

# COMPLIANCE REPORT

M/s Jain Housing and Construction Ltd.

Cochin, Kerala



## *Jain Housing & Constructions Ltd.*

Dt. 16-05-2020

**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 :- F. No.21-59/2010-1A III

Sub :- Environment Clearance – at Survey Nos. 483/14, 484/7, 485/1 of  
Kakkanad Village, Thrikkakara Municipality, Ernakulam District, Kerala.–  
Compliance Report – Reg.

Respected Sir,

The construction of residential project was accorded Environmental Clearance for  
1,39,885.78 sq. m of build up area on 24<sup>th</sup> May 2011, vide letter **F. No.21-59/2010-1A III** by  
the Ministry of Environment & Forests (MoEF), Govt. of India. The compliance report to the  
specific conditions, additional conditions and general condition of the Environment  
Clearance along with monitored data is enclosed.

Thanking you,

Yours respectfully,

For M/s Jain Housing and infrastructure ltd

For Jain Housing & Construction Ltd

  
(Branch Authorized Signatory)

Encl: - As Above

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**Cochin/Site Office :** Jains Tufnell Garden ,Flat no: 4082, Rajagiri Valley, Chittethukara,  
Nilampathinja mughal Road, Kakkanad-682039, Cochin.  
Ph : +91 98464 04990

**COMPLIANCE REPORT**  
**TO**  
**THE CONDITIONS**  
**OF**  
**ENVIRONMENT CLEARANCE ORDER**

**PREPARED FOR**

**M/s Jain Housing and Construction Ltd.**  
**Kakkanad, Cochin, Kerala**

**PREPARED BY**

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

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## **INTRODUCTION**

M/s Jain Housing and infrastructure ltd is a residential project situated at Survey Nos.483/14, 484/7, 485/1 of Kakkanad Village, Thrikkakara Municipality, Ernakulam District, Kerala. The construction project was accorded Environmental Clearance for 1,39,885.78 Sq.Mtr of built up area on 24<sup>th</sup> May 2011 vide letter F. No.21-59/2010-1A III by then the Ministry of Environment & Forests (MoEF), Govt. of India.

The compliance to the specific conditions to construction phase, operational phase and general conditions of the Environmental Clearance is being submitted for the kind consideration of Ministry of Environment, Forest & Climate Change.

**Brief of the Project**

1	Type of Project	Construction project (Residential Apartments)
2	Name of the project	<b>M/s Jain housing &amp; infrastructure</b>
3	Address for correspondence	Jains Tufnell garden, Site Office – Flat no: 4082, Rajagiri Valley, Chittethukara, Nilampathinja mughal Road, Kakkanad, Cochin - 682039
4	Website and E mail ID of company	branchhead_cok@jainhousing.co.in <a href="http://www.jainhousing.com">www.jainhousing.com</a>
5	Name, Phone Number & E mail id of responsible persons	1. Vijay Shekhawat, Project Head, Mob. 09840572841 <a href="mailto:vijay_mgmt@jainhousing.co.in">vijay_mgmt@jainhousing.co.in</a>  2. Colleen Petriz Branch Manager - Project, Mob. 9846404990, branchhead_cok@jainhousing.co.in
6	Salient Features: a) Of the project	The project involves construction of Residential apartments comprises eight towers and 1216 houses. The total water requirement was 538.30 KLD and the source will be Roof Rainwater water, Ground water Municipal Supply and Recycling of treated effluent from STP. The estimated solid waste generation will be 2420 Kg/day which will be disposed with the help of CRDAI and Municipal Corporation as per Solid waste management & Handling Rules. The maximum height of the building is 58 Meters. The cost of the project is 112.122 crores  a) Installation of bio-bins for bio degradable waste  b) First aid Facilities, Drinking water and sanitary facilities for the workers

	b) Of the Environmental Management Plan	c) Installation of solar Energy d) Acoustic enclosures with DG sets e) Establishment of STP f) Rain water harvesting g) Green belt development h) Energy Conservation measures i) Solid waste disposal j) Hazardous waste disposal k) Environment Monitoring Cell
7	Project area	Plot area – 35,084.62 Sq.Mtr  Build up area – 1,39,885.78 Sq.Mtr

### **Current status of the Project**

The project proponent planned to construct eight towers for residential apartments out of which two towers were completed. The construction work was stopped in the mid of civil work of remaining six towers. Thereafter no work is carrying out at present in project site. Nearly 30 families are residing in one of the completed towers. The project proponent is trying to overcome all constraints for completing the remaining work of all towers.



# **COMPLIANCE REPORT**

## **PART A**

### **SPECIFIC CONDITIONS**

### **CONSTRUCTION PHASE**

**PART A – Specific Conditions**

<b>1</b>	<b>“Consent for Establishment” shall be obtained from Kerala State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site</b>
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As per the statute, the project proponent had applied at Kerala State Pollution Control Board (KSPCB) for Establishment before the construction started. Thereafter the project proponent had applied at KSPCB for consent to operate. The application of consent for operate is attached as **Annexure No.1**

<b>2</b>	<b>The road along the park is not required and can be converted into pedestrian. The outer road should be widen to minimum 9.0 m. Revise the layout plan accordingly</b>
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The project proponent had redrawn the road along the park as walk way as per the direction of competent authority. The outer road was widened to 9m as suggested by EAC. The layout plan was revised by the project proponent with suggested changes. The copy of conceptual plan is attached as **Annexure No.2.**

<b>3</b>	<b>The storm water drainage shall be worked out after analyzing the contour levels of the site and the surrounding area and the carrying capacity of the storm drains and their outfall.</b>
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To know the topography of project site, the project proponent had conducted contour survey. The drainage all along the project site was planned after analyzing the contour lines in and around the project site. The slope of the project is towards thodu flowing near to the project site. The project proponent constructed well defined drainages with 1 m width and 0.90 m. depth.

<b>4</b>	<b>The total height of the building shall not be more than 60 m due to the non availability of sufficient fire fighting facilities in the area.</b>	<b>Complied</b>
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In the proposed project, the project proponent had planned to construct eight towers. The maximum height of the tower was restricted to 58 meters due to the non availability of sufficient fire fighting facilities in the area.

5	<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, crèche etc. The housing may be in the form of temporary structures to be removes after the completion of the projects.</b>	<b>Complied</b>
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The civil work contractor had setup a well labour camp during the period of its civil work at Kakkanad 2 Km away from the project site. The maximum number of labours in construction period was eighty only. The contractor had provided fuel for cooking, temporary toilets, safe drinking water and medical health care to the labours. The photograph of facilities provided in project site and labour camp was attached as **Plate No.1.**

6	<b>A First Aid Room will be provided in the project both during construction and operation of the project.</b>	<b>Complied</b>
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The project proponent had set up a temporary first aid room at the construction site under the supervision of a qualified nurse. The First Aid facilities are provided as per the guidelines mentioned in BOCW (Building and other construction Workers Act). The photograph of the First aid Room is provided in **Plate No.2.** A brief detail of First Aid Facility is mentioned in **Table No.1.** To aware the labours various programmes were conducted in project site. The photograph of awareness programme is provided as **Plate No.3.**

**Table No.1 Details of First Aid facility at construction site**

Sl. No.	First Aid facility Available
1.	Oxygen cylinder
2.	Various stretchers
3.	Suction Apparatus
4.	Pulse Oximeter
5.	Sphygmomanometer
6.	Injection – T.T, DNS
7.	Betadine gargle mint

8.	Refresh eye drop
9.	Spray – voline
10.	Digital thermometer etc

<b>7</b>	<b>All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.</b>	<b>Complied</b>
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The project proponent did not excavate earth in the project site. No basement for parking and other utility services were planned in the instant project therefore topsoil was too less in the project. The cutting and filling was not necessary due to the topography and building plan. However the project proponent developed a landscape area within the project site. The photograph of landscape area is attached as **Plate No.4**.

<b>8</b>	<b>Disposal of muck during construction phase should not create any adverse effect on the neighboring 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.</b>	<b>Complied</b>
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The muck was safely disposed by the project proponent with the help of a responsible contractor. They could ensure that, the muck will not creating any adverse effect on the neighboring communities. The project proponent had taken necessary precautions for general safety and health aspects of people while disposing the muck.

<b>9</b>	<b>Soil and ground water samples should be tested to ascertain that there is no threat to ground water qualities by leaching of heavy metal and other toxic contaminants.</b>	<b>Complied</b>
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The leaching of heavy metals and other toxic contaminants to the earth will not happen because the construction was for residential purpose. However to distinguish the quality of ground water in the area, monitoring tests had conducted by a private laboratory approved by the Pollution Control Board. The copy of the monitoring result of ground water is given in **Annexure No.3**.

The project proponent had monitored the soil to check whether the construction activity degraded the parameters of soil.

<b>10</b>	<b>Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate water sources and the dumb sites for such materials, must be secured not that they should not leach in to the ground water.</b>	<b>Complied</b>
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As part of conservation of soil and water, the project proponent had executed measures to prevent leach from the construction waste and metals used in construction site. All construction spoils and wastes were kept in a designated place. The Hazardous materials and its waste were keeping in a separate room. The project proponent was cautious to preserve the quality of soil and water. Therefore they could prevent contamination of water due to the improper disposal of construction spoils and other hazardous materials. The project proponent did not use bitumen for construction of road and other purposes.

<b>11</b>	<b>Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with the necessary approvals of the State pollution control Board.</b>	<b>Complied</b>
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The project proponent had provided a separate place to collect and keep the hazardous waste in the project site. The all hazardous waste generated during construction phase were disposed off as per applicable rules and norms and in consultation with State pollution control Board. The project had designated a temporary room of 16 sqm for keeping hazardous wastes. The spent oil and used oil filters were managed and handled by an approved agency.

<b>12</b>	<b>The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environmental (protection) prescribed for air and noise emission standards</b>	<b>Complied</b>
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The project proponent could obtain temporary electrical connection from KSEB during construction phase therefore the use of DG set was limited. To reduce air pollution and health risks of public and residents, the project proponent used generator sets with high efficiency. During construction period low sulphur diesel was not available in local market. The detail of DG sets used in construction site is provided below in the table.

**Table No.2 - Details of DG sets**

<b>Particulars</b>	<b>No. of Units</b>	<b>kVA</b>	<b>Avg. Consumption of diesel/Month</b>
<b>DG sets</b>	1	64	200 liters

<b>13</b>	<b>The diesel required for operating DG sets shall be stored in underground tanks and clearance from the chief Controller of Explosive shall be taken.</b>	<b>Complied</b>
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In construction phase, diesel was stored in appropriate barrels and kept in a safe room. Only designated person can access the diesel room. Since the project proponent could obtain temporary electrical connection from KSEB the consumption of diesel was too low. Since the volume of diesel consumption and storage was low, no clearance was obtained from Chief Controller of Explosive.

<b>14</b>	<b>Vehicles hired for brining 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</b>	<b>Complied</b>
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To check pollution through vehicles used in the project site, the project proponent instructed all vehicles owners to submit copy of pollution check test at office. All vehicles playing in the site were in good condition and had a valid pollution check certificate from an approved agency. In addition that, assured transportation of all vehicles are operated only during day time and in non – peak hours.

<b>15</b>	<b>Ambient noise levels should confirm to residential standards both during day and night as per Noise Pollution (control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated</b>	<b>Complied</b>
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standards by CPCB/KSPCB.	
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One of the main health risks of labours during the period of construction is the high level of RSPM 10 and 2.5 and noise. The project had taken various measures to reduce the problems some of the measures are given below.

1. Spraying of water during summer season
2. Covered vehicles for the transportation of materials
3. Wheel washing of vehicles
4. Ensure that, all vehicles are in good condition and obtained certificate for pollution check
5. Limited work during night time
6. Ensure that all building equipments are in good condition

Copy of the monitoring results of ambient air and noise (monitoring done by Kerala State Pollution control Board approved laboratory) is given in **Annexure No.4 & 5**.

To maintain the ambient noise level as residential standard during day and night as per Noise Pollution (control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase through an approved laboratory. The results are well within the limits.

For immediate reference the monitored value of ambient air is given in

**Table No.3- Details of Ambient Air**

Parameter	Value In 2017	Standard
Particulate matter (<10microns)	62.3	100
Particulate matter (<2.5 microns)	24.7	60
Sulphur dioxide	<2	80
Oxides nitrogen	<2	80

<b>16</b>	<b>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.</b>	<b>Complied</b>
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Even though the provision of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003, was not applicable to the instant project, the project proponent had used building materials made with fly ash as maximum as possible.

<b>17</b>	<b>Ready mixed concrete must be used in building construction.</b>	<b>Complied</b>
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To reduce noise and air pollution and to conserve water and to reduce the wastage of construction materials, the project proponent used Ready mixed concrete in the site for building construction. This could help to reduce the noise and pollution level.

<b>18</b>	<b>Storm mixed control and its re- use as per CGWB and BIS standards for various applications</b>	<b>Complied</b>
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As part of water conservation, the project proponent had constructed a portable tank with the capacity of 10 KL for rain water harvest at the site. The stored storm water was used for curing the building. The treated water from STP in operational phase will be used for flushing and gardening purpose.

<b>19</b>	<b>Water demand during construction should be reduced by use of pre - mixed concrete, curing agents and other best practices referred.</b>	<b>Complied</b>
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As part of water conservation, the project proponent had used Pre mixed concrete and curing agents during civil work of project. The project had constructed rain water harvesting tank with the capacity of 10KL for the tower. By adopting these measures, the project proponent could save a considerable amount of water during construction and operational phase of the residential project.

<b>20</b>	<b>Permission to draw ground water shall be obtained from the competent Authority prior to construction/ operation of the project.</b>	<b>Complied</b>
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As per the Ground Water Authority, the State of Kerala has not notified and therefore there is no such procedure of taking permission for ground water abstraction. The project proponent did not dig well in project site.

<b>21</b>	<b>Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water</b>	<b>Complied</b>
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The project had installed dual plumbing lane to avoid contamination of water and to separate grey and black water from the source. This will help in the recycling process of used water. The grey and black water will be treated at STP for reuse in the project site at its operational phase.

<b>22</b>	<b>Fixture for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.</b>	<b>Complied</b>
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To reduce water consumption, all the sanitary equipments selected on the basis of its water consumption efficiency. All taps and showers are low flow and high pressure. All toilets are selected on the basis of its dual flushing mechanisms. Through these water efficiency fixtures, a considerable volume can be saved.

<b>23</b>	<b>Use of glass may be reduced by up-to 40% to reduce the electricity consumption and load on air- conditioning. If necessary, use high quality double glass with special reflective coating in windows.</b>	<b>Complied</b>
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The project proponent used glass materials below 40% in its construction. This could help to reduce electricity consumption and load on air – conditioning. Only high quality double glass with special reflective coating is used where it is necessary. Since this project is for residential apartments glasses were used for window purpose only.

<b>24</b>	<b>Roof should meet prescriptive requirement as per energy Conservation building code by using appropriate thermal insulation material to fulfill requirement</b>	<b>Will be complied</b>
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To reduce the effect of heat, the project proponent planned to apply and install thermal insulation materials instead of plastering using with cements, could not finish the construction project due to various reasons.

<b>25</b>	<b>Opaque wall should meet prescriptive requirement as per energy Conservation building code which is proposed to be mandatory for all air conditioned spaces while it is inspirational for non air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement</b>	<b>Will be complied</b>
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The project is a residential building therefore most of the rooms will be separated by solid bricks. This will reduce the load of air conditions installed in each houses. The opaque wall may construct with solid cement bricks, wooden materials and glasses. At present the civil work of 6 towers is yet to complete.

<b>26</b>	<b>The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as energy Conservation building code protection measures form lighting etc.</b>	<b>Complied</b>
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The building design has good structural stability to face all situations including natural disasters like earthquake in zone III , as stipulated under Part – 6 ( Structural Design) of the National Building Code of India, 2005 and other relevant codes. Lightning conductor will install on top of the project , electrically bonded using a wire or electrical conductor to interface with ground or "earth" through an electrode. This will protect the structure in the event of lightning strike. All fire fighting equipments will be provided in the project to face an emergency situation. The copy of structural safety is attached as **Annexure No.6**.

<b>27</b>	<b>Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.</b>	<b>Complied</b>
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To monitor the stipulated conditions in the Environment Clearance Order, the project had formed an Environment Monitoring Cell (EMC). The detail of the monitoring cell is given

below in the table. The project is very cautious to keep its surroundings as it is for environmental sustainability.

**Table No 4 - Details of Environment Monitoring cell**

<b>Name of Posts</b>	<b>Name of Members</b>
Sandeep Mehta (M D)	Head of the committee
Dilip Khivsara (Laisoning Head)	Member
Santhosh Kumar (General Manager, Kochi)	Member

<b>28</b>	<b>Under the provision of Environment (protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environment clearance.</b>	<b>Noted</b>
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The project proponent started its construction only after obtaining deemed Environmental Clearance. The project proponent is very cautious to execute all conations stipulated in the Environmental clearance order in a good manner.

# **COMPLIANCE REPORT**

## **PART A**

### **SPECIFIC CONDITIONS**

#### **OPERATION PHASE**

**OPERATION PHASE**

<b>01</b>	<b>The installation of Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% gray water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the state Pollution control Board. Necessary measures should be made to mitigate the odour problem from STP.</b>	<b>Complied</b>
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The project proponent installed STP with capacity of 400 KL/day for treating sewage and other domestic waste water. At present there are only less than 30 families residing. Therefore no sewage is generated from the project site to operate STP. The adequacy report of the STP by an independent expert will be conducted before its operation. The treated water from STP will be reused for flushing and gardening. The STP is located at ground floor. Suitable mechanical ventilation system with adequate capacity is provided in the said area. This will help to mitigate odour problem. All gray and black water is channelized to STP. To have a better functional and logistic design of sewage treatment one centralised plant is established using MBBR technology.

<b>02</b>	<b>The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed of to the approved sites for the land filling after recovering recyclable material.</b>	<b>Complied</b>
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The handling and management of solid waste generated from the project site is progressing under the guidelines of Rules issued in 2016. The project proponent has installed colour coded bins to collect and segregate the solid wastes. The non bio degradable solid waste is being sold to the local vendors. Bio degradable waste is handled within the project site. No solid waste will generate from the proposed residential project for land filling.

<b>03</b>	<b>Diesel power generator sets proposed as source of back-up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (protection) act, 1866. The height stack of DG sets should be equal to the height needed</b>	<b>Complied</b>
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	<b>for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution control Board.</b>	
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**Table No.5 - Details of stack of DG sets**

<b>Sl.No.</b>	<b>Capacity of DG sets</b>	<b>Height of chimney (In meters)</b>
<b>1</b>	180 kVA x1nos	6 m.

The specification of installed DG set in the project site is mentioned in below table. To reduce amplification of sound the DG set is enclosed type and confirmed to the rules applicable. To reduce air pollution, the project proponent initiated steps to use low sulphur diesel to reduce air pollution but it is not available in the market. However the DG set is high efficiency with low emission of pollution. The location of DG set is approved by Kerala State Pollution control Board.

<b>04</b>	<b>Noise should be controlled to ensure that it does not exceed the prescribed standards. During the night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.</b>	<b>Complied</b>
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Since it is a residential building project, the main sound generates only from the playing of vehicles of house owners. To monitor the noise level noses were tested by a Laboratory approved by Kerala State Pollution Control Board. The results were under 75 db (A). The result is attached as **Annexure No. 5**. No works were carrying out at midnight during its construction phase.

<b>05</b>	<b>The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulars and noise.</b>	<b>Complied</b>
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As per the condition stipulated and to enhance the aesthetic value, the project proponent planted many local species along the periphery of the project site. The Green belt can reduce the pollutant levels at air; this can also perform a barrier to arrest the

dust from outside to the project site. Many plants debilitated due to the lack of proper care and protection. The details of planted species are Fan palm, Golden Bamboo, Clerodandrm, Korean Lawn etc.,

<b>06</b>	<b>Weep holes in the compound wall shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.</b>	<b>Complied</b>
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The project proponent did not excavate earth for the construction of basement or compound wall. There is no major contour level difference in its topography therefore weep holes in compound wall was not necessary. The project proponent provided adequate wholes on compound wall for natural drainage of rain water in the catchment area during the monsoon period.

<b>07</b>	<b>Rain Water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run-off, pre- treatment must be done to remove suspended matter, oil and grease. The bore well for rain water recharging should be kept at least 5 mtrs. Above the highest ground water table.</b>	<b>Complied</b>
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As part of roof run off harvesting, the project proponent has constructed two tanks with cumulative capacity of 130KL. This can be used as a water conservation measure during operational phase of the project. The rain water harvesting through recharge pits is not feasible due to the location of high ground water table within the site. Since there is no plan to collect surface runoff the project didn't construct chamber for pre – treatment to remove suspended matter for harvesting storm water run- off.

<b>08</b>	<b>The ground water level and its quality should be monitored regularly in consultation with Central Ground water Authority.</b>	<b>Complied</b>
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To assure the quality of ground water the project proponent regularly monitor ground water samples with the help of private laboratory approved by Kerala State Pollution Control Board. The result of monitored water sample is attached as **Annexure No.3**.

<b>09</b>	<b>Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space</b>	<b>Complied</b>
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should be utilized.	
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The proposed project has taken all measures for the easy movement of vehicles near the entry and exit points from the roads adjoining the project site and provided enough parking spaces for vehicles in the residential project. There are two gates in frontage of the project. At present the project proponent is using only one gate due to the low number of occupants. Sufficient space for two wheelers and four wheelers of residents and guests were provided inside the project site. No public space is proposed for parking

Provision for parking space is made available in ground floors

1. All internal roads have minimum 6.0 mtr. Width for easy and smooth vehicular movement within the project premises.
2. Total 4 wheeler parking provided = 1337 cars
3. Total parking provided for two wheelers = 334 two wheelers

10	<b>A report on the energy conservation measures confirming to energy conservation norm finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials &amp; technology, R &amp; U Factors etc, and submit the Ministry in three months time.</b>	<b>Noted</b>
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The project proponent is yet to prepare a report on the energy conservation measures confirming to energy conservation norm finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors.

11	<b>Energy conservation measures like installation CFLs/TFLs for the lightening the area outside the building should be integral part of the project design and should in the place before project commissioning. Use 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. Use of solar panels may be done to the extent possible.</b>	<b>Complied</b>
----	--	-----------------

As part of energy conservation, the project proponent is using a wide range of LED and CFL lights. The discarded LEDs/CFLs/TFLs will be properly collected and disposed off for recycling as per the prevailing guidelines to prevent mercury contamination. The electrical lights of common area are being regulated by effective management. The project



proponent could not complete the construction project. To conserve energy, the project proponent will incorporate solar energy after obtaining necessary permissions and approvals from various competitive authorities.

<b>12</b>	<b>Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.</b>	<b>Complied</b>
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The project proponent has installed STP with the capacity of 400 KLD. To prevent odour problem from STP, the project proponent had adopted following measures

1. Proper design with the consultation of experienced STP suppliers
2. Regular cleaning of bar screen
3. Assure disused aeration in equalization tank
4. Regular maintenance of Sewage Treatment Plant

<b>13</b>	<b>The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation. Landscape plan to be revised accordingly.</b>	<b>Complied</b>
-----------	--	-----------------

To allow proper movement of fresh air, ventilation and natural light, the project provided 10 meters between each towers. The natural light helps to reduce energy consumption. The landscape plan was revised accordingly.

**COMPLIANCE REPORT**

**(GENERAL CONDITIONS)**

**PART B**

**PART – B GENERAL CONDITIONS**

<b>01</b>	<b>The proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.</b>	<b>Complied</b>
-----------	--	-----------------

The status of compliance towards the conditions stipulated in Environment Clearance order is being submitted along with the monitoring data to the Regional office of MoEF, the same is being submitted to the SPCB. The project proponent has uploaded compliance reports and monitoring results in the website of company, same can be viewed at [www.jainhousing.com](http://www.jainhousing.com). The project proponent had conducted monitoring of air, water and noise regularly.

<b>02</b>	<b>Officials from the regional office of MoEF&amp;CC would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all entire document submitted to MoEF&amp;CC should be followed to the CCF, Regional office of MoEF, Bangalore.</b>	<b>Noted</b>
-----------	--	--------------

The project proponent executed all possible measures for environment protection. The project proponent is keeping a file for MoEF & CC and environmental conservation activities. The project is being extended all support to the officials from the regional of MoEF&CC for their monitoring on environmental safeguards implemented in the project site.

<b>03</b>	<b>In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this ministry.</b>	<b>Noted</b>
-----------	--	--------------

The project will approach Expert Appraisal Committee for fresh Environmental Clearance in case of any change(s) in the scope of the project

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

The project proponent is glad to execute all possible measures and safeguards in the project site, if the ministry found it necessary.

05.	All other statutory clearances such as the approvals for storage of Diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and wild life (Protection) Act, 1972 etc. Shall be obtained, as applicable by project proponents from the restive competent authorities.	Complied
-----	--	----------

The project proponent has obtained clearance/ permission from relevant agencies including town planning authority before commencement of work. NOC from Civil aviation department is attached as **Annexure No.7**. The NoC from Air Port authority is attached as **Annexure No.8**, the Environmental Clearance is attached as **Annexure No.9**. The building permit is provided at **Annexure No. 10**.

06.	These stipulation would be enforced among others under the provision of Water (Prevention and control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act, 1981, The Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Noted
-----	--	-------

All stipulations is being enforced under existing Acts, Rules, Notifications and Government Orders.

07.	The project proponent should Advertise in at least two local Newspapers widely circulated in the region. One of which shall be in the vernacular language informing that the project has been accorded Environmental clearance and copies of clearance letters are available with State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest & Climate Change at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . The advertisement should be made within seven days from the date of receipt of the clearance	Complied
-----	---	----------

	<b>letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore .</b>	
--	---	--

The project proponent had advertised in two local Newspapers widely circulated in the region within the stipulated time period. The advertisement published in English and Malayalam News paper.

<b>08.</b>	<b>Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation v/s Union of India in Writ Petition (Civil) No. 460 of 2004 as may be application to this project.</b>	<b>Noted</b>
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<b>09.</b>	<b>A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ Municipal corporation, Urban Local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal, the clearance letter shall also be put on the website of the company by the proponent.</b>	<b>Complied</b>
------------	--	-----------------

A copy of Environmental clearance letter submitted to the local self Government. The project proponent has uploaded the environmental clearance order in the company website.

<b>10.</b>	<b>The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&amp;CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</b>	<b>Complied</b>
------------	--	-----------------

The project proponent has uploaded the status of compliance towards the conditions stipulated in Environment Clearance Order and monitored data in [www.jainhousing.com](http://www.jainhousing.com). A display board was placed at a convenient location near the main gate of the company in the public domain containing ambient air and stack emission data.

11.	<b>The environmental statement for each financial year ending 31<sup>st</sup> March in Form –V as is mandate to be submitted by the project proponent to the concerned Sate Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of Compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&amp;CC by email.</b>	<b>Complied</b>
-----	--	-----------------

The project proponent could not continue the construction activity after completion of two towers. The environmental statement for financial year ending 31<sup>st</sup> March in Form – V was submitted at Kerala State Pollution Control Board. Thereafter project proponent could not continue to submit environmental statement in form V at respective PCB.

# PLATES

Plate No.1



Drinking and Rest room



Facilities for labours - housing



Plate No. 2



First Aid Room

Plate No. 3



Awareness programmes



**Plate No.4**



**Landscaping area**

# Annexure

## Annexure No.1

**Form IVC/IC**

**KERALA STATE POLLUTION CONTROL BOARD**

**APPLICATION FOR CONSENT/AUTHORISATION/REGISTRATION  
(RESIDENTIAL ESTABLISHMENT)**

**PART I**

**NAME AND ADDRESS OF ESTABLISHMENT:**

JAIN HOUSING & CONSTRUCTIONS Ltd  
 Project at Jain Tuffnel Park, Phase-I, Block 4 & 5, Kakkanad  
 / H.O - JAIN HOUSING AND  
 CONSTRUCTIONS LTD  
 G 361 MAIN AVENUE  
 PANAMPILLY NAGAR  
 COCHIN 682036

I am the occupier of above industry/establishment. I hereby apply for clearance/s under :  
*tick appropriate cells*

NAME OF STATUTE	ESTABLISH	OPERATE	RENEW
		✓	

• The entries in the application/s are true to the best of my knowledge, information and belief. I have signed hereunder, at the end of the application and on enclosure in affirmation of that.

• I undertake to furnish any information, explanation and/or clarification within 15 days of it being called for to make my application complete. I understand that the date on which the application is made complete in all respect will only be counted as the date of the application.

• I agree to abide by the conditions of the Consent/Authorisation/Registration and the pertinent legal provisions.

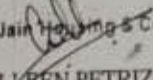
• I undertake to render access to functionaries and empowered officers of the Board to inspect the industry/establishment and its premises and peruse records thereof.

• Any change in line of activity/pollution load will be effected only after obtaining the Consent/Authorisation/Registration for which a fresh application will be made.

1

Place : ERNAKULAM I

Date : 25/08/2016

For Jain Housing & Construction Ltd  
 Signature :   
 Name : COLLEEN PETRIZ  
 Designation : BRANCH HEAD  
 Authorized Signatory

**PART II**  
**GENERAL INFORMATION**

1.

	REGISTERED OFFICE ADMINISTRATIVE OFFICE	OCCUPIER
Postal Address	Project at Jain Tuffnel Park, Phase- I, Block 4 & 5, Kakkanad / H.O - JAIN HOUSING AND CONSTRUCTIONS LTD G 361 MAIN AVENUE PANAMPILLY NAGAR COCHIN 682036	JAIN HOUSING AND CONSTRUCTIONS LTD G 361 MAIN AVENUE PANAMPILLY NAGAR COCHIN 682036
PIN	682030	682036
Telephone	0484-2316111	0484-2320333
Fax	-	-
e-mail	colleen@jainhousing.co.in	colleen@jainhousing.co.in
Website	-	-

2.

	OWNERSHIP	AREA IN SQUARE METERS	ADDRESS OF LESSOR, IF ON LEASE
Built up area	-	34576.26	M.J Louiz, Indira Louiz, Sunitha Elizabeth George, Mukkadayil veedu, Ernakulam
Total area	-	35335.54	-
Survey No.	485/1	Ward NO. & Name	11
Village	KAKKANAD	Panchayat/ Municipality/ Corporation	Thrikakara
Taluk	KANAYANNUR	District	ERNAKULAM I

3.

Management	Public Limited Company
Category	ORANGE

## 4. Particulars of last clearance/s obtained :

CLEARANCE	GRANT/ REFUSAL, No., Date, Validity
Consent Under Water Act	NA
Consent Under Air Act	NA
ICE/ICO/ICO(R)	NA
Authorisation under BMW Rules	NA

5. Date of Commissioning: Dec/2016  
(if new, anticipated date)

## 6. Nearest building/water body within 100m:

	OWNERSHIP , USE ,DISTANCE, in m (to be marked on site plan)
From The Building	Residential-40Mtr
From Effluent Treatment Plant	Residential-80Mtr
Dug well/tube/pond	NA
Stream/river/lake/backwater/sea	Canal-3.5Mtr

7. Total occupants/staff: 304 Flats / 1064 Occupants(152-2 BHK,152-3BHK)

8. Laundry: NO /round the year

9. Kitchen: YES

10. Number of staff quaters within the premises: NA  
Number of residents: 5

11. Gross Fixed Capital Investment(Rs in Lakhs): 4088.79



AMOUNT	MODE OF PAYMENT	PERIOD
135000.0	Offline 135935 16/08/2016	/
385000.0	Offline 153616 03/07/2012	

### PART III

#### WASTE WATER MANAGEMENT

##### 1. Water consumption details:

Sl.No.	PURPOSE	CONSUMPTION l/d
1	Domestic	38000.0
2	Others Toilet Flushing	34000.0
3	Others Horticulture	50000.0
4	Others Plantation	50000.0

##### 2. Source/s of water with quantity: Bore well& Open Well,192

##### 3. Effluent treatment details:

S.No	Uses	Effluent Generation	Treatment Arrangement Status	Treatment Details
1	Domestic Effluent	154.0	Yes	STP

##### 4. Effluent quantity and quality:

OUTLET NUMBER	QUANTITY m3/d	QUALITY			RECIPIENT BODY
		PARAMETER	UNIT	CONCENT- RATION	
1	154	BOD	Mg/Ltr	30	Reuse Maximum and Soak pit
1	154	SS	Mg/Ltr	100	Reuse Maximum and Soak pit
1	154	Oil & Grease	Mg/Ltr	10	Reuse Maximum and Soak pit



500 Ltr	2	Mild steel	6	100mm	100mm	3	One Stack Attached to DG set
---------	---	------------	---	-------	-------	---	------------------------------

## 3. Emission Details:

Stack No.	Stack Name.	Design Flow Nm <sup>3</sup> /h	Concentration in mg/Nm <sup>3</sup> , at 12% CO <sub>2</sub> correction				
			PM	SO <sub>2</sub>	NO <sub>x</sub>	CO	Others

## 4. Emission control &amp; monitoring:

Stack No.	Stack Name.	Port Hole (Y/N)	Platform (Y/N)	Ladder (Y/N)	On-Line Monitoring		Sources	Control Measures
					Continuous (Y/N)	Periodic (Y/N)		

## NON-HAZARDOUS WASTE MANAGEMENT

7

Category	Quantity	Details of storage treatment & disposal
Garbage	18	Bio Bin/ Municipal service

2. Green-belt details:  
(also to be shown in site plan)

Proposed

3. Details of litigation pending, if any, against pollution due to your establishment:

Nil

4. Details of separate energy meters, if provided, for pollution control equipments:

Will be Install

5. Details of stand-by power, if provided, for pollution control equipments:

Common facility

6. Any other pertinent matter:

Nil

For Jain Housing &amp; Construction Ltd

Signature:

Name:

COLLEEN PETER

Accompaniments :

Annexure No.2

CONCEPTUAL PLAN



Conceptual plan of project



## Annexure No.3

**TEST REPORT**

Test Report No: SEAAL/1712/WA/R004	Date: 09.12.2017	Page 1 of 1
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**CUSTOMER DETAILS**

Customer Details	Name & Address	M/s Jain Housing and Construction Ltd. Thrikkakkara, Kakkanad, Ernakulam District.
Location of Site	Survey No	483/14, 484/7, 485/1
	Village	Kakkanad
	Taluk	Kanayannur
	District	Ernakulam
	State	Kerala
Customer Reference	---	

**SAMPLE DETAILS**

Sample Code	SEAAL/1712/WA/S004	Sample Received On	04.12.2017
Sample Name	Water	Sampling Procedure	---
Sample Description	Open Well	Sampling Location	Project Site
Identification By Customer	---	Sample Condition	Good
Sampled On	04.12.2017	Test Started On	05.12.2017
Sampled By	Customer	Test Completed On	09.12.2017

SL NO	TEST PARAMETER	TEST METHOD	UNITS	RESULT	ACCEPTABLE LIMIT (IS 10500 - 2012)
01	Colour	IS 3025 Part 4: 1983 RA 2012	Hazen	1.00	5.00 (Max)
02	Odour	IS 3025 Part 5: 1983 RA 2012	---	Agreeable	Agreeable
03	Turbidity	IS 3025 Part 10: 1984 RA 2012	NTU	0.80	1.00 (Max)
04	pH	IS 3025 Part 11: 1983 RA 2012	---	6.71	6.50 - 8.50
05	Conductivity	IS 3025 Part 14:1984	µS/cm	1635	---
06	Total Dissolved Solids	IS 3025 Part 16: 1984 RA 2012	mg/L	1060	500 (Max)
07	Total Hardness (asCaCO <sub>3</sub> )	IS 3025 Part 21: 2009	mg/L	325	200 (Max)
08	Calcium (as Ca)	IS 3025 Part 40: 1991 RA 2009	mg/L	109	75.0 (Max)
09	Magnesium (as Mg)	IS 3025 Part 46: 1994 RA 2009	mg/L	12.9	30.0 (Max)
10	Chloride (as Cl)	IS 3025 Part 32: 1988 RA 2009	mg/L	119	250 (Max)
11	Total Alkalinity (asCaCO <sub>3</sub> )	IS 3025 Part 23:1986	mg/L	129	200 (Max)
12	Iron (as Fe)	IS 3025 Part 53: 2003 RA 2009	mg/L	0.4	1.00 (Max)
13	Sulphate (SO <sub>4</sub> )	IS 3025 Part 24:1986	mg/L	228	200 (Max)
14	Total Coli form Bacteria	IS 1622 - 1981 RA 2009	---	9	Absent/100 ml
15	E coli	IS 15185: 2002	---	Absent	Absent/100 ml

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

For and on behalf of  
Standard<sup>s</sup> Environmental & Analytical Laboratories

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

**Standard<sup>s</sup> Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB  
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

Monitoring result of water

## Annexure No.4

**TEST REPORT**

Test Report No:SEAAL/1712/EN/R002	Date: 09.12.2017	Page 1 of 1
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CUSTOMER DETAILS

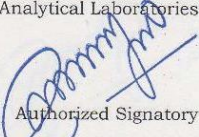
Customer Details	Name & Address	M/s Jain Housing and Construction Ltd. Thrikkakkara, Kakkanad, Ernakulam District
Location of Site	Survey No	483/14, 484/7, 485/1
	Village	Kakkanad
	Taluk	Kanayannur
	District	Ernakulam
	State	Kerala
Customer Reference	---	

SAMPLE DETAILS

Source of Sample	Ambient Air	Sample Code	SEAAL/1712/EN/S002
Location of Monitoring	Project Site	Sampled By	Laboratory
Date of Monitoring	04.12.2017	Test Started On	06.12.2017
Sample Received On	05.12.2017	Test Completed On	09.12.2017
Humidity	65 %	Sampling Procedure	IS 5182 Part V & XIV

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
01	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23: 2006 RA 2017	µg/m <sup>3</sup>	62.3	100
02	Particulate Matter (PM <sub>2.5</sub> )	EPA 40 CFR Part 50 Appendix - L	µg/m <sup>3</sup>	24.7	60.0
03	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part 2: 2001 RA 2017	µg/m <sup>3</sup>	<2.00	80.0
04	Oxides of Nitrogen (NO <sub>2</sub> )	IS 5182 Part 6: 2006 RA 2017	µg/m <sup>3</sup>	<2.00	80.0

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

For and on behalf of  
Standard<sup>s</sup> Environmental & Analytical Laboratories
  
Authorized Signatory

**Lalju P. N.**  
Laboratory Head
**Standard<sup>s</sup> Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB  
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

Monitoring result of air



## Annexure No. 5

**TEST REPORT**


Test Report No:SEAAL/1712/EN/R003	Date: 09.12.2017	Page 1 of 1
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CUSTOMER DETAILS		
Customer Details	Name & Address	M/s Jain Housing and Construction Ltd. Thrikkakkara, Kakkanad, Ernakulam District
Location of Site	Survey No	483/14, 484/7, 485/1
	Village	Kakkanad
	Taluk	Kanayannur
	District	Ernakulam
	State	Kerala
Customer Reference		---
SAMPLE DETAILS		
Source of Sample		Ambient Sound Level
Sample Code		SEAAL/1712/EN/S003
Location of Monitoring		Project Site
Date of Monitoring		04.12.2017

DAYTIME	RESULT	NIGHTTIME	RESULT
06.00 Hrs	37.2 dB (A)	23.00 Hrs	34.1 dB (A)
07.00 Hrs	39.8 dB (A)	00.00 Hrs	36.6 dB (A)
08.00 Hrs	44.0 dB (A)	01.00 Hrs	37.3 dB (A)
09.00 Hrs	47.5 dB (A)	02.00 Hrs	37.0 dB (A)
10.00 Hrs	49.8 dB (A)	03.00 Hrs	37.7 dB (A)
11.00 Hrs	52.9 dB (A)	04.00 Hrs	36.6 dB (A)
12.00 Hrs	50.2 dB (A)	05.00 Hrs	38.4 dB (A)
13.00 Hrs	49.4 dB (A)	RESULTS	
14.00 Hrs	49.8 dB (A)		
15.00 Hrs	50.2 dB (A)	Ambient Sound Level (Leq) Daytime	48.3 dB (A)
16.00 Hrs	51.3 dB (A)		
17.00 Hrs	51.7 dB (A)		
18.00 Hrs	46.3 dB (A)		
19.00 Hrs	42.9 dB (A)	Ambient Sound Level (Leq) Nighttime	36.9 dB (A)
20.00 Hrs	39.1 dB (A)		
21.00 Hrs	38.6 dB (A)		
22.00 Hrs	36.0 dB (A)		

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

For and on behalf of  
Standard's Environmental & Analytical Laboratories

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

**Standard's Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB  
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

**Monitoring result of Noise**

Annexure No. 6



No.8, Usha Street, Dr. Seethapathy Nagar,  
Velachery, Chennai-600 042.  
Phone : 91-044-42022362  
E-mail : sgbi2000@yahoo.co.in

"Krishna Giri", Ponnadi Lane,  
Jawans Cross Road, Ponnekara,  
Edappally, Cochin-682 041, Kerala.  
Phone: 0484-2802538  
E-mail : pkaravindan\_sgc@yahoo.co.in  
sgc.cons@gmail.com

Prof. Dr. P.K. Aravindan  
(Former Prof. in Struct. Engg. IIT Madras)  
Principal Consultant  
Mobile: 9656650022

Kochi  
Date: 10/07/2012

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that, the structural design of proposed Ground + 20 storey Residential Apartment for Shri. M J Louiz, Sunitha Elizabeth George & Indhira Louiz, Mukkadayil Veedu, Jain Housing & Construction Ltd, G-361, Main Avenue, Panampilly Nagar, Cochin-682036 in Survey nos: 483/14, 484/7, 485/1, in Kakkanand Village, Kanayanur Taluk, Ernakulam District is done as per provisions of relevant codes of Bureau of Indian Standards (IS 456:2000, IS 1893 (Part 1) : 2002, IS 875:1987) and the design is structurally stable.

Prof. Dr. P.K. Aravindan



(Architects, Civil, Mechanical, Electrical, Quality Control Engineers and Retrofit Strategists)

Structural safety Certificate




Annexure No.07

le: 2872050  
Copy should be addressed to the Flag Officer Commanding-in-Chief  
Southern Naval Command  
Kochi - 682 004  
14 Mar 12  
quoting: AO/747/HC  
✓ M/s Jain Housing & Constructions Ltd  
39/5177, 1<sup>st</sup> Floor, G-361  
Panampilly Nagar  
Kochi - 682 036

**ISSUE OF NOC FOR CONSTRUCTION OF BUILDING  
"TUFNELL PARK TOWER NO.1"**

1. Refer to your letter dated 04 Oct 11 regarding construction of New building Project "Tufnell park tower No.1" at Plot/Survey no. 483/14, 484/7 & 485/1 Kakkanadu & Kmakulam village Kanayannur Taluk, Ernakulam, Kerala.
2. The Indian Navy has no objection for the proposed above construction at a distance of 10.825 Km on a bearing of 055° from Aerodrome reference point up to a maximum height of 80.65 Mtrs AMSL including water tank, aerials, lift-well etc.
3. The building is to be marked by day and night during and on completion of construction as per ICAO standards so as to be visible from air. The details regarding the markings of building may be obtained from the Senior Air Traffic Control Officer, INS Garuda, Naval Base, Kochi. Tele 2873182.
4. A completion report is to be rendered to this Headquarters with a copy to Commanding Officer INS Garuda, Naval Base, Kochi.
5. This certificate is valid for a period of five years from the date of issue.
6. This NOC will be valid subject to clearance by Airport Authority of India, Cochin, Nedumbassery.

  
Copy to: -  
The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011  
The Corporation Secretary  
Office of the Corporation of Kochi  
Ernakulam, Kochi - 11  
The Commanding Officer  
INS Garuda  
The Managing Director  
Cochin International airport

(PVGK Nambiar)  
Commander  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

2872049

Reply should be addressed to the  
Flag Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

18 Sep 17

\* Quoting: AO/1089/HC

M/s Jain Housing  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 2" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

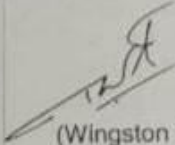
1. Refer to the following:-

(a) This office letter AO/746/HC dated 14 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 2" (Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 14 Mar 17 to 13 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 13 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

Encl:- As above

Copy to:-

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011



2872049

Reply should be addressed to the  
Flag Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

\* Quoting: AO/1083/HC

18 Sep 17

M/s Jain Housing  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 3" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

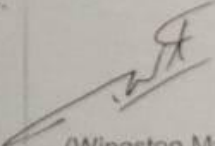
1. Refer to the following:-

(a) This office letter AO/744/HC dated 22 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 3"(Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 22 Mar 17 to 21 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 21 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

**Encl:-** As above

**Copy to:-**

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011

072049

Reply should be addressed to the  
Flag Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

Quoting: AO/1086/HC

26 Sep 17

M/s Jain Housing & ✓  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 4" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

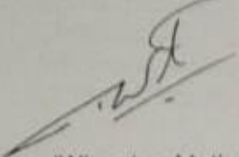
1. Refer to the following:-

(a) This office letter AO/745/HC dated 22 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 4"(Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 22 Mar 17 to 21 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 21 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

**Encl:-** As above

**Copy to:-**

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011

872049

Reply should be addressed to the  
Flag Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

Quoting: AO/1087/HC

18 Sep 17

M/s Jain Housing  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 5" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

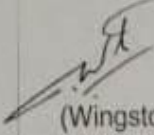
1. Refer to the following:-

(a) This office letter AO/741/HC dated 14 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 5"(Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 14 Mar 17 to 13 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 13 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

Encl:- As above

Copy to:-

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011

2049

should be addressed to the  
Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

Quoting: AO/1084/HC

18 Sep 17

M/s Jain Housing  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 6" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

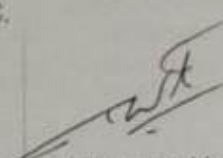
1. Refer to the following:-

(a) This office letter AO/740/HC dated 14 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 6"(Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 14 Mar 17 to 13 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 13 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

**Encl:-** As above

**Copy to:-**

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011



2049

should be addressed to the  
Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

18 Sep 17

Quoting: AO/1084/HC

M/s Jain Housing  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 6" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

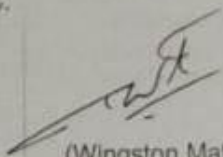
1. Refer to the following:-

(a) This office letter AO/740/HC dated 14 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 6" (Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 14 Mar 17 to 13 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 13 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

**Encl:-** As above

**Copy to:-**

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011

Ref: 2872049

Reply should be addressed to the  
Flag Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

Quoting: AO/1090/HC

18 Sep 17

M/s Jain Housing  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 7" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

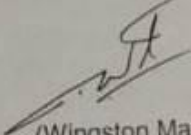
1. Refer to the following:-

(a) This office letter AO/742/HC dated 22 Mar 12 regarding the issue of No Objection Certificate (NOC) for construction of building project "Tufnell Park-Tower 7" (Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter quoted ibid is hereby extended for a further period of three years i.e. from 22 Mar 17 to 21 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy certificate before 21 Mar 20, would render the NOC invalid and require submission of fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief

Encl:- As above

Copy to:-

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011

2872049

Reply should be addressed to the  
Flag Officer Commanding-in-Chief

Headquarters  
Southern Naval Command  
Kochi - 682 004

Quoting: AO/1091/HC

26 Sep 17

M/s Jain Housing & ✓  
Construction Ltd.  
G-361, Main Avenue,  
Panampilly Nagar  
Kochi-682 036

**EXTENSION OF NOC FOR CONSTRUCTION OF NEW BUILDING PROJECT  
"TUFNELL PARK-TOWER 8" SITUATED AT KAKKANAD, KANAYANNUR,  
ERNAKULAM BY JAIN HOUSING AND CONSTRUCTIONS LTD.**

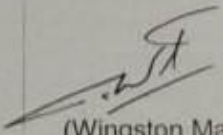
1. Refer to the following:-

(a) This office letter AO/743/HC dated 14 Mar 12 regarding the issue of No  
Objection Certificate (NOC) for construction of building project "Tufnell Park-  
Tower 8"(Copy Enclosed).

(b) Your office letter dated 24 Jun 17.

2. It is intimated that the validity of NOC issued vide this Headquarters letter  
quoted ibid is hereby extended for a further period of three years i.e. from 14 Mar 17  
to 13 Mar 20.

3. It is further intimated that non submission of completion report/ occupancy  
certificate before 13 Mar 20, would render the NOC invalid and require submission of  
fresh application for accord of NOC.

  
(Wingston Mathews T)  
Captain  
Command Aviation Officer II  
for Flag Officer Commanding-in-Chief


Encl:- As above

Copy to:-

The Chief of the Naval Staff  
(for DNAS)  
Integrated Headquarters of  
Ministry of Defence (Navy)  
New Delhi - 110 011

NOC Southern Naval Command, Aviation Officer

## Annexure No.8

		<b>भारतीय विमानपत्तन प्राधिकरण</b> <b>AIRPORTS AUTHORITY OF INDIA</b>	
NO: AA/SELNOC/HH Jain Housing and Construction Ltd G-361, Main Avenue, Panampilly Nagar, Ernakulam, Cochin Kerala 682036		Date: 25-02-2016 Valid Upto: 24-02-2021	
<b>No Objection Certificate for Height Clearance</b>			
1. This NOC is issued by Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR751 (E) dated 30th Sep. 2015 for Safe and Regular Aircraft Operations.			
2. This office has no objection to the construction of the proposed structure as per the following details:			
NOC ID :	CIAL/SOUTH/B/012216/119769		
Applicant Name :	Jain Housing and Construction Ltd		
Site Address :	483/14, 485/1, 484/7, 485/1, 485/1, Block 9		
Site Coordinates :	76 21 18.2-10 00 02.0, 76 21 18.2-10 00 02.5, 76 21 18.7-10 00 02.0, 76 21 18.7-10 00 02.5,		
Site Elevation in mtrs AMSL as submitted by Applicant:	14 M		
Permissible Top Elevation in mtrs Above Mean Sea Level(AMSL)	80.65M		
3. This NOC is subject to the terms and conditions as given below:			
a. The site-elevation and site coordinates provided by the applicant are taken for calculation of the permissible top elevation for the proposed structure. If, however, at any stage it is established that the actual data is different from the one, provided by the applicant, this NOC will become invalid and action under the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994 may be initiated by the concerned Airport Operator			
b. The Structure height shall be calculated by subtracting the Site elevation in AMSL from the Permissible Top Elevation in AMSL i.e Maximum Structure Height = Permissible Top Elevation - Site Elevation.			
c. The issue of the 'NOC' is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994.			
d. No radio/TV Antenna, lighting arresters, staircase, Muntree, Overhead water tank and attachments of fixtures of any kind shall project above the Permissible Top Elevation of 80.65M, as indicated in para 2.			
e. The use of oil fired or electric fired furnace is mandatory, within 8 KM of the Aerodrome Reference Point.			
Page 1/2			
राजीव गांधी भवन Rajiv Gandhi Bhawan	सफदरजंग हवाई अड्डा नई दिल्ली-110003 Safdarjung Airport, New Delhi-110003	दूरभाष : 24832950 Phone: 24832950	





भारतीय विमानपत्तन प्राधिकरण  
AIRPORTS AUTHORITY OF INDIA

f. The certificate is valid for a period of 5 years from the date of its issue. If the construction of structure/Chimney is not commenced within the period, a fresh 'NOC' from the Designated Officer of Airports Authority of India shall be obtained. However, if construction work has commenced, onetime revalidation request, as per the rules, may be considered. The date of completion of the Structure should be intimated to this office.

g. No light or a combination of lights which by reason of its intensity, configuration or colour may cause confusion with the aeronautical ground lights of the Airport shall be installed at the site at any time, during or after the construction of the building. No activity shall be allowed which may affect the safe operations of flights

h. The applicant will not complain/claim compensation against aircraft noise, vibrations, damages etc. caused by aircraft operations at or in the vicinity of the airport.

i. Day markings & night lighting with secondary power supply shall be provided as per the guidelines specified in chapter 6 and appendix 6 of Civil Aviation Requirement Series 'B' Part I Section 4, available on DGCA India website: [www.dgca.nic.in](http://www.dgca.nic.in)

j. The applicant is responsible to obtain all other statutory clearances from the concerned authorities including the approval of building plans. This NOC for height clearances is to ensure the safe and regular aircraft operations and shall not be used as document for any other purpose/claim whatsoever, including ownership of land etc.

k. This NOC has been issued w.r.t. the Civil Airports. Applicant needs to seek separate NOC from Defence, if the site lies within their jurisdiction.

l. In case of any discrepancy/interpretation of NOC letter, English version shall be valid.

m. In case of any dispute w.r.t site elevation and/or AGL height, top elevation in AMSL shall prevail.

Chairman NOC Committee

Region Name: SOUTH

Address: General Manager Airports  
Authority of India, Regional  
Headquarter, Southern Region,  
Anna International Airport,  
Chennai-600027 (Tamil Nadu)

Email ID: [vomn.noc@aai.aero](mailto:vomn.noc@aai.aero)

Contact No: 044-22560046

1. APD, AAI, CTAL, Kerala - 683111
2. The secretary, corporation of Cochin, Ernakulam - 682011
3. File copy / NOCAS-2

Page 2/2

राजीव गांधी भवन  
Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली-110003  
Safdarjung Airport, New Delhi-110003

दूरभाष : 24632950  
Phone: 24632950

INDIA



NO: Madse/Noc/Retd  
Jain Housing and Construction Ltd

G-361, Main Avenue, Panampilly  
Nagar, Ernakulam, Cochin Kerala  
682036

भारतीय विमानपत्तन प्राधिकरण  
AIRPORTS AUTHORITY OF INDIA

Date: 25-02-2016

Valid Upto: 24-02-2021

### No Objection Certificate for Height Clearance

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DC ID :	CIAL/SOUTH/B/012216/117379
Applicant Name :	Jain Housing and Construction Ltd
Site Address :	483/14, 485/1, 484/7, 485/1, 485/1, Block 9
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Site Elevation in mtrs AMSL as submitted by Applicant:	14 M
Permissible Top Elevation in mtrs Above Mean Sea Level(AMSL)	80.65M

3. This NOC is subject to the terms and conditions as given below:

- The site-elevation and site coordinates provided by the applicant are taken for calculation of the permissible top elevation for the proposed structure. If, however, at any stage it is established that the actual data is different from the one, provided by the applicant, this NOC will become invalid and action under the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994 may be initiated by the concerned Airport Operator.
- The Structure height shall be calculated by subtracting the Site elevation in AMSL from the Permissible Top Elevation in AMSL i.e. Maximum Structure Height = Permissible Top Elevation - Site Elevation.
- The issue of the 'NOC' is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994.
- No radio/TV Antenna, lighting arresters, staircase, Muntree, Overhead water tank and attachments of fixtures of any kind shall project above the Permissible Top Elevation of 80.65M, as indicated in para 2.
- The use of oil fired or electric fired furnace is mandatory, within 8 KM of the Aerodrome Reference Point.

Page 1/2

राजीव गांधी भवन

Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली-110003

Safdarjung Airport, New Delhi-110003

दूरभाष : 24632950

Phone: 24632950



भारतीय विमानपत्तन प्राधिकरण  
AIRPORTS AUTHORITY OF INDIA

f. The certificate is valid for a period of 5 years from the date of its issue. If the construction of structure/Chimney is commenced within the period, a fresh 'NOC' from the Designated Officer of Airports Authority of India shall be obtained. However, if construction work has commenced, onetime revalidation request, as per the rules, may be considered. The date of completion of the Structure should be intimated to this office.

g. No light or a combination of lights which by reason of its intensity, configuration or colour may cause confusion with the aeronautical ground lights of the Airport shall be installed at the site at any time, during or after the construction of the building. No activity shall be allowed which may affect the safe operations of flights.

h. The applicant will not complain/claim compensation against aircraft noise, vibrations, damages etc. caused by aircraft operations at or in the vicinity of the airport.

i. Day markings & night lighting with secondary power supply shall be provided as per the guidelines specified in chapter 6 and appendix 6 of Civil Aviation Requirement Series 'B' Part I Section 4, available on DGCA India website: [www.dgca.nic.in](http://www.dgca.nic.in)

j. The applicant is responsible to obtain all other statutory clearances from the concerned authorities including the approval of building plans. This NOC for height clearances is to ensure the safe and regular aircraft operations and shall not be used as document for any other purpose/claim whatsoever, including ownership of land etc.

k. This NOC has been issued w.r.t. the Civil Airports. Applicant needs to seek separate NOC from Defence, if the site lies within their jurisdiction.

l. In case of any discrepancy/interpretation of NOC letter, English version shall be valid.

m. In case of any dispute w.r.t site elevation and/or AGL height, top elevation in AMSL shall prevail.

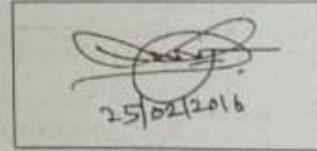
Chairman NOC Committee

Region Name: SOUTH

Address: General Manager Airports  
Authority of India, Regional  
Headquarter, Southern Region,  
Anna International Airport,  
Chennai-600027 (Tamil Nadu)

Email ID: [vonn.noc@aai.aero](mailto:vonn.noc@aai.aero)

Contact No: 044-22560046



TO :

1. APO, AAI, CIAL, Kerala - 683 111
2. Re Secretary, cap of Cochin, Ernakulam - 682011
3. File copy NOCAS-2

Page 2/2

राजीव गांधी भवन  
Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली-110003  
Safdarjung Airport, New Delhi-110003

दूरभाष : 24632950  
Phone: 24632950

NOC height clearance, Airport Authority of India



Annexure No.9

F.No. 21-59/2010-IA.III  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodhi Road,  
New Delhi-110 003.

Dated: 24<sup>th</sup> May, 2011

To  
M/s. Jain Housing and Construction Ltd.,  
11-Somasundaram Street,  
T. Nagar, Chennai - 600 017

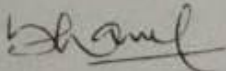
**Subject:** Environmental Clearance for construction of Group Housing project at Survey No. 483/14, 484/7, 485/1, Village Kakkanad, Panchayat Phrikkakara, Taluk Kanayannur, District Ernakulam, Kerala by M/s. Jain Housing and Construction Ltd. - Reg.

Dear Sirs,

This has reference to your application No. NIL dated 03.11.2010 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 and its subsequent amendments on the basis of the mandatory documents enclosed with the application viz., the Form-1 & 1A, Conceptual Plans to the Expert Appraisal Committee (EAC) constituted by the competent authority in its meeting held on 14<sup>th</sup> - 15<sup>th</sup> February, 2011.

2. It is, interalia, noted that the project involves the construction of Group Housing project on a plot area of 35,084.62 sq.m. The total built-up area is 1,39,885.78 sq.m. It is proposed to construct 1,216 dwelling units (1 BR-456 + 1BR +Study-456 + 2 BR = 304 Nos.) with Club area. Which will have 8 Towers (Lower ground floor + Upper Ground floor + 19 floors). The total water requirement is 538.30 KLD (fresh water -399.25 KLD). The capacity of STP proposed is 582 KLD. Treated waste water to be used for flushing of toilets-139.05 KL, horticulture-21KLD and nearby plantation-275.973 KLD. Total solid waste generation will be 2,420 Kg/day. The power requirement is 8,000 KVA. The total parking spaces proposed are for 1,337 cars + 334 two wheelers. Total cost of the project is Rs. 112.122 Crores.

3. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry hereby accord necessary Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification - 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:



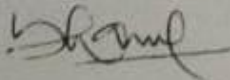
**PART A - SPECIFIC CONDITIONS**

**I. Construction Phase**

- (i) "Consent for Establishment" shall be obtained from Kerala State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) The road along the park is not required and can be converted into pedestrian. The outer road should be widen to minimum 9.0 m. Revise the layout plan accordingly.
- (iii) The storm water drainage shall be worked out after analyzing the contour levels of the site and the surrounding area and the carrying capacity of storm water drains and their outfall.
- (iv) The total height of the building shall not be more than 60 m., due to the non-availability of sufficient fire fighting facilities in the area.
- (v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (vi) A First Aid Room will be provided in the project both during construction and operation of the project.
- (vii) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- (viii) Disposal of muck during construction phase should 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.
- (ix) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (x) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- (xi) Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Kerala State Pollution Control Board.

*Sh. M. C.*

- (xii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- (xiii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- (xiv) 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 and should be operated only during non-peak hours.
- (xv) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ KSPCB.
- (xvi) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003.
- (xvii) Ready mixed concrete must be used in building construction.
- (xviii) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xix) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xx) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxi) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- (xxii) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- (xxiii) Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.
- (xxiv) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.





- (xxv) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xxvi) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.
- (xxvii) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- (xxviii) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

## **II. Operation Phase**

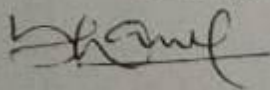
- i) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Kerala State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- ii) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- iii) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Kerala State Pollution Control Board.
- iv) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

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- v) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- vi) Deep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- vii) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
- viii) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- ix) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized. ROW inside the complex shall be minimum of 9 meter. Parking plan to be as per MoEF norms.
- x) A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.
- xi) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use 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. Use of solar panels may be done to the extent possible.
- xii) Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.
- xiii) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation. Landscape plan to be revised accordingly.

**PART - B. GENERAL CONDITIONS**

- i) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.



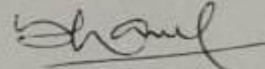


4. Officials from the Regional Office of MOEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bangalore.
5. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
6. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
8. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
9. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Kerala Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.
10. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
11. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
12. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The

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criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

13. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.




(Bharat Bhushan)  
Director (IA)

24.05.2011

Copy to:

- (1) The Secretary, Department of Environment, Government of Kerala, Thiruvananthapuram.
- (2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110 032.
- (3) The Member Secretary, Kerala State Pollution Control Board, Plamoodu Junction, Pattom Palace, P.O. Thiruvananthapuram - 695 004.
- (4) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bangalore - 560 034.
- (5) IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
- (6) Guard file.



(Bharat Bhushan)  
Director (IA)

Copy of EC order

## Annexure No.10

## MUNICIPAL COUNCIL, THRIKKAKARA

## APPENDIX C

[See Rule 11(3)]

**BUILDING PERMIT**

(REGULARISATION)

No. 2/Rg/2016-17

Date 15-06-2016

Ref:- Application dated 06-08-2015 from Sri/Smt M.J. Louiz, Sunita Elizabeth George,  
Indhira Louiz, Mukkadayil Veedu, Ernakulam

Permission is granted for the erection / re-erection / addition / alteration / demolition of building / hut /  
digging of well / Residential Apartments (specify the construction) in building  
No. \_\_\_\_\_ or near the building No. \_\_\_\_\_ in Survey No  
483/H, 484/H, 485/H Taluk Karayannoor, Kakkannad Village  
District Ernakulam for Residential

(specify the occupancy) purpose, subject to the conditions stated below:

- (1) Five Nos. POC and MDEF if required should be produced before
- (2) Completion of work.
- (3) \_\_\_\_\_
- (4) \_\_\_\_\_

Fees remitted ₹ 373,29,000-

(under Rs No. 01/11622500063-2697000)  
Rs No. 01/11622500064-30633000

Plinth area of the building is as follows:-

Basement Lower level Area (Carparking) - 27030.91 m<sup>2</sup>  
Ground Floor upper level Area ( " ) - 27030.91 m<sup>2</sup>  
First Floor Typical Floor Area Tower no  
Tower no: 1, 4, 5, 6, 7, 8 - 19 x 5316.9 = 101021.10  
Tower 2 & 3: 19 x 1964.04 = 37316.76  
Headroom 238.12  
192637.80 m<sup>2</sup>

Place : Thrikkakara  
Date : 15-06-2016



Signature and P.S. SHIBU  
SECRETARY  
THRIKKAKARA MUNICIPALITY

- Notes:- (1) The development permit or building permit unless otherwise provided under these rules, shall be valid for three years from the date of issue and may be renewed twice each for three years.
- (2) The application for renewal shall be submitted to the Secretary in white paper, typed or written in ink affixed with necessary court fee stamp and accompanied by copy of permit and approved plan.
- (3) The fee for renewal of permit shall be fifty percent of the prevailing permit fee.
- (4) The permits issued under the Kerala Building Rules, 1984 and remaining valid at the commencement of these rules shall be deemed to have been issued under these rules and may be renewed for like period and on like terms as a permit issued under these rules.

Copy of building permit