

COMPLIANCE REPORT  
OCTOBER 2022 - MARCH 2023

M/S KGA INTERNATIONAL TRADES  
PVT. LTD.

KOTTAYAM DISTRICT  
KERALA

**KGA International Trades Pvt. Ltd.**

KIT/MOEF-02/2023-24  
13-09-2023

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

**Ref. No.1: - F. No. 21-95/2021-IA-III Dt. 07-12-2021**

**Ref. No.2: - EC identification No. - EC21A038KL118170**

**Ref. No.3: - Proposal No. IA/KL/MIS/232468/2021**

**Sub : - Environment Clearance – at Vazhappaly East Village,  
Changanacherry Municipality and Taluk, Kottayam District, Kerala. –  
Compliance Report – Second half - Reg.**

**Respected Sir,**

The construction project was accorded Environmental Clearance for **50,911 sq. m** of built-up area on **10-12-2021**, vide **F. No. 21-95/2021-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 2022 – March 2023) to the specific conditions and standard conditions of the Environment Clearance is enclosed.

Thanking you,

Yours respectfully,  
For M/s KGA International Trades Pvt. Ltd.

  
**K C EAPEN**  
**DIRECTOR**



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**COMPLIANCE REPORT**  
**TO**  
**THE CONDITIONS**  
**OF**  
**ENVIRONMENT CLEARANCE ORDER**  
**(F. NO. 21-59/2021-IA-III)**  
**FOR THE PERIOD OF**  
**October 2022 – March 2023**

**PREPARED BY**

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

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## INTRODUCTION

M/s KGA international Trades is a commercial project situated at Vazhappaly East Village, Changanacherry Municipality and Taluk, Kottayam District, Kerala. The construction project was accorded Environmental Clearance for **50,911 sq.mtr** of built-up area on 10-12-2021 vide order No **F. NO. 21-95/2021-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 2022 - March 2023** (Second half) is being submitted.

**COMPLIANCE REPORT  
PART - A  
SPECIFIC CONDITIONS**

**SPECIFIC CONDITION**

<b>01</b>	<b>Abstraction of groundwater shall be subject to the permission of Central Ground Water Authority (CGWA). Fresh water requirement shall not exceed 105 KLD during operational phase.</b>	<b>Noted</b>
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The piling work has been completed in the project site. The fresh water requirement will not exceed 105 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.

<b>02</b>	<b>As proposed, wastewater shall be treated in an onsite STP of total 200 KLD capacity. At least 154 KLD of treated water from the STP shall be recycled and reused for flushing (121 KLD) gardening (5 KLD) and for make-up water (28 KLD) for cooling towers attached with the HVAC system as proposed.</b>	<b>Noted</b>
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Waste water generated from the side will be treated in the STP at project site with the capacity of 200 KLD. At least 154 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.

<b>03</b>	<b>The project proponents would commission at 3<sup>rd</sup> 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.</b>	<b>Noted</b>
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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 3<sup>rd</sup> party study.

04	<b>Area for greenery shall be provided as per the details provided in the project document i.e., area under plantation/ greenery shall be 1600sqm. as proposed. At least 450 trees shall be maintained during the operation phase of the project. 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.</b>	Noted
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The contrition phase of the project has been started. During operational phase of the project at least 450 trees will be maintained at project premises. The project proponent will include native plants in the landscape plan and water intensive and invasive species will not be used. Area for greenery will be assured as per the details provided at EAC.

05	<b>No tree can be felled/ transplanted unless exigencies demanded. Where absolutely necessary, tree felling shall be with prior permission from the Concerned regulatory authority. Old tree 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).</b>	Noted
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The permission from Forest department is not necessary for the trees proposed to be uprooted in the project site. All possible trees will be maintained at the project site. The prior permission will be taken form the concerned regulatory authority to fell the trees which are in the list of Forest Department. It will be assured that, tree saplings will be planted as compensation for felling trees in the project site.

06	<b>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.</b>	<b>Noted</b>
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The project proponent will plant 10 tree saplings as compensation of 1 tree that is cut. The green belt development will be 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 of its land scape and green belt development.

07	<b>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 95 KL capacity shall be provided by PP for rainwater harvesting after filtration.</b>	<b>Noted</b>
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The construction of rain water harvesting tank is a mandatory provision in KMBR in Kerala. The project proponent will construct RWH facility with the capacity of 95 KL in the project site as part of water conservation. The construction of the same is yet to start.

08	<b>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 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&amp;D waste shall be segregated and managed as per C&amp;D</b>	<b>Noted</b>
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	<b>Waste Management Rules, 2016.</b>	
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The project proponent will construct separate facility for segregation, handling and management of bio degradable and non bio degradable waste in the project site. The bio degradable waste will be disposed with the help of bio bins and bio gas plants in the project site. The non bio degradable waste will be sold to the local vendor. All solid waste and construction and Demolition waste generated from the project site will be managed as per the waste management Rules enacted in 2016.

<b>09</b>	<b>The PP shall provide electric charging points in parking areas for E vehicles as committed.</b>	<b>Noted</b>
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The project proponent will provide electric charging points in parking areas for E Vehicles as committed.

<b>10</b>	<b>As committed, solar water heaters shall be installed on the roof to meet the hot water requirement of at least 14 KLD and solar energy shall be used for external lighting by using light fixtures with standalone solar panel.</b>	<b>Noted</b>
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As part of promotion of renewable energy, the project proponent will install solar panels on the roof of the building. The generation of power from solar is estimated about 5 percentage of power requirements for common amenities in the project site. The PP will install 120 solar panels on the roof for water heating.

<b>11</b>	<b>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.</b>	<b>Noted</b>
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The project proponent has got various approvals from various department and authorities. The proponent has started the construction project only after obtain of all needed approvals and licenses/ clearances.

**COMPLIANCE REPORT  
PART – B**

**STANDARD CONDITIONS**

## I. STATUTORY COMPLIANCES

<b>01</b>	<b>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.</b>	<b>Complied</b>
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All the construction will be done in accordance with the local building byelaws. At present the project proponent has applied to obtain various clearances / approvals / licenses. The construction work will be 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:-

<b>Sl. No</b>	<b>Approvals/Licenses</b>	<b>Issue date</b>	<b>Annexure</b>
01	EC order	07/12/2021	01
02	Building permit	10/06/2022	02
03	Consent for Establishment	26/08/2022	03
04	NOC from Fire and Rescue services	03/08/2022	04

<b>02</b>	<b>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.</b>	<b>Complied</b>
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The project proponent has obtained structural stability certificate from an approved structural engineer. The project proponent will construct the building as per the guidelines in National Building Code.

<b>03</b>	<b>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.</b>	<b>Not needed</b>
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There is no forest land involved in the project. Therefore, no forest clearance is necessary for the instant project.

<b>04</b>	<b>The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.</b>	<b>Not needed</b>
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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.

<b>05</b>	<b>The project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (prevention &amp; Control of Pollution) Act, 1981 and the water (prevention &amp; Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.</b>	<b>Complied</b>
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The project proponent has obtained consent to Establish from State Pollution Control Board. The copy of the consent is attached as Annexure No.2.

<b>06</b>	<b>The project proponent shall obtain the necessary permission for drawl of groundwater / surface water required for the project from the competent authority.</b>	<b>Noted</b>
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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 Slef Government if the project is intending to draw water from ground.

<b>07</b>	<b>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.</b>	<b>Noted</b>
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The power supplying agency in Kerala is Kerala State Electricity Board (KSEB). There is no other agency in connection with supply of power. The preparatory work for land clearance is started,

08	<b>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.</b>	<b>Noted</b>
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**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 will use DG sets in construction phase but the volume of diesel stored in project site will not cross 1000 liters therefore approval from Chief Controller of Explosive is not necessary.

09	<b>The provisions of the Solid Waste Management Rules, 2016, E Waste (Management) Rules, 2016, and the Plastic Waste Management Rules, 2016, shall be followed.</b>	<b>Will be Complied</b>
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**Compliance:**

To handle and management of all type of wastes generated from the project site will be 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 construction phase.

10	<b>The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.</b>	<b>Noted</b>
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**Compliance:**

The project proponent will follow the Energy Conservation Building Code for Commercial Building by Bureau of Energy Efficiency, Ministry of Power strictly. This will be done in this commercial building in consultation with experts in this field.

## II. Air quality monitoring and preservations:

<b>1</b>	<b>Notification GSR 94 (E) 25-012-018 of MoEF&amp;CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.</b>	<b>Will be Complied</b>
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No construction activities started in the project site. The project proponent will implement 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.

<b>2</b>	<b>A Management Plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.</b>	<b>Will be Complied</b>
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The project proponent has prepared a Management plan in connection with application for obtaining EC. The measures laid down in the management plan will be executed in the project site for contain the current exceedance in ambient air quality at the site.

<b>3</b>	<b>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<sub>10</sub> PM<sub>2.5</sub> covering upwind and downwind directions during the construction period.</b>	<b>Will be Complied</b>
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To monitor the quality of ambient air quality in the project site, the project proponent regularly monitor the PM<sub>10</sub> and PM<sub>2.5</sub> covering upwind and downwind directions during the construction period. This will be submitted along with the Half yearly Compliance report.



4	<b>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 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.</b>	<b>Will be Complied</b>
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The Diesel power generating sets proposed as source of back power will be of enclosed type and confirmed to rules made under the Environment (Protection) Act, 1986. The place of DG and its stack height will be decided in consultation with the Pollution Control Board.

5	<b>Construction site shall be adequately barricaded before the construction begins. Dust smoke &amp; 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.</b>	<b>Will be Complied</b>
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The project proponent has installed proper barricade well before commencing of construction of building. Dust smoke and other air pollution prevention measures will be 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 will be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site. The photograph of the site is attached as **Plate No.1**. The piling works has been completed in the project.

6	<b>Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.</b>	<b>Will be Complied</b>
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Plastic / tarpaulin sheet covers will be provided for sand, cement, murram loose soil and other construction materials prone to causing dust pollution stored at the site.

<b>7</b>	<b>Wet jet shall be provided for grinding and stone cutting.</b>	<b>Will be Complied</b>
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Grinding and stone cutting will not be done at open space and wet jet will be used to prevent dust emission.

<b>8.</b>	<b>Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.</b>	<b>Will be Complied</b>
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To suppress dust emission from the unpaved surfaces and loose soil stored at project site will be adequately sprinkled with water.

<b>9.</b>	<b>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.</b>	<b>Complied</b>
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All construction and demolition debris are being be stores at the site this won't dumped on the roads or open spaces out side the site. The waste is being managed as per the provision stipulated in the construction and Demolition water management rules, 2016.

<b>10</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will use 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.	Will be Complied
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**Compliance:**

The project proponent will finalize the place, stack height of D G sets in consultation with PCB. The gaseous emissions from DG set will be dispersed through adequate stack height Acoustic enclosure will be 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.	Will be Complied
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**Compliance:**

The Project proponent will provide adequate ventilation. Since it is commercial project proponent need to maintain the air quality inside the project well within the standard.

**III. Water quality monitoring and preservation:**

1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to abstract 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.	Will be Complied
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There will be no construction allowed to abstract the natural drainage through the site, on wetland and water bodies. The natural drain system will be maintained for ensuring unrestricted flow of water.

2	Buildings shall be designed to follow the natural topography as	Will be
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	<b>much as possible. Minimum cutting and filling should be done.</b>	<b>Complied</b>
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**Compliance:**

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

<b>3</b>	<b>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&amp;CC along with six monthly compliance reports.</b>	<b>Will be Complied</b>
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The project proponent will install 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.

<b>4</b>	<b>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.</b>	<b>Noted</b>
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At present the construction is yet to start in the project site. 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.

<b>5</b>	<b>At least 20 percentage 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 percentage opening, landscape, etc. would be considered as pervious surface.</b>	<b>Will be Complied</b>
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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.

<b>6</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will install STP for used water so that dual plumbing will be there in the project site. The condition will be complied during its construction phase.

<b>7</b>	<b>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.</b>	<b>Will be Complied</b>
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As part of conservation of water, the project proponent will install water saving devices / fixtures for water conservation. This has been incorporated in the building plan.

<b>8</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will provide dual plumbing system in the project site for separation of grey and blackwater in the project site.

<b>9</b>	<b>Water demand during construction should be reduced by use of pre mixed concrete, curing agents and other best practices referred.</b>	<b>Will be Complied</b>
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The project proponent will use pre mixed concrete, curing agents during construction phase to reduce water consumption and other pollutions. Batching plant, rain water harvesting etc will be adopted.

10	<b>Rainwater harvesting recharge pits/ storage tanks shall be provided for groundwater recharging as per the CGWB norms.</b>	<b>Noted</b>
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The project proponent will construct rain water harvesting tanks in the project site. Since the ground water table is higher in the region, the ground water recharging pit is not advisable.

11	<b>A rain water harvesting plant needs to be designed where the recharge bores of minimum one recharge bore per 5000 square 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.</b>	<b>Noted</b>
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The project proponent will construct rain water harvesting tank in the project site to harvest roof top rain water. The capacity of Rain water harvesting tank will be as proposed.

12	<b>All recharge should be limited to shallow aquifer.</b>	<b>Noted</b>
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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 will try to do ground water recharge by using rain water.

13	<b>No groundwater shall be used during construction phase of the project.</b>	<b>Complied</b>
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The project proponent does not use ground water during construction phase of the project.

14	<b>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.</b>	<b>Noted</b>
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Since the proposed site is in safe zone the permission from CGWA is not mandatory however the project proponent will have consultation with ground water department of the state in connection with the dewatering of ground water.

<b>15</b>	<b>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&amp;CC along with six monthly Monitoring reports.</b>	<b>Will be Complied</b>
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The project proponent will install 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.

<b>16</b>	<b>Sewage shall be treated in the STP with tertiary treatment. As proposed, no treated water shall be disposed into municipal drain.</b>	<b>Will be Complied</b>
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The project proponent will construct STP with capacity of 280 KLD for recycling of used water. The treated water will be used for flushing, gardening and other purposes. No treated water will be disposed in to municipal drain.

<b>17</b>	<b>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, 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.</b>	<b>Will be Complied</b>
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All sewage generated from the project site will be 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

<b>18</b>	<b>Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.</b>	<b>Will be Complied</b>
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The treated water from STP will be 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.

<b>19</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will install al dewatering machine 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**

<b>1</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will implement 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 will be implemented.

<b>2</b>	<b>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.</b>	<b>Will be Complied</b>
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To monitor the ambient noise level, the project proponent will conduct noise monitoring with the help of laboratory having approval from Pollution Control Board. The results of noise level will submit along with the half yearly compliance report.

<b>3</b>	<b>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.</b>	<b>Will be Complied</b>
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To reduce impact of noise, Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel will be provided as mitigation measures.

#### **V. Energy Conservation Measures:**

<b>1</b>	<b>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.</b>	<b>Noted</b>
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The project proponent will comply the guidelines of Energy Conservation Building Code of Bureau of Energy Efficiency.

<b>2</b>	<b>Outdoor and common area lighting shall be LED</b>	<b>Will be Complied</b>
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The all lightening installed at out side and inside of the project will be LED to reduce the energy consumption.

3	<b>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.</b>	<b>Will be Complied</b>
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The instant project is for commercial building. All building will get 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	<b>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.</b>	<b>Will be Complied</b>
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The project proponent has incorporated the LED for the lightening of the outside and common area of the commercial building. As per energy conservation, the project proponent will advise each lessee to prefer LED lights in their places.

5	<b>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.</b>	<b>Will be Complied</b>
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As part of promotion of renewable energy, the project proponent will install solar panels and streetlights to generate electricity equivalent to 1 percentage of the demand load. The PP will install 120 solar panels in the project site.

6	<b>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.</b>	<b>Will be Complied</b>
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Separate electric meter will be installed for solar power. The project proponent will provide facility for solar water heaters in the project site. Solar power will be used for lighting in apartment to reduce the power load on grid.

#### **VI. Waste Management:**

1	<b>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.</b>	<b>Noted</b>
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The project proponent will install a bio bin / bio gas plant to dispose the bio degradable waste generated from the project site. The Non Bio degradable waste will be sold to the local vendor. Therefore, the project proponent will not ask the support of Local Self Government or other public authority to treat the solid waste generated from the commercial project.

2	<b>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.</b>	<b>Will be Complied</b>
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The disposal of muck during construction phase will not create any adverse impact on the

neighboring community. The project proponent will take extreme care while disposing the generated muck from the project site.

3	<b>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.</b>	<b>Will be complied</b>
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To collect the waste generated from each apartment, the project proponent will provide separate wet and dry bin for proper collection and segregation. Solid waste will be segregated into wet garbage and inert materials.

4	<b>Organic waste compost / vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.</b>	<b>Will be Complied</b>
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The PP will install facilities for disposing bio degradable waste like Organic waste converter, Bio - bin or bio gas plant.

5	<b>All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.</b>	<b>Will be Complied</b>
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The non bio degradable waste will be sold to the local vendors for recycling. A written tie up will be 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	<b>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.</b>	<b>Complied</b>
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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	<b>Use of environment friendly materials in bricks, blocks and other 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.</b>	<b>Will be Complied</b>
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The project proponent will use environment friendly materials in bricks, blocks and other construction materials, for at least 20 percentage of the construction material quantity.

8	<b>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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January 2016, Ready mixed concrete must be used in building construction.</b>	<b>Noted</b>
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Fly ash added materials will be used in the construction of proposed commercial building. Ready mixed concrete will be used in the project site to reduce consumption of water and other pollution.

9	<b>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.</b>	<b>Complied</b>
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All waste in connection with construction and demolition activities is being managed in conform to the Construction and Demolition Waste Management Rules, 2016.

10	<b>Used CFLs &amp; 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.</b>	<b>Noted</b>
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The used CFLs & TFLs will 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 will be disposed as per the guidelines.

## VII. GREEN COVER

01	<b>No tree can be felled/ transplanted unless exigencies demanded.</b>	<b>Noted</b>
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All possible trees will be maintained at the project site. The prior permission will be taken from the concerned regulatory authority to fell the trees if the trees are in the list of Forest department to take NOC. It will be assured that, tree saplings will be planted as compensation for felling trees in the project site.

2	<b>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.</b>	<b>Will be Complied</b>
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As part of conservation of fertile soil in the project site, the project proponent will strip the topsoil 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.

## VIII. Transport:

1	<b>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.</b> <b>a. Hierarchy of roads with proper segregation of regular and</b>	<b>Noted</b>
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	<p><b>pedestrian traffic.</b></p> <p><b>b. Traffic calming measures.</b></p> <p><b>c. Proper design of entry and exit points.</b></p> <p><b>d. Parking norms as per local regulation.</b></p>	
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A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), will be prepared to include motorized, non motorized, public and private networks. Road will be designed with due consideration for environment and safety of users. The above mentioned criteria will be used during the design of the road.

<b>2</b>	<b>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.</b>	<b>Will be Complied</b>
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The all vehicles come to the project site for loading and unloading if various materials will be in good condition and will have pollution check certificate. The transportation will be regulated during peak hours.

<b>3</b>	<b>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</b>	<b>NOted</b>
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	<b>departments.</b>	
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A detailed traffic management and traffic decongestion plan will 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. The above mentioned points will be taken care during the planning stage.

#### **IX. Human Health Issues:**

<b>1</b>	<b>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.</b>	<b>Complied</b>
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There are 76 labors are working in the project site/ The project proponent has provided mask to the all labours working in the project site as part of health and safety.

<b>2</b>	<b>For indoor air quality, the ventilation provisions as per National Building Code of India.</b>	<b>Will be Complied</b>
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The instant commercial building will have adequate ventilation provisions like windows and balcony.

<b>3</b>	<b>Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management plan shall be implemented.</b>	<b>Will be Complied</b>
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The project proponent has prepared a disaster management plan. The emergency preparedness plan will be based on the Hazard Identification and Risk Assessment.

<b>4</b>	<b>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</b>	<b>Complied</b>
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	<b>housing may be in the form of temporary structures to be removed after the completion of the project.</b>	
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The project proponent has provided housing out side the instant project site which is located at 3 Km away from the 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.

<b>5</b>	<b>Occupational health surveillance of the workers shall be done on a regular basis.</b>	<b>Complied</b>
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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.

<b>6</b>	<b>A first Aid Room shall be provided in the project both during construction and operations of the project.</b>	<b>Complied</b>
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A first aid room has provided in the project site both during construction and operation of the project. The Photograph of first Aid room installed in the project site is attached as **Plate No.2.**

#### **X. Miscellaneous:**

<b>1</b>	<b>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&amp;CC/SEIAA website where it is displayed.</b>	<b>Will be Complied</b>
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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 New Indian Express and Deepika Dt. 03-02-2022). The advertisement published in newspaper is attached as **Annexure No. 5.**

2	<b>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.</b>	<b>Will be Complied</b>
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The copy of environmental clearance was submitted by the project proponent to the Heads of local bodies.

3	<b>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.</b>	<b>Complied</b>
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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 results is attached as **Annexure No. 6 to 9**.

4	<b>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.</b>	<b>Complied</b>
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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	<b>The company shall have a well laid down environmental policy, duly approved by the Board of Directors. The environmental policy should prescribe for standard</b>	<b>Will be Complied</b>
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	<p><b>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&amp;CC as a part of six-monthly report.</b></p>	
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The project proponent will prepare an Environmental Policy duly approved by the board of directors. The policy will be prepared based on the instruction laid down in the EC order. The instant project is for construction of a commercial building.

<b>6</b>	<p><b>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.</b></p>	<b>Complied</b>
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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. The details of the same is listed below

#### **Environmental Cell at headquarter level**

<b>Sl. No.</b>	<b>Name of Members</b>	<b>Designation</b>
1	Mr. K.C. Eapen (Director)	Chairman
2	Mr. Viswapreet. S (Project Director)	Member
3	Mr Anil Kumar M S (Project Engineer)	Member
4	Mr Shamsudeen Mustafa (Project Engineer – MEP)	Member

**Environmental Cell at project site level**

<b>Sl. No.</b>	<b>Name of Members</b>	<b>Designation</b>
1	Mr. Abraham Thomas (Project Manager)	Chairman
2	Mr. James Joseph (Senior Planning Engineer)	Member
3	Mr. Byju K C (HSE Officer)	Member
4	Mr. Tomy Thomas (Officer Accounts & Admin)	Member

<b>7</b>	<b>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.</b>	<b>Will be Complied</b>
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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.

<b>8</b>	<b>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.</b>	<b>Complied</b>
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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	<b>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.</b>	<b>Will be Complied</b>
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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	<b>The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.</b>	<b>Complied</b>
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The project is under construction stage. The all stipulations made by the State Pollution Control Board and State Government is being strictly followed.

11	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will abide all the commitments and recommendations made in the EIA / EMP report and during presentation at Expert Appraisal Committee.

12	<b>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&amp;CC).</b>	<b>Will be Complied</b>
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The project proponent will apply for fresh EC in case the management decided for further expansion or modification of the project.

<b>13</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent did not conceal any data in connection with obtaining Environmental Clearance. The data submitted at EAC were true and correct.

<b>14</b>	<b>The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.</b>	<b>Will be Complied</b>
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The project proponent is being implemented all conditions stipulated in the EC order.

<b>15</b>	<b>The ministry reserves the right to stipulate additional conditions If found necessary. The company in a time bound manner shall implement these conditions.</b>	<b>Will be Complied</b>
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The project proponent is willing to adhere additional condition if the competent authority found necessary at any stage of construction or operation.

<b>16</b>	<b>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.</b>	<b>Will be Complied</b>
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The project proponent will extent full support to the officers of the Regional Offices of Ministry of Environment Forest and Climate Change during their inspection at project site.

<b>17</b>	<b>The above conditions shall be enforced, inter-alia under the</b>	<b>Will be</b>
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	<b>Water (prevention &amp; control of Pollution) Act, 1974, the Air (prevention &amp; 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.</b>	<b>Complied</b>
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The conditions stipulated in the EC order will be adhered by the project. In addition, the project proponent will adhere the provision of all rules and regulations in India in connection with construction of commercial project.

<b>18</b>	<b>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.</b>	<b>Noted</b>
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There is no appeal against this EC order filed in NGT within a period of 30 days.

# ANNEXURE



## Annexure No.1



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

To,

The Director  
M/S KGA INTERNATIONAL TRADES PVT. LTD.  
Mr. K.C. Eapen, Director, M/s KGA International Trades Pvt. Ltd. , XI/641,  
Maradu P.O., Ernakulam, Kerala, India,,Kottayam,Kerala-686101

**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/232468/2021 dated 03 Oct 2021. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	<b>EC21A038KL118170</b>
2. File No.	21-95/2021-IA-III
3. Project Type	New
4. Category	A
5. Project/Activity including Schedule No.	8(a) Building and Construction projects
6. Name of Project	Proposed commercial complex "KGA Mall" (Shopping Mall, Multiplex, Banquet Hall, Food Court, Hotel and Restaurant) project to be developed by M/s KGA International Trades Pvt. Ltd. at Vazhappally East Village, Changanacherry Taluk, Kottayam.
7. Name of Company/Organization	M/S KGA INTERNATIONAL TRADES PVT. LTD.
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: 10/12/2021

(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.*

*This is a computer generated cover page.*

**F. No. 21-95/2021-IA-III**

Government of India  
Ministry of Environment, Forest and Climate Change  
(IA.III Section)

Indira Paryavaran Bhawan,  
Jor Bagh Road, New Delhi - 110003

December 7<sup>th</sup>, 2021

To,

**Shri K.C. Eapen, Director**  
**M/s KGA International Trades Pvt. Ltd.**  
XI/641, Maradu P.O.,  
Ernakulam – 682304, Kerala  
E. mail: kc.eapen@kga.group

**Subject: Environmental Clearance for Proposed commercial complex “KGA Mall” (Shopping Mall, Multiplex, Banquet Hall, Food Court, Hotel and Restaurant) project with total built up area of 50,911 sqm. to be developed at Vazhappaly East Village, Changanacherry Municipality, Changanacherry Taluk, Kottayam District, Kerala by M/s KGA International Trades Pvt. Ltd. – regarding.**

Sir,

This has reference to your Application/Proposal No. IA/KL/MIS/232468/2021; received on 03<sup>rd</sup> October, 2021 through Parivesh Portal for Environmental Clearance (EC) for ‘Proposed commercial complex “KGA Mall” (Shopping Mall, Multiplex, Banquet Hall, Food Court, Hotel and Restaurant) project with total built up area of 50,911 sqm. to be developed at Vazhappaly East Village, Changanacherry Municipality, Changanacherry Taluk, Kottayam District, Kerala’ by M/s KGA International Trades Pvt. 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) in its 75<sup>th</sup> meeting held during 27-28<sup>th</sup> October, 2021.

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. 56/67, 28/65, 29, 51/2, 3, 4, 5, 6 & 9 in Block 105 & Survey Nos. 4/1 in Block 104, Vazhappaly East

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Proposal No. IA/KL/MIS/232468/2021



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Village, Changanacherry Municipality Changanacherry Taluk, Kottayam District, Kerala with coordinates from 09°26'52.25"N to 09°26'59.05"N Latitude and 76°32'15.01"E to 76°32'19.50"E Longitude.

- ii. The project is new.
- iii. The total plot area is 16,117 sqm. and total construction (Built-up) area is 50,911 sqm. The project will comprise of 1 no. of commercial building block with construction of commercial complex with shopping area / retail area, hotel (54 rooms), banquet hall (1,240 seats), multiplex (670 seats), restaurant / food court (800 seats) & supporting infrastructure facilities. Maximum height of the building is 32.75 m. The details of building are as follows:

Name of Building	Max. no. of floors	Max. Height	Built-up area	
Commercial Building Block	Basement + Lower Ground floor + Ground floor + 6 floors	32.75 m	50,911 sqm.	
	Floor			Usage
	Basement			Parking area
	Ground floor			Shopping mall
	1 <sup>st</sup> Floor			Shopping mall
	2 <sup>nd</sup> Floor			Multiplex + Food Court
	3 <sup>rd</sup> Floor			Banquet Hall
4 <sup>th</sup> - 6 <sup>th</sup> Floor	Hotel Rooms			

- iv. During construction phase, total water requirement is expected to be 62 KLD which will be met by recycled water from portable STP/Stored rain water (tank) for construction purposes and Kerala Water Authority (KWA) supply for meeting the domestic water requirement expected to be 15 KLD. During the construction phase, portable STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- v. During operational phase, total water demand of the project is expected to be 259 KLD and the same will be met by 105 KLD fresh water from Stored Rain Water Tank (250 KL capacity)/KWA/Ground water and 154 KLD Recycled water. Wastewater generated (171 KLD) will be treated in STP of total 200 KLD capacity. 154 KLD of treated wastewater will be generated which will be recycled and re-used (121 KLD for flushing, 5 KLD for gardening etc.). About 28 KLD treated water from STP will be used for make-up water requirement for cooling towers attached with the HVAC system. Therefore, there is no discharge to the external drainage system or to the land or to any water body.
- vi. About 856 kg/day solid waste will be generated in the project. The biodegradable waste (350 kg/day) will be processed in bio-gas generation unit/OWC unit and the non-biodegradable waste generated (506 kg/day) will be handed over to authorized local vendor.
- vii. The total power requirement during operation phase is 1,534 kWh and will be met from Kerala State Electricity Board (KSEB) & DG Sets (1,250 kVA x 1 nos + 500 kVA x 1 nos.) will be provided as a standby power

- back up arrangement. Total power requirement during construction phase is 100 kW and will be met from KSEB & DG Sets (standby).
- viii. Rooftop rainwater of buildings will be collected in RWH tank of total 250 KL capacity for harvesting after filtration.
  - ix. There is a small building existing at site which will be demolished during construction. The demolition waste to be generated will be handled as per the guidelines of Construction and Demolition (C&D) Waste Management & Handling Rules, 2016.
  - x. Parking facility for 650 Cars + 1,700 Two Wheelers is proposed to be provided against the requirement of 635 Cars + 1,600 Two Wheelers respectively (according to local norms). Provision for charging for electrically operated vehicles is proposed in each parking floor.
  - xi. Proposed energy saving measures would save about 17% of power.
  - xii. About 94 nos. of solar water heaters would be installed on the roof to meet the daily hot water requirement of about 14 KL. Solar energy will be used for external lighting by using light fixtures with standalone solar panel.
  - xiii. The project is not located in Critically Polluted area.
  - xiv. The project is not located within 10 km of Eco Sensitive Zone. NBWL Clearance is not required.
  - xv. Forest Clearance is not required.
  - xvi. No court case is pending against the project.
  - xvii. Green belt area of about 1600 sqm (0.16 Ha) will be developed. 80 trees are existing at the site which will be cut and 450 trees are proposed for plantation.
  - xviii. Expected timeline for completion of the project - About 36 months from the date of start of construction.
  - xix. Investment/Cost of the project is Rs. 216 Crores.
  - xx. Employment potential - About 150 persons during construction phase and about 593 persons during operation phase.
  - xxi. Benefits of the project - The project would provide better commercial retail shopping area with supporting infrastructure facilities and amenities 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), 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 75<sup>th</sup> meeting held during 27-28<sup>th</sup> October, 2021.

6. Based on recommendations of EAC (Infra-2), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project for 'Proposed commercial complex "KGA Mall" (Shopping Mall, Multiplex, Banquet Hall, Food Court, Hotel and Restaurant) project with total built up area of 50,911 sqm. to be developed at Vazhappaly East Village, Changanacherry Municipality, Changanacherry Taluk, Kottayam District,

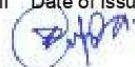
Kerala' by M/s KGA International Trades Pvt. Ltd., under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the following specific and standard conditions:

**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 105 KLD during operational phase.
- ii. As proposed, wastewater shall be treated in an onsite STP of total 200 KLD capacity. At least 154 KLD of treated water from the STP shall be recycled and re-used for flushing (121 KLD) gardening (5 KLD) and for make-up water (28 KLD) for cooling towers attached with the HVAC system as proposed.
- 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 1600 sqm. As proposed, at least 450 trees shall be maintained 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. No tree can be felled/transplanted 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).
- vi. 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.
- vii. 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 250 KL capacity shall be provided by PP for rain water harvesting after filtration.
- viii. The solid waste shall be duly segregated into biodegradable and non-biodegradable components and handled in separate area earmarked for

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segregation of solid waste, as per SWM Rules, 2016. As committed, biodegradable waste shall be utilized through bio-gas generation unit/ OWC 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.

- ix. The PP shall provide electric charging points in parking areas for e-vehicles as committed.
- x. As committed, solar water heaters shall be installed on the roof to meet the hot water requirement of atleast 14 KLD and solar energy shall be used for external lighting by using light fixtures with standalone solar panel.
- xi. 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 lightning 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<sub>10</sub> and PM<sub>2.5</sub>) 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, 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. 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.
- iv. 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.
- v. 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.
- vi. 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.
- vii. 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.
- viii. 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.
- ix. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- x. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xi. 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.
- xii. All recharge should be limited to shallow aquifer.
- xiii. No ground water shall be used during construction phase of the project.
- xiv. 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.



- xv. 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.
- xvi. Sewage shall be treated in the STP with tertiary treatment. As proposed, no treated water shall be disposed in to municipal drain.
- xvii. No sewage or untreated effluent water would be discharged through storm water drains.
- xviii. 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.
- xix. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xx. 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, ear 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> 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
- ii. 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

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- 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 shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- 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 Honble 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.

**7.** The Environmental Clearance is being granted to M/s KGA International Trades Pvt. Ltd. for Proposed commercial complex "KGA Mall" (Shopping Mall, Multiplex, Banquet Hall, Food Court, Hotel and Restaurant) project with total built up area of 50,911 sqm. to be developed at Vazhappaly East Village, Changanacherry Municipality, Changanacherry Taluk, Kottayam District, Kerala.

**8.** This issues with the approval of the Competent Authority.



**(Dr. Dharmendra Kumar Gupta)**  
**Director (S)**

**Copy to:**

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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, 4<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> 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)**

## Annexure No.2

**GOVERNMENT OF KERALA**

Deemed Licence issued under section 10 of Kerala Industrial Single Window Clearance Boards and Industrial Township Development Area Act, 1999 (5 of 2000).

**Building Permit**

Department of Local Self Government(Directorate of Urban Affairs)

UID: 110/2022-SDL  
Appl No: KL-7567/2022



Certified that necessary Clearance/ No objection Certificate / Licence is issued to M/s.**K G A MALL CHANGANASSERY,XI/641** in Survey Nos.**Sy.No 313/8,313/11,284/1A,284/1B,314/1,314/2B,314/2C,314/3,314/4,314/6,314/9B,Re-Sy No 4/1-10,28/65,51/2,51/3,51/4,51/5,51/6,51/9,56/67,29** of **Vazhappally East** Village of **Changanacherry** Taluk, **Kottayam** District has been obtained through the online single window portal,for conducting the activity of **Building Permit** in exercise of the powers conferred on this Board by Section 10 of Kerala Industrial Single Window Clearance Boards and Industrial Township Development Area Act,1999 read with Rule 9(2).

The certificate will be valid for the period for which the applicant has applied for.The board has the power to cancel/revoke the licence if the licence is obtained by misrepresentation or suppression of facts or if the applicant has committed breach or any conditions stipulated herein or violation of any provisions of any Act or Rules under which the licence is issued.

This Certificate is issued on this the **10<sup>th</sup>** day of **July** , **2022**.This is a system generated Certificate which requires no signature.

Building permit

## Annexure No.3

**FILE NO : KSPCB/KT/ICE/10006214/2022**

**Date of issue : 26-08-2022**

**KERALA STATE POLLUTION CONTROL BOARD****CONSENT TO ESTABLISH**

ISSUED UNDER

The Water (Prevention & Control of Pollution) Act, 1974

The Air (Prevention & Control of Pollution) Act, 1981

and

The Environment (Protection) Act, 1986

**As per Application No. : 10006214**

**Dated : 01-07-2022**

**To**

**KGA Mall**

**Opp S B College, Changanassery, Kottayam - 686101**

**Consent No. : KSPCB/KT/ICE/10006214/2022**

**Valid Upto : 31-07-2027**



**1. GENERAL**

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

1	<b>VALIDITY</b>	31-07-2027
2	Name and Address of the establishment	KGA Mall Opp S B College, Changanassery, Kottayam - 686101
3	Occupier Details	K C Eapen K C Eapen, KGA International Trades Pvt Ltd, XI/641, Kundannoor, Marad P O , Ernakulam - 682304
4	Local Body	Changanassery Municipality
5	Survey Number	29, 56/67, 28/65, 51/2, 51/3, 51/4, 51/5, 51/6, 51/9, 4/1-10
6	Village	Vazhappally East
7	Taluk	Changanassery
8	District	KOTTAYAM
9	Capital Investment(Rs in Lakhs)	21600.0
10	Scale	Large
11	Category	RED
12	Annual fee(Rs)	449000.0
	Total Fee remitted(Rs)	10.0
13	Activity	Establishing a commercial building having shopping mall,multiplex,food court,banquet hall and hotel in B+LG+G+6 floors; Built-up area- 48738 sq.m
14	Machinery details	

## GENERAL CONDITIONS

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(6) of the Air (Prevention & Control) of pollution Act 1981 & section 27 of the water (Prevention & control ) of pollution Act 1974.
2. This consent unless withdrawn earlier and subject to condition No.5.2 shall be valid for five years from the date of issue. At the end of the validity period if the construction is in progress the same shall be renewed. If the construction is yet to be started, the applicant shall apply afresh for consent to establish.
3. The date of commissioning shall be intimated, at least one month in advance to the District Office of the Board.
4. 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. Consent to Operate shall be obtained before commissioning the industry under the Water (Prevention and Control of Pollution) Act, the Air (Prevention and Control of Pollution) Act and the relevant Rules under Environment (Protection) Act..

## 2. CONDITIONS AS PER

The Water (Prevention and Control of Pollution) Act, 1974

2.1. Sewage/Effluent Treatment Plant consisting of treatment units having adequate capacity shall be made functional as per the proposal submitted along with the application, before the 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: 254 KLD

2.3. Effluent Generation: 229 KLD

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

Sl.No	Characteristics	Unit	Tolerance limit(for soakpit discharge	Tolerance limit (for reuse)
1	pH	-	6.5-9.0	6.5-8.5
2	BOD	mg/l	10	3
3	TSS	mg/l	10	10
4	Oil & Grease	mg/l	-	1
5	COD	mg/l	50	-
6	NH4-N	mg/l	5	-
7	N-total	mg/l	10	-
8	Fecal Coliform	MPN/100 ml	<230	-

2.5. Mode of disposal of treated effluent: Soak pit/Reuse

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

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

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

4.1. The construction activities as well as the operation of the industry / DG set shall be carried out strictly in compliance with the provisions of the Noise Pollution (Regulation and Control) Rules 2000.

4.2. Used lead acid batteries, if any shall be disposed of in compliance with the provisions of the Batteries (Management and Handling) Rules, 2001.

4.3. E-waste shall be disposed of in compliance with the E-Waste (Management) Rules, 2016.

4.4. The solid waste generated shall be treated and disposed of in compliance with the provisions of the Solid Waste (Management) Rules, 2016.

4.5. The plastic waste generated shall be disposed of in compliance with the provisions of the Plastic Waste (Management) Rules, 2016.

4.6. The hazardous waste generated in the unit shall be disposed of in compliance with the provisions of the Hazardous and other Wastes (Management and Trans boundary Movement) 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  $0.2 \times \text{square root of kVA}$  above roof level or 2m above the highest nearby building and at a minimum distance of square root of  $(\text{kVA}/2)$  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 and the outlet shall be set up beyond  $10 \log Q$  m (Q is the maximum capacity of the treatment Plant in cubic meters per day) from the nearest residence/water body and there shall be a

minimum setback of 3m from the boundaries to the STP

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. Conditions in the Environmental Clearance shall be complied with.

5.25. 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

5.26. Operation and maintenance contract with Performance Guarantee for the Sewage treatment plant shall be entered into between the consentee and the consultant . The application for Consent to Operate shall be accompanied by

1) an undertaking on Rs. 200/- stamp paper by the builder that all facilities required as per the Consent to Establish have been duly installed and are functional;

2) a certificate by the consultant to the same effect

3) Copy of operation and maintenance contract and

4) Copy of performance guarantee.

5.27. Total fee remitted -Rs.22,45,010/- ( Total fee remitted shown in I(12) shall be ignored)

Digitally signed by  Pradeep Kumar  
Date: 2022.08.26 13:03:32 IST

SIGNATURE OF ISSUING AUTHORITY

CHAIRMAN

**Copy of consent from PCB**

## Annexure No.4



WE SERVE TO SAVE



**DEPARTMENT OF FIRE AND RESCUE SERVICES**  
**GOVERNMENT OF KERALA**

No:FRS/05/CHY/9455/2022/SITE

Date:03/08/2022

**NO OBJECTION CERTIFICATE (FOR BUILDING PERMIT)****(As per Rule 5(4).12 of KMBR 2019/KPBR 2019)**

Name & Address of the Applicant:	KGA INTERNATIONAL TRADES PVT. LTD. KGA INTERNATIONAL TRADES PVT.LTD. REP. BY IT'S DIRECTOR, K C EAPEN, XI/641, KUNDANOOR, MARADU P.O, ERNAKULAM,Kerala 682304 India
Name of the Company:	KGA INTERNATIONAL TRADES PVT. LTD.
Occupancy type of Building:	Residential Buildings cum Assembly Buildings
Height of the building:	Residential Buildings up to 37.5 m Assembly Buildings up to 22.85 m
Number of Floors of the Building:	B1+G+G+6(9 Floors)
Total Built Up Area (in sqm):	Residential Buildings-3658.28 m2 Assembly Buildings -45079.72 m2 Total-48738 m2
Survey No:	Survey NO: 313/8 & 11; 284/1A &1B; 314/1,2B,2C 3,4,6 & 9B Resurvey No: 4/1-10; 28/65; 29; 51/2 3 , 4, 5 6, 9 & 56/67
Village:	Vazhappally East
Municipality:	Changanassery
District:	Kottayam

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 FRS/05/CHY/9455/2022/SITE.) 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 matters including eligibility of the land and plot for this project, environmental feasibility, survey details, etc. should be got verified and approved by the concerned competent 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 Nousad M  
Reason: site clearance  
Location: Headquarters, Thiruvananthapuram  
Date: 2022.08.03 06:44:22 +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.6

**TEST REPORT**

Test Report No.: 20230320/R016	Date: 25-03-2023	Page 1 of 1
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CUSTOMER DETAILS	
Customer Name & Address	<b>M/s KGA International Traders Pvt Ltd</b> Vazhappally, Changanacherry Kottayam District
Customer Reference	Test Request date: 20-03-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	20230320/S016
Sample Name	Ambient Air	Sample Received on	20-03-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	20-03-2023
Sampled by	Lab Authorized Sampler	Test Completed on	20-03-2023

DETAILS OF SAMPLING			
Sampling Location	Project Site	Date of Sampling	20-03-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	69 %

SAMPLING SITE DETAILS			
Village	Vazhappally	Taluk	Changanacherry
District	Kottayam	State	Kerala

TEST RESULTS-CHEMICAL					
SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
1	Particulate matter, PM <sub>10</sub>	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	65.2	100 (Max)
2	Particulate matter, PM <sub>2.5</sub>	IS 5182 (Part 24): 2019	µg/m <sup>3</sup>	31.9	60.0 (Max)
3	Sulphur dioxide as SO <sub>2</sub>	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	4.55	80.0 (Max)
4	Oxides of Nitrogen as NO <sub>2</sub>	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	5.61	80.0 (Max)

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

**Shency Joy**  
Dy.TM-Chemical  
Checked by:



**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Standard<sup>S</sup> 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: sealab@gmail.com

**Result of Air**

## Annexure No.7

**TEST REPORT**

Test Report No.: 20230320/R017	Date: 25-03-2023	Page 1 of 1
--------------------------------	------------------	-------------

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s KGA International Traders Pvt Ltd</b> Vazhappally, Changanacherry Kottayam District
Customer Reference	Test Request date: 20-03-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	20230320/S017
Sample Name	Ambient Noise	Monitoring Commenced on	20-03-2023
Test Method	IS 9989:1981	Monitoring Completed on	21-03-2023
Monitoring Location	Project Site	Monitored by	Lab Authorized Sampler

SAMPLING SITE DETAILS			
Village	Vazhappally	Taluk	Changanacherry
District	Kottayam	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	37.9	14:00	50.8	22:00	36.8
07:00	40.7	15:00	51.2	23:00	36.0
08:00	45.0	16:00	52.4	24:00	38.6
09:00	48.5	17:00	52.8	01:00	39.3
10:00	50.8	18:00	47.3	02:00	39.0
11:00	54.0	19:00	43.8	03:00	39.7
12:00	51.2	20:00	39.9	04:00	38.6
13:00	50.4	21:00	39.4	05:00	40.4

Sl. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time	dB(A)	49.3
2	Ambient Sound Level (Leq) Night Time	dB(A)	39.0

Remarks:

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

**Shency Joy**  
Dy.TM-Chemical  
Checked by:



**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Result of Noise**

## Annexure No.8

**TEST REPORT**

Test Report No.: 20230320/R019	Date: 25-03-2023	Page 1 of 3
--------------------------------	------------------	-------------

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s KGA International Traders Pvt Ltd</b> Vazhappally, Changanacherry Kottayam District
Customer Reference	Test Request Date: 20-03-2023

SAMPLE DETAILS			
Product Category	Water	Sample Code	20230320/S019
Sample Name	Ground Water	Sample Received on	21-03-2023
Sample Description by Customer	Open Well Water	Temperature @ Receipt	28°C
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	22-03-2023
Sample Quantity & Packing	1 L & 125 ml in a Plastic Bottle	Test Completed on	24-03-2023
Information Provided by Customer	---	Sampled by	Not Drawn by Laboratory

SAMPLING SITE DETAILS			
Village	Vazhappally	Taluk	Changanacherry
District	Kottayam	State	Kerala

TEST RESULTS- CHEMICAL PARAMETERS					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
1	Colour	IS 3025 (Part 4): 1983	Hazen	1	5 (Max)
2	Odour	IS 3025 (Part 5): 2018	---	Agreeable	Agreeable
3	Turbidity	IS 3025 (Part 10): 1984	NTU	0.4	1.0 (Max)
4	pH	IS 3025 (Part 11): 1983	---	6.95	6.50-8.50
5	Conductivity	IS 3025 (Part 14): 1984	µS/cm	139	---
6	Total Dissolved Solids	IS 3025 (Part 16): 1984	mg/L	90.8	500 (Max)
7	Total Hardness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009	mg/L	30.0	200 (Max)
8	Calcium as Ca	IS 3025 (Part 40): 1991	mg/L	8.00	75 (Max)

**Shency Joy**  
Dy. TM-Chemical  
Checked by



**Remya B.**  
TM-Biological  
Authorized Signatory

**Laju P.N.**  
Laboratory Head  
Authorized Signatory

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

**TEST REPORT**

Test Report No.: 20230320/R019	Date: 25-03-2023	Page 2 of 3
--------------------------------	------------------	-------------

**TEST RESULTS- CHEMICAL PARAMETERS**

Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
9	Magnesium as Mg	IS 3025 (Part 46): 1994	mg/L	2.44	30 (Max)
10	Chloride as Cl	IS 3025 (Part 32): 1988	mg/L	18.1	250 (Max)
11	Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23): 1986	mg/L	29.7	200 (Max)
12	Iron as Fe	IS 3025 (Part 53): 2003	mg/L	0.20	1 (Max)
13	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24): 1986	mg/L	1.98	200 (Max)

**TEST RESULTS - BIOLOGICAL PARAMETERS**

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

Remarks:

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

**Shency Joy**  
Dy.TM-Chemical  
Checked by



**Remya B.**  
TM-Biological  
Authorized Signatory

**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Result of Water**

## Annexure No.9

**TEST REPORT**

Test Report No.: 20230320/R018	Date: 25-03-2023	Page 1 of 1
--------------------------------	------------------	-------------

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s KGA International Traders Pvt Ltd</b> Vazhappally, Changanacherry Kottayam District
Customer Reference	Test Request date: 20-03-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	20230320/S018
Sample Name	Stack Emission	Sample Received on	21-03-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	22-03-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-03-2023

DETAILS OF SAMPLING			
Stack Identity	62.5 KVA DG DET	Date of Sampling	20-03-2023
Stack Diameter	0.10 m	Sampling Procedure	SEAAL/ENL/GEN/SOP/03

SAMPLING SITE DETAILS			
Village	Vazhappally	Taluk	Changanacherry
District	Kottayam	State	Kerala

TEST RESULTS-CHEMICAL				
SL NO	PARAMETERS	TEST METHOD	UNIT	RESULT
1	Temperature of Emission	IS 11255 (Part 3): 2008	°C	139
2	Velocity of Gas Discharged	IS 11255 (Part 3): 2008	m/sec	8.29
3	Stack Gas Flow Rate	IS 11255 (Part 3): 2008	Nm <sup>3</sup> /Hr	169
4	Particulate Matter	IS 11255 (Part-1): 1985	mg/Nm <sup>3</sup>	25.8

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

**Shency Joy**  
Dy. TM-Chemical  
Checked by:



**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Result of stack emission from DG**

# PLATES

Plate No. 1



Photograph of the project site

Plate No.2



First Aid Room