1st Construction	8th Floor	Building Area				739.69									739.69
1st Construction	7th Floor	Building Area				739.69									739.69
1st Construction	6th Floor	Building Area				739.69									739.69
1st Construction	Ground Floor	Floor Area				826.95									826.95
1st Construction	1st Floor	Floor Area				682.16									682.16

Chembilode Grama Panchayat Permit No.A2-BA(30203)/2023 Dated:24/01/2023to Sri/Smt : FARHAAN YASIN E-FileNo. 1733258 Print Date:24/01/2023 17:58:40 .Authenticity of this Permit can be verified at https://buildingpermit.lsgkerala.gov.in/Content/AuthenticityCheck.aspx .The File No is unique to each certificate. Software developed and

1st Construction	5th Floor	Floor Area				722.53									722.53
1st Construction	4th Floor	Floor Area				682.16									682.16
1st Construction	3rd Floor	Floor Area				722.53									722.53
1st Construction	2nd Floor	Floor Area				682.16									682.16
1st Construction	9th Floor	Floor Area				90.64									90.64
1st Construction	8th Floor	Floor Area				692.03									692.03
1st Construction	7th Floor	Floor Area				682.16									682.16
1st Construction	6th Floor	Floor Area				682.16									682.16
2nd Construction	Ground Floor	Existing Building Area				3214.95									3214.95
2nd Construction	Cellar Floor/Basement	Existing Building Area				3324.27									3324.27
2nd Construction	4th Floor	Existing Building Area				1918.75									1918.75
2nd Construction	3rd Floor	Existing Building Area				2644.65									2644.65
2nd Construction	2nd Floor	Existing Building Area				3210.07									3210.07
2nd Construction	1st Floor	Existing Building Area				3104.27									3104.27
2nd Construction	9th Floor	Existing Building Area				117.6									117.6
2nd Construction	8th Floor	Existing Building Area				291.37									291.37
2nd Construction	7th Floor	Existing Building Area				1865.25									1865.25
2nd Construction	6th Floor	Existing Building Area				1865.25									1865.25
2nd Construction	5th Floor	Existing Building Area				1865.25									1865.25
2nd Construction	Ground Floor	Existing Floor Area				3077.4									3077.4
2nd Construction	Cellar Floor/Basement	Existing Floor Area				2289.92									2289.92
2nd Construction	4th Floor	Existing Floor Area				1901.12									1901.12
2nd Construction	3rd Floor	Existing Floor Area				2113									2113
2nd Construction	2nd Floor	Existing Floor Area				3094.87									3094.87
2nd Construction	1st Floor	Existing Floor Area				3011.3									3011.3
2nd Construction	9th Floor	Existing Floor Area				0.001									0.001
2nd Construction	8th Floor	Existing Floor Area				291.37									291.37



SANKETHAM Building Permit

Date:24/01/2023 Page 3 of 3

2nd Constructio n	7th Floor	Existing Floor Area				1819 .95									1819 .95
2nd Constructio n	6th Floor	Existing Floor Area				1819 .95									1819 .95
2nd Constructio n	5th Floor	Existing Floor Area				1819 .95									1819 .95

Signature :
Name & Designation : BINDU.P.M
Secretary

Chembilode Grama Panchayat Kannur

Place : Chembilode
Date : 24/01/2023

Document certified by P M BINDU <bindupukundanpm@gmail.com>.

Digitally signed by P M BINDU
Date: 2023.01.24 17:57:54 IST
Reason: ILGMS Govt. of kerala

Chembilode Grama Panchayat Permit No.A2-BA(30203)/2023 Dated:24/01/2023to Sri/Smt : FARHAAN YASIN E-FileNo. 1733258 Print Date:24/01/2023 17:58:40 .Authenticity of this Permit can be verified at https://buildingpermit.lsgkerala.gov.in/Content/AuthenticityCheck.aspx .The File No is unique to each certificate. Software developed and

Building permit

Annexure No.3

FILE NO. :R15KAN1944294
Date of issue :07/07/2022

KERALA STATE POLLUTION CONTROL BOARD

CONSENT TO ESTABLISH

ISSUED UNDER

Section 25 of Water (Prevention & Control of Pollution) Act, 1974
Section 21 of the Air (Prevention & Control of Pollution) Act, 1981

and

Environment (Protection) Act, 1986

As per Application No. :17365490
Dated:26-06-2022

TO

M/s MALABAR INSTITUTE OF MEDICAL SCIENCE HOSPITAL
Chembilodu, Edakkad,
Kannur-670621.

Consent No. :PCB/HO/KNR/ICE-EXP/03/2022

Valid Upto :30/06/2027

Page1

1. GENERAL

1.1. This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit.

1	**VALIDITY**	30/06/2027
2	Name and Address of the establishment	MALABAR INSTITUTE OF MEDICAL SCIENCE HOSPITAL CHEMBILODU, EDAKKAD KANNUR 670621
3	Communication	Telephone :0497-6641000 Fax :- E-mail:nazeer.cp@asterhospital.com
4	Occupier Details	Farhaan yasin Regional Director MIMS Hospitals 16/198 A,B,C,D, Chala Bypass Chala East PO Kannur
5	Local Body	Chembilodu Panchayath
6	Survey Number	49/185,124,162,110,122,135,134,183,182,170,109,126, 184,123,141
7	Village	Chembilodu
8	Taluk	KANNUR
9	District	Kannur
10	Capital Investment(Rs in Lakhs)	Rs.1601 lakh
11	Scale	Large
12	Category	RED
13	Annual fee(Rs) Total Fee remitted(Rs)	Rs.93,000/- Rs.4,65,150/-
14	Activity	Expansion of the existing hospital with additional 138 beds; G+8 floors; Total built-up area- 6937.78 sq.m.
15	Mode of disposal of Bio Medical Waste	Common Bio-medical waste treatment and disposal facility

2. CONDITIONS AS PER
The Water(Prevention and Control of Pollution)Act, 1974

2.1 Sewage Treatment Plant (STP) consisting of treatment units having adequate capacity shall be made functional/ arrangement for sewage treatment shall be provided, as per the proposal submitted along with the application, before commissioning of the establishment. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(1)(g) of the Water Act shall also be made along with.

2.2 Water Consumption : 124200 l/day

2.3 Effluent Generation :

2.4 The characteristics of effluent after treatment shall confirm to the following tolerance limits:

SI.NO.	Characteristics	Unit	Tolerance Limits	
			Irrigation/ Soak pit	Flushing/ Gardening/ Reuse
1	pH	-	6.5-9.0	-
2	COD	mg/l	50	-
3	N-total	mg/l	10	-
4	BOD	mg/l	10	-
5	TSS	mg/l	10	-
6	NH4-N	mg/l	5	-
7	Fecal Coliform	MPN/100 ml	<230	-

2.5 Mode of disposal of treated effluent : Reuse to the maximum extent and balance to soak pit

3. CONDITIONS AS PER
The Air(Prevention and Control of Pollution)Act, 1981

3.1 Adequate air pollution control measures shall be provided before commissioning of the industry. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack No.	Sources of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level	Roof Level	
1	600 KVA D.G.set	-	-	5 m	Acoustic enclosure
2	500 KVA D.G. set	-	-	4.5 m	Acoustic enclosure

3.2 Emission characteristics shall not exceed the following:

SI.No.	Parameter	Limiting Standards (mg/Nm3)

4. CONDITIONS AS PER
The Environment (Protection) Act, 1986.

4.1 Bio-Medical waste shall be handled, stored and disposed off as per the Bio-Medical Waste Management Rules, 2016.

4.2 The construction activities shall be carried out strictly in compliance with the provisions of the Noise Pollution (Regulation and Control) Rules 2000.

4.3 Used lead acid batteries shall be disposed of as per the Batteries (Management and Handling) Rules, 2001

4.4 E-waste shall be disposed off safely as per the E-Waste (Management)Rules, 2016.

5. SPECIFIC CONDITIONS:

5.1. This consent is granted subject to the power of the Board to review and make variations in all or any of the conditions as per section 21 of the Air (Prevention and Control of Pollution) Act 1981 and section 25 of the Water (Prevention and Control of pollution) Act 1974.
5.2. At the end of the validity period if the construction is in progress, the same shall be got renewed. If the construction is not started in the consent period, the applicant shall apply afresh for consent to establish.
5.3. The applicant shall comply with the instructions that the Board may issue from time to time regarding prevention and control of air, water, land and sound pollution.
5.4. Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 shall be obtained by the builder before commissioning the project. The date of commissioning of the project shall be intimated at least one month in advance to the District Office of the Board.
5.5. Water & energy conservation measures shall be adopted. Renewable source of energy namely solar energy shall be utilized.
5.6. Adequate safety measures shall be provided in accordance with fire safety regulation.
5.7. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
5.8. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.
5.9. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
5.10. Grinding and cutting of building materials in open area shall be prohibited.
5.11. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
5.12. No uncovered vehicles carrying construction material and waste shall be permitted.
5.13. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.
5.14. DG set shall be provided with acoustic enclosure and a chimney of height 0.2*square root of kVA above roof level or 2m above the highest nearby building and at a minimum distance of square root of (kVA/2) from the nearest residential building/educational institutions/hospitals/place of worship/public offices.
5.15. The construction camp shall have a well maintained waste management system and sewage and effluent shall be treated to meet the standards. The solid waste and debris from the construction shall be disposed without causing environmental problems. The dredging shall be carried out without causing significant disturbance to the back water system, if any.
5.16. The area near the boundary and the buildings and the set back shall be utilized for the development of green belt.
5.17.Arrangements shall be provided for rainwater harvesting before commissioning.
5.18. Natural drainage of the area shall be protected.
5.19. Sewage treatment plant (STP) shall be set up maintaining a minimum distance of 10 logQ (where Q is the discharge of waste water in m3 /day) from the nearest residence/education institution/public office/hospital/place of worship/ similar establishments. A minimum
set back of 3 m shall be provided from STP to the boundary of the premises.
5.20. Sewage treatment plant shall be constructed above ground level/cellar of the establishment.
5.21. There shall be easy access to each and every treatment unit for inspection. Sufficient sampling points

shall be provided to facilitate collection of samples. Lighting arrangements shall be provided in the sewage treatment plant area.
5.22. TOD type energy meter shall be installed exclusively for sewage treatment plant. Water meter shall be fixed to record consumption of water.
5.23. Each and every sewage treatment unit shall be labelled.
5.24. Any of the following facility of adequate capacity shall be provided for the proper solid waste management;
(a) Biogas plant/Highrate bio reactor (b) Biobins/portable biobins (c)Centralized masonry biotanks (d)Aerobic ferro-cement bins

A B Pradeep Kumar Digitally signed by A B Pradeep Kumar Date: 2022.07.07 16:57:52 +05'30'

DATE :07/07/2022

SIGNATURE & SEAL OF ISSUING AUTHORITY
CHAIRMAN

KERALA STATE POLLUTION CONTROL BOARD

To

M/s.Malabar Institute of Medical Science Hospital,
Chembilodu, Edakkad,
Kannur-670621.

1. This digitally signed document is legally valid as per the Information Technology Act 2000

2. For verifying this document please go to krocmms.nic.in and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent Management and Monitoring System.

Page5

Copy of consent from PCB

Annexure No.4

WE SERVE TO SAVE

DEPARTMENT OF FIRE AND RESCUE SERVICES
GOVERNMENT OF KERALA

No:FRS/13/KNR/9959/2022/SITE Date:29/07/2022

NO OBJECTION CERTIFICATE (FOR BUILDING PERMIT)

(As per Rule 5(4).12 of KMBR 2019/KPBR 2019)

Name & Address of the Applicant:	FARHAAN YASIN REGIONAL DIRECTOR,MIMS HOSPITAL CHALA EAST PO KANNUR,Kerala 670621 India
Name of the Company:	MALABAR INSTITUTE OF MEDICAL SCIENCE LTD
Occupancy type of Building:	Institutional Buildings
Height of the building:	30.75 M
Number of Floors of the Building:	G+8(9Floors)
Total Built up Area (in sqm):	6937.78 M²
Survey No:	48/115,120,122,236,237,241,247,248,249 49/109,110,122,123,124,126,134,135,141 162,170,182,183,184,185,50/116,118,119 123,124,125,126,127,129,130,131,133 135,136,137,138,51/131,132
Village:	Chembilode
Grama Panchayath:	Chembilode
District:	Kannur

The above site was inspected by the competent and authorized Officials of this Department. It was found that the site is suitable from fire protection point of view for the proposed construction.

The Fire system drawings were scrutinized and compared with the Checklist (Form No H-4.) and Prima Facie found to be in Order. The Applicant shall comply with all the Fire Safety arrangements as contained in the relevant Rules and Norms pertaining to Fire Safety, without any deviation. In case, if any deviation is to be made in the construction for any reason, the same shall be intimated to the competent authorities of the Stake Holder Departments including this Department and deposit necessary Fees etc. as per rules to obtain revised clearance.

On completion of the building construction and after installation of the fire protection arrangements, the Applicant shall fill the Checklist Cum Application again and also prepare a Fire System Drawing and submit following the due procedure. On receiving the Plan & the Checklist Cum Application duly filled, the authorized and competent Officials of this Department will inspect & verify the fire protection arrangements made as per the filled up Checklist to consider issuance of a No Objection Certificate (Completion) from this Department for compliance of the proposed fire protection requirements.

This clearance is limited to the Fire protection arrangements for the proposed Building. All other [illegible]s including eligibility of the land and plot for this project, environmental feas[illegible]urvey details, etc. should be got verified and approved by the concerned comp[illegible] authority. This No objection Certificate is issued for facilitating the construction of the proposed Building. The validity of this certificate will be for 5 years from the date of issue. Renewal will be subject to the conditions of building permit issued by the Local Authority.

Digitally signed by Renjith P
Reason: site clearance
Location: Regional Fire Office Kannur
Date: 2022.07.29 12:15:17 +05:30

To,
Applicant / Concerned Local Authority

** This is a computer generated certificate & signature is not required.*

Copy of NOC from Fire and Rescue Service

Annexure No.4A

VALSARAJ ASSOCIATES
STRUCTURAL CONSULTANTS
G-90, Panampilly Nagar
Cochin 682036, Kerala, India
Telephone : +91-484-2315562
Mobile : +91-9447057227

18 January 2024

TO WHOMSOEVER IT MAY CONCERN

STABILITY CERTIFICATE

With respect to the building work of the Proposed multistoreyed hospital building having G+8 floors with terrace at Sy.Nos 48/115,120,122,236,237,241,247,248,249,49/109,110,122,123,124,126,134,135,141,162, 170,182,183,184,185,50/116,118,119,123,124,125,126,127,129,130,131,133,135,136,13 7,138,51/131,132 , Chembilode village, Kannur taluk, Kannur district, Grama Panchayath Chembilode Panchayath, , we certify that the structural plans and details of the building satisfy the structural safety requirements for all situations including natural disaster, as applicable, as stipulated under part6 structural design of national building code of India and other relevant codes IS 456-2000 plain and reinforced concrete(fourth revision), IS-875 (part1 to part5)code of practices for design loads (other than earthquake), IS 1893-2016 criteria for earthquake resistant design of structures and IS 13920 :2016 code of practice for ductile detailing of reinforced concrete structures subjected to seismic forces and the information given there in is factually correct to the best of knowledge and understanding.

Truly yours,

V.K. VALSARAJ.
Chartered Engineer (M – 122661 -9)

V. K. VALSARAJ
B.Tech (Civil), M.Tech (Struct.), MIE
Chartered Engineer, M-122661-9
Valsaraj Associates
G-90, Panampilli Nagar, Kochi-682 036

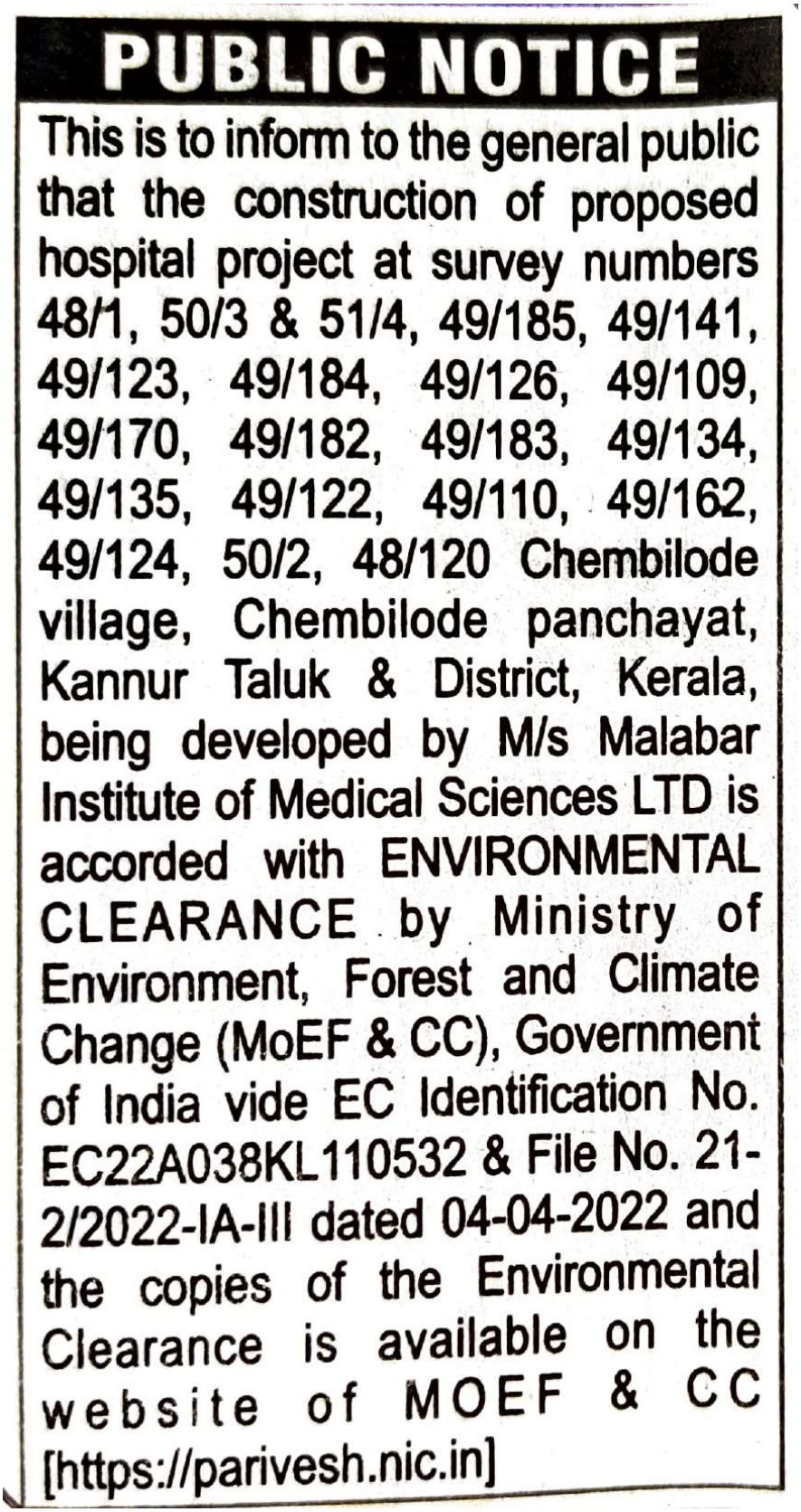
Structural stability

Annexure No.5

നോട്ടീസ്

പൊതുജന ശ്രദ്ധയ്ക്കായി കേരള സംസ്ഥാനം, കണ്ണൂർ ജില്ല, കണ്ണൂർ താലൂക്ക്, ചെമ്പിലോട് പഞ്ചായത്ത്, ചെമ്പിലോട് വില്ലേജിൽ ഉൾപ്പെട്ട സർവേ നമ്പർ 48/1, 50/3 & 51/4, 49/185, 49/123, 49/184, 49/126, 49/109, 49/170, 49/182, 49/183, 49/134, 49/135, 49/122, 49/110, 49/162, 49/124, 50/2, 48/120 എന്നിവയിൽ ഹോസ്പിറ്റൽ നിർമ്മാണ പദ്ധതിക്കായി വേണ്ട പാരിസ്ഥിതിക അനുമതി മലബാർ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് മെഡിക്കൽ സയൻസ് ലിമിറ്റഡ് എന്ന സ്ഥാപനത്തിന് കേന്ദ്ര വനം പരിസ്ഥിതി കാലാവസ്ഥ വ്യതിയാനം (MO EF&CC) കേന്ദ്രസർക്കാർ (ഗവർൺമെന്റ് ഓഫ് ഇന്ത്യ)ൽ നിന്നു ഇസി ഐഡന്റിഫിക്കേഷൻ നമ്പർ EC22A038KL110532, ഫയൽ നമ്പർ 21-2/2022-IA-III & തിയതി: 04/04/2022 എന്ന ഓഡർ പ്രകാരം ലഭിച്ചിരിക്കുന്നു. ഈ ഓർഡറിന്റെ പകർപ്പ് കേന്ദ്രഭരണം പാരിസ്ഥിതി കാലാവസ്ഥ വ്യതിയാനം (MO EF&CC) വകുപ്പിന്റെ വെബ്സൈറ്റിൽ (httsp://parivesh.nic.in) ലഭ്യമാണ്.

Suprebhatham



PUBLIC NOTICE

This is to inform to the general public that the construction of proposed hospital project at survey numbers 48/1, 50/3 & 51/4, 49/185, 49/141, 49/123, 49/184, 49/126, 49/109, 49/170, 49/182, 49/183, 49/134, 49/135, 49/122, 49/110, 49/162, 49/124, 50/2, 48/120 Chembilode village, Chembilode panchayat, Kannur Taluk & District, Kerala, being developed by M/s Malabar Institute of Medical Sciences LTD is accorded with ENVIRONMENTAL CLEARANCE by Ministry of Environment, Forest and Climate Change (MoEF & CC), Government of India vide EC Identification No. EC22A038KL110532 & File No. 21-2/2022-IA-III dated 04-04-2022 and the copies of the Environmental Clearance is available on the website of MOEF & CC [https://parivesh.nic.in]

Copy of advertisements – The Hindu

Annexure No.6

Standard[S] Environmental Monitoring

TEST REPORT

Test Report No: 230622/R097	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS** Chala East, Chala, Kannur, Kerala-670621
Customer Reference	Test Request date: 21-06-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	230622/S097
Sample Name	Ambient Air	Sample Received on	22-06-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	23-06-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-06-2023

DETAILS OF SAMPLING			
Sampling Location	Near Compound Wall Emergency Gate	Date of Sampling	21-06-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	69 %

TEST RESULTS-CHEMICAL DESCIPLINE

SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
1	Particulate matter (PM_{10})	IS 5182 (Part 23): 2006	µg/m³	40.8	100 (Max)
2	Particulate matter ($PM_{2.5}$)	IS 5182 (Part 24): 2019	µg/m³	19.6	60.0 (Max)
3	Sulphur dioxide (as SO_2)	IS 5182 (Part 2): 2001	µg/m³	<4.00	80.0 (Max)
4	Oxides of Nitrogen as NO_2	IS 5182 (Part 6): 2006	µg/m³	<4.00	80.0 (Max)

Remarks:

End of Report

Shency Joy
TM-Chemical
Checked by:

Laiju P N
Laboratory Head
Authorized Signatory

Standard[S] Environmental & Analytical Laboratories
Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: seaalab@gmail.com

Result of Air

Annexure No.7

Standard^S Environmental Monitoring

TEST REPORT

Test Report No: 230622/R095	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS** Chala East, Chala, Kannur, Kerala-670621
Customer Reference	Test Request date: 21-06-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	230622/S095
Sample Name	Ambient Noise Level	Date of Monitoring	21-06-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler
Monitoring Location	1 m away from the Compound Wall Emergency Gate		

TEST RESULTS				
SL NO	TEST PARAMETER	UNIT	RESULTS	KSPCB LIMIT
1	Ambient Noise Level (Leq) Daytime	dB (A)	51.2	55.0
2	Ambient Noise Level (Leq) Nighttime	dB (A)	40.8	45.0

Remarks:

End of Report

Shency Joy
TM-Chemical
Checked by:

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Laboratory Head
Authorized Signatory

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Result of Noise

Annexure No.8

Standard^S Environmental Monitoring

TEST REPORT

Test Report No: 230622/R100	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS** Chala East, Chala, Kannur, Kerala-670621
Customer Reference	Test Request date: 21-06-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	230622/S100
Sample Name	Stack Emission	Sample Received on	22-06-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	23-06-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-06-2023

DETAILS OF SAMPLING			
Stack Identity	600 KVA DG Set-3 CAT-Catterpiller, Sr No. S8H00211	Date of Sampling	21-06-2023
Stack Diameter	0.15 m	Sampling Procedure	SEAAL/ENL/GEN/SOP/03

TEST RESULTS-CHEMICAL

SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT	KSPCB LIMIT
1	Temperature of Emission	IS 11255 (Part 3): 2008	^oC	156	---
2	Velocity of Gas Discharged	IS 11255 (Part 3): 2008	m/sec	7.60	---
3	Stack Gas Flow Rate	IS 11255 (Part 3): 2008	Nm^3/Hr	336	---
4	Particulate Matter	IS 11255 (Part-1): 1985	mg/Nm^3	37.8	<286
5	Oxides of Nitrogen (as NOX)	IS 11255 (Part-7): 2005	mg/Nm^3	12.6	NOX+HC <5714
6	Non-Methane Hydrocarbon	IS 13270: 1992	mg/Nm^3	1.82	
7	Carbon monoxide (as CO)	SEAAL/EN/STK/SOP/01	mg/Nm^3	68.9	<5000

End of Report

Shency Joy
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Standard^{S}
Environmental Monitoring

TEST REPORT

Test Report No: 230622/R098	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS** Chala East, Chala, Kannur, Kerala-670621
Customer Reference	Test Request date: 21-06-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	230622/S098
Sample Name	Stack Emission	Sample Received on	22-06-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	23-06-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-06-2023

DETAILS OF SAMPLING			
Stack Identity	600 KVA DG Set-1 CAT-Catterpiller, Sr No. S8H00773	Date of Sampling	21-06-2023
Stack Diameter	0.15 m	Sampling Procedure	SEAAL/ENL/GEN/SOP/03

TEST RESULTS-CHEMICAL

SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT	KSPCB LIMIT
1	Temperature of Emission	IS 11255 (Part 3): 2008	^{o}C	168	---
2	Velocity of Gas Discharged	IS 11255 (Part 3): 2008	m/sec	8.24	---
3	Stack Gas Flow Rate	IS 11255 (Part 3): 2008	Nm^3/Hr	354	---
4	Particulate Matter	IS 11255 (Part-1): 1985	mg/Nm^3	40.5	<271
5	Oxides of Nitrogen (as NOX)	IS 11255 (Part-7): 2005	mg/Nm^3	11.6	NOX+HC <5424
6	Non-Methane Hydrocarbon	IS 13270: 1992	mg/Nm^3	2.10	
7	Carbon monoxide (as CO)	SEAAL/EN/STK/SOP/01	mg/Nm^3	70.8	<4746

End of Report

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Standard^{S}
Environmental Monitoring

TEST REPORT

Test Report No: 230622/R099	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS** Chala East, Chala, Kannur, Kerala-670621
Customer Reference	Test Request date: 21-06-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	230622/S099
Sample Name	Stack Emission	Sample Received on	22-06-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	23-06-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-06-2023

DETAILS OF SAMPLING			
Stack Identity	600 KVA DG Set-2 CAT-Catterpiller, Sr No. S8H00234	Date of Sampling	21-06-2023
Stack Diameter	0.15 m	Sampling Procedure	SEAAL/ENL/GEN/SOP/03

TEST RESULTS-CHEMICAL

SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT	KSPCB LIMIT
1	Temperature of Emission	IS 11255 (Part 3): 2008	^{o}C	162	---
2	Velocity of Gas Discharged	IS 11255 (Part 3): 2008	m/sec	8.04	---
3	Stack Gas Flow Rate	IS 11255 (Part 3): 2008	Nm^3/Hr	350	---
4	Particulate Matter	IS 11255 (Part-1): 1985	mg/Nm^3	42.8	<274
5	Oxides of Nitrogen (as NOX)	IS 11255 (Part-7): 2005	mg/Nm^3	13.1	NOX+HC <5486
6	Non-Methane Hydrocarbon	IS 13270: 1992	mg/Nm^3	1.98	
7	Carbon monoxide (as CO)	SEAAL/EN/STK/SOP/01	mg/Nm^3	70.1	<4800

End of Report

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Web: www.sealabs.in, E-mail: seaalab@gmail.com

Result of Stack emission of DG

Annexure No.9

Standard^{S} Environmental Monitoring

TEST REPORT

Test Report No: 230622/R096	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS Hospital** Chala East, Chala, Kannur District
Customer Reference	Test Request date: 21-06-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	230622/S096
Sample Name	Indoor Air	Sample Received on	22-06-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	23-06-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-06-2023

DETAILS OF SAMPLING			
Sampling Location	Inside 3rd Floor Central Lab	Date of Sampling	21-06-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02		

TEST RESULTS – CHEMICAL DISCIPLINE

Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	LIMITS AS PER OSHA 1910.1000
1	Temperature	SEAAL/ENL/MMM/SOP/01	°C	25.4	19 - 28
2	Relative Humidity	SEAAL/ENL/MMM/SOP/01	%	53	30 - 65
3	Respirable Particulate Matter (PM_{10})	NIOSH 0600 (4th Edn): 1998	mg/m^3	0.042	Max 5
4	Carbon Dinoxide as CO_2	SEAAL/ENL/IAQ/SOP/04	ppm	200	Max 5000
5	Sulphur Dioxide as SO_2	ASTM D 2914:2015	mg/m^3	<0.01	Max 13
6	Nitrogen Dioxide as NO_2	NIOSH 6014 (4th Edn): 1994	mg/m^3	<0.01	Max 9

Remarks:

End of Report

Shency Joy
TM-Chemical
Checked by:

Laiju P N
Laboratory Head
Authorized Signatory

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Web: www.sealabs.in, E-mail: seaalab@gmail.com

Indoor Air

Annexure No.10

Standard^{S} Environmental Monitoring

TEST REPORT

Test Report No: 230622/R094	Date: 26-06-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s Aster MIMS** Chala East, Chala, Kannur, Kerala-670621
Customer Reference	Test Request date :21-06-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	230622/S094
Sample Name	Ambient Noise Level	Date of Monitoring	21-06-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler

TEST RESULTS

SL. NO.	SOURCE		UNIT	RESULT
1	Noise Level	Acoustic enclosure door open condition while 600 KVA DG set 1 working	dB (A)	91.1
		Acoustic enclosure door close condition while 600 KVA DG set 1 working	dB (A)	65.5
2	Noise Level	Acoustic enclosure door open condition while 600 KVA DG set 2 working	dB (A)	91.6
		Acoustic enclosure door close condition while 600 KVA DG set 2 working	dB (A)	65.8
3	Noise Level	Acoustic enclosure door open condition while 600 KVA DG set 3 working	dB (A)	92.3
		Acoustic enclosure door close condition while 600 KVA DG set 3 working	dB (A)	66.5

Remarks:

End of Report

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DG Noise

PLATE

Plate No.1

Hospital

Plate No.2

STP

Plate No.3

Waste collection area