

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Poura Bhavan, Block 'FD'-415A, 4th Floor, Sector – III,

Salt Lake, Kolkata – 700 106

Telefax No. 033 2337 0268

Website : www.environmentwb.gov.in

No. 41043/EN/T-II-1/039/2015

Date : 22/12/2015

To
M/s. ASPS Developers LLP
'Ganapati Building'
68/2, Harish Mukherjee Road
Kolkata – 700 025

SUB. : Environmental clearance application for the proposed residential Complex "Flora Fountain" at 45, Christopher Road, KMC Ward No. 58, Kolkata – 700 046, West Bengal.

Sir,

This has a reference to your application for environmental clearance dated 23/06/2015 for the proposed residential complex "Flora Fountain" at 45, Christopher Road, KMC Ward No. 58, Kolkata – 700 046, West Bengal and presentation made by you before SEAC on 18/08/2015.

Based on your application for environmental clearance and presentation made by you, SEAC in its meeting dated 26.09.2015 has recommended a list of stipulated conditions for the up coming project.

In addition to the SEAC's observations, it has been decided by SEIAA in the meeting dated 05.12.2015 that the following issues are to be addressed appropriately while submitting sanctioned building plan for obtaining environmental clearance.

1. The project area should be delineated in Google-earth map (at resolution of 1:2500).
2. Revised water balance diagram to be submitted
3. Water meter to be installed at every inlet point of fresh water uptake, STP inlet & outlet including discharge point of treated water and regular records to be maintained.
4. Dedicated car washing area to be earmarked and car washing water to be collected and treated in STP. Provision for backup power for operation of STP during power failure should be made..
5. Microclimatic studies to be completed as per the indicative guidelines for high-rise building including fraction of covered area that can be illuminated by natural lighting and heat released per unit ground coverage due to AC/heating.
6. Building should be oriented for maximum natural ventilation and day lighting.
7. At least 15 KW of solar power to be generated and utilized in addition to the stand alone solar powered street lights.
8. Fire escape, evacuation proposal and means thereof, the refuge areas and floor levels in the building plan to be submitted

You are requested to prepare the construction plan incorporating those conditions before submission of the same for building plan approval. The sanctioned building plan may kindly be submitted in the secretariat of SEAC at Paribesh Bhavan, Salt Lake. The SEIAA shall consider the case only when it is ensured that the conditions listed in the enclosure have been properly addressed in the building plan.

Member Secretary, SEIAA

No. / EN/T-II-1/039/2015/1(1)

Date : / 12 /2015

Copy forwarded for information to the Secretary, State Level Expert Appraisal Committee.

Sd/-

Member Secretary, SEIAA

Relevant parts of the Minutes of the 109th SEAC Meeting for stipulating conditions for environmental clearance of proposed residential complex "Flora Fountain" by M/s. ASPS Developers LLP at 45, Christopher Road, KMC Ward No. 58, Kolkata 700046. Name of the Environmental Consultant : M/s. Ghosh, Bose & Associates (P) Ltd.

This has reference to the application for environmental clearance dated 21.07.2015 along with FORM I, FORM IA and other documents on the above referred project.

1. This is a proposal for construction of residential building comprising of 2 blocks of G+25 storied and total no. of flats are 342.
2. The above proposal has been considered in the 107th SEAC meeting held on 18.08.2015 & 109th SEAC meeting held on 26.09.2015.
3. Salient features of the proposed project are -

Land Area	: 17351.54 sqm.
Latitude & Longitude	: 22°32'54.00"N & 88°22'58.00"E
Expected Population	: 1760 persons fixed & 150 floating
Total Water requirement	: 303.38 KLD (Operation stage)
Fresh Water requirement	: 180.50 KLD (KMC supply)
Wastewater generated	: 216.6 KLD (to be treated in STP)
Treated Wastewater reused	: 122.88 KLD (Landscaping, Car & road washing & dual plumbing)
Treated Wastewater discharged	: 82.89 KLD (To KMC sewer)
Solid waste disposal	: 1078.50 kg per day (to be disposed off through on-site compost plant & KMC)
Total Built-up Area	: 60388.548 sqm. (including parking)
Ground Coverage	: 5654.262 sqm. (32.59% of land area)
Exclusive Tree Plantation Area	: 3479.70 sqm (20.05 % of land area)
Total Paved Area	: 3795.79 sqm. (21.87% of land area)
Total Softscape Area	: 5251.35 sqm. (30.26% of land area)
Water body area	: 2106.474 sqm. & 389.087 sq.m (14.38% of land area)
Plantation proposed	: 244 nos.
No. of solar street light proposed	: 25 nos.
No. of Parking Spaces proposed	: 570 nos.
Total Power requirement	: 1250 KW, CESC (at least 1% of total power requirement shall be met from solar power)
Backup Power	: DG Sets (3x500 KVA)


4. The State Level Expert Appraisal Committee, West Bengal, hereby, proposes the stipulated conditions for environmental clearance as per the provision of Environmental Impact Assessment Notification 2006 and the subsequent amendments, on the basis of above mentioned features along with other details submitted to SEIAA, subject to strict compliance of the terms and conditions (whichever applicable at building sanction stage) mentioned below.

Part A - SPECIFIC CONDITIONS

I. Construction Phase

Facility of labourers during construction: -

- i. Provision of drinking water, wastewater disposal and solid waste management should be ensured for labour camps. Water usage during construction should be optimized to avoid any wastage.


Secretary, State Expert Appraisal Committee, West Bengal

Relevant parts of the Minutes of the 109th SEAC Meeting for stipulating conditions for environmental clearance of proposed residential complex "Flora Fountain" by M/s. ASPS Developers LLP at 45, Christopher Road, KMC Ward No. 58, Kolkata 700046. Name of the Environmental Consultant : M/s. Ghosh, Bose & Associates (P) Ltd.

Selection of materials for better energy efficiency:-

- i. Use of energy efficient construction materials should be ensured to achieve the desired thermal comfort.
- ii. Design layout should ensure adequate solar access and ventilation. Proper planning and window design for daylight integration should be considered.
- iii. Fly Ash is to be used for construction as per Notification No. S.O. 763(E) dated 11.09.1999 amended vide Notification No. S.O. 979(E) dated 27.8.2003 and S.O. 2804(E) dated 03.11.2009 of the Ministry of Environment & Forests, Govt. of India.
- iv. Construction should conform to the requirements of local seismic regulations. The project proponent should obtain permission for the plans and designs including structural design, standard and specifications from concerned authority.
- v. Construction technologies that require less material and possess high strength should be adopted. Materials with low embodied energy and high strength should be used preferably.
- vi. The building will be constructed and provisioned to use natural sunlight to the maximum during the day time, during use.
- vii. Use of alternate building materials and alternate construction techniques should be considered apart from the conventional materials and methods. Use of hollow unit masonry should be considered.
- viii. Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. should be promoted. Solar energy should be used for outdoor lighting. Adequate no. of solar lights should be installed for external lighting as per norms. All common area lighting will be LED system.
- ix. Solar water heating arrangement will be done for water heating .
- x. Passive solar cooling to be incorporated in building design. Buildings should be oriented for ensuring natural ventilation and daylighting.
- xi. Proper insulation of roof should be provided to achieve desired thermal comfort. Use of light coloured, reflective roofs having an SRI (solar reflectance index) of 50% or more should be incorporated.
- xii. Use of high albedo or reflective pavements to keep parking lots, pavements and inside roads cool should be incorporated.
- xiii. Guidelines to the occupants should include usage efficiency measures such as energy efficient lighting and water efficient system.
- xiv. Reduce hard paving-onsite (open area surrounding building premises) and/or provide shade on hard paved surfaces to minimize heat island effect and imperviousness of the site.
- xv. Adequate open space, greenery and water bodies to be provided as per rules.
- xvi. Any proposed building with air-conditioning facility should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency. Use of chillers will be CFC & HCFC free.
- xvii. Restrict the use of glazed surface as per National Building Code 2005.

Water Body Conservation:-

- i. Water body of area 2106.474 sqm. & 389.087 sq.m should not be lined and their embankments should not be cemented. The water body is to be kept in natural conditions without disturbing the ecological habitat. The size & location of the water body should be shown in the building plan sanctioned by the competent authority.

Plantation Proposal:-

- i. The unit should strictly abide by The West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007. The proponent should undertake plantation of trees over at least 20% of the total area.
- ii. No tree can be felled without prior permission from the Tree Cutting Authority constituted as per the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Act, 2006 and subsequent rules.
- iii. The proponent should plant at least 244 trees as proposed. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iv. Provision for Roof Top Gardening is mandatory.

Water supply:-

- i. Water requirement during construction phase shall be met from KMC supply. Ground water should not be abstracted without prior permission from the competent authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.

Sewage Treatment Plant:-

- i. As per the proposal submitted by the proponent waste water shall be treated in septic tank to soak pit. Construction waste water to be collected in sedimentation trap with adequate retention time and to be reused.


Secretary, State Expert Appraisal Committee, West Bengal

Relevant parts of the Minutes of the 109th SEAC Meeting for stipulating conditions for environmental clearance of proposed residential complex "Flora Fountain" by M/s. ASPS Developers LLP at 45, Christopher Road, KMC Ward No. 58, Kolkata 700046.
Name of the Environmental Consultant : M/s. Ghosh, Bose & Associates (P) Ltd.

Sewage Treatment Plant:-

- i. As per the proposal submitted by the proponent, waste water shall be treated in STP. Treated waste water shall be partly reused for dual plumbing, landscaping, internal road and pavement cleaning etc. and rest will be discharged to KMC sewer.
- ii. Reuse of treated wastewater should be carried out as proposed.

Emission from Diesel Generator Set: -

- i. Noise barriers will be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards. Diesel generator sets should be provided with integral acoustic enclosure at the manufacturing stage itself as per CPCB norms.
- ii. The stack height and emissions from D.G. sets should conform to the norms of Central Pollution Control Board. The certification of space design for DG sets should be done by competent authority.

Ensure Energy Efficiency:-

- i. Use of energy efficient construction materials to achieve the desired thermal comfort should be incorporated. The desired level of R and U factors must be achieved. U factor for the top roof should not exceed 0.4 Watt/sq.m/degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 should be strictly followed.
- ii. Use of energy efficient electrical systems should be promoted. High efficiency lamps with electronic ballasts should be used.
- iii. Energy efficient Motors and properly rated Transformers should be installed. Manufacturer's certificate to this effect shall be obtained and kept on record. Back up power supply should be based on cleaner fuel.
- iv. The power cabling shall be adequately sized as to maintain the distribution losses not to exceed 1% of the total power usage. Record of transmission losses shall be maintained. The proponent shall install permanent electrical metering to record demand (kVA), energy (kWh) and total power factor.

Transport Management: -

- i. Use of public mode of transportation should be promoted. Use of the least polluting type of transportation should be promoted. Adequate parking space should be provided as per norms.
- ii. Pathways should be covered or shadowed by tree canopy as far as practicable. Transport system should be such that traffic will be calm in neighbourhoods. Traffic within the project site should be restricted by regulation. Adequate vertical and horizontal clearances of overhead electric power and telecommunication lines should be provided.

Solid Waste Management:-

- i. The proponent should abide by the Municipal Solid Wastes (Management and Handling) Rules, 2000. The proponent must develop the Solid Waste Management and Disposal Scheme ensuring storage and segregation of biodegradable and non-biodegradable wastes. The solid waste is to be disposed off in consultation with concerned authority.
- ii. The proponent shall install onsite compost plant for treatment of biodegradable part of Municipal Solid Waste. Sufficient space for installation of onsite compost plant should be provided and operation of the compost plant considering full occupancy of the apartments i.e. the capacity of garbage disposal unit should be selected accordingly.
- iii. The handling agency should also take care of the recyclable wastes like plastic, paper board, glass etc. and also inert materials in case of respective municipal authorities want to avoid any kind of waste from the housing complex.
- iv. The proponent should have sufficient area for horticulture where the compost generated can be used as fertilizer and soil supplement and also have arrangement for sale of excess quantity of compost.
- v. Provision for treatment of leachate generated and odor control in onsite compost plant should be made.
- vi. Non-recyclable inorganics and rejects will be disposed off through KMC as proposed.
- vii. The proponent should provide different coloured bins for different categories of waste and ensure complete segregation of biodegradable and non-biodegradable wastes. The solid waste from different collection and storage bins should be finally collected at transfer stations. Further segregation will be done at transfer stations to collect recyclables such as plastic, polythene, glass, metals, textiles, rubbers, leathers, paper etc. Separate compartments shall be provided for each type of recyclables.



Secretary, State Expert Appraisal Committee, West Bengal



Relevant parts of the Minutes of the 109th SEAC Meeting for stipulating conditions for environmental clearance of proposed residential complex "Flora Fountain" by M/s. ASI'S Developers LLP at 45, Christopher Road, KMC Ward No. 58, Kolkata 700046.
Name of the Environmental Consultant : M/s. Ghosh, Bose & Associates (P) Ltd.

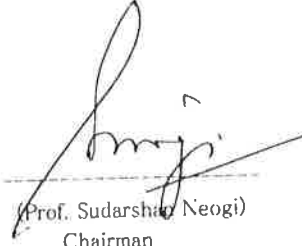
features of the stipulated conditions for environmental clearance and necessary documents and consideration of the same by the State Level Expert Appraisal Committee, West Bengal. The area statement as well as detailed building profile, parking spaces etc., as proposed in the salient features, should be clearly mentioned in the sanctioned Master Plan.



(Dr. S. Mukherjee)

Secretary

State Expert Appraisal Committee, West Bengal



(Prof. Sudarshan Neogi)

Chairman

State Expert Appraisal Committee, West Bengal

GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIRECTOR GENERAL
WEST BENGAL FIRE & EMERGENCY SERVICES
13-D, Mirza Galib Street, Kolkata – 700 016.

Memo. No. : WBFES/5330/15 /Kol/RB/590/15 (590/15) Date : 17/07/15

From : **The Director,
Fire Prevention Wing,
West Bengal Fire & Emergency Services.**

To : Mr. Binod Kumar Sharma,
Constituted Attorney
ASPS Developers LLP,
68/2, Harish Mukherjee Road,
Kolkata-700 025.



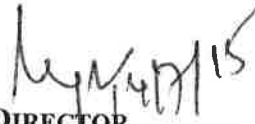
Sub : **Fire Safety Recommendation for proposed construction of G+XXV Storied Residential Building at premises No.- 45, Christopher Road, Kolkata-46, Ward No-58, Borough-VII, P.S.-Tangra.**

This is in reference to your letter No. Nil dated 27.05.2015 regarding Fire Safety measure for proposed construction of G+XXV Storied Residential Building at premises No.- 45, Christopher Road, Kolkata-46, Ward No-58, Borough-VII, P.S.-Tangra.

The plan drawing submitted by you was scrutinized and marked as found necessary from fire safety point of view. In returning one set of plan with recommendation, this office is issuing **Fire Safety Recommendation** in favour of the aforesaid building subject to the compliance of the following fire safety measure.

Encl. :

1. One set of plan.
2. Recommendation placed in this file.


DIRECTOR
FIRE PREVENTION WING
WEST BENGAL FIRE & EMERGENCY SERVICES

RECOMMENDATION

A. CONSTRUCTION:

1. Materials for rapid flame spread categories including untreated wood fiber board etc. shall not be used. The doors and windows preferably shall be made of metal.
2. The floor area exceeds 750m² shall be suitably compartmented having four hours Fire resisting capacity.
3. The interior finish decoration of the building shall be made with the materials with low flame spread and low smoke and toxic gas generating categories conforming I.S. Specification.
4. The whole construction of the proposed building shall be carried out as per approved plan drawing conforming the relevant building rules of Kolkata Municipal corporation.
5. Arrangement shall have made for sealing all the vertical service ducts by the materials of adequate Fire resisting capacity.
6. Fire rating test certificate of all interior finish decoration should be submitted to this office before taking occupancy.
7. Service Ducts and shafts should be enclosed by a wall of 2 hours and doors of one hour fire rating. All such ducts shall be properly sealed and Fire stopped at all floor levels.

B. OPEN SPACE & APPROACH:

1. The open space surrounding the building shall be kept clear open to sky and shall conform the relevant building rules as well as permit the easy accessibility and maneuverability of the Fire appliances with turning facility.
2. The approach road and roads surrounding the building shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.
3. The width and height of the entry gates to the promises shall not be less than 5m and 6m respectively.
4. Drive way should be free of any type obstruction. No parking will be allowed on the Drive Way.

C. STAIRCASE:

1. Both the staircases of the Residential building shall be enclosed type, entire construction shall be made of brick / R.C.C. type having Fire resisting capacity not less than 4 hours respectively marked in the plan.
2. The staircases shall have permanent vents at the top equal to 5% of the cross sectional area of the staircases enclosures and open able sashes at each floor level equal to 15% of the said cross section area shall have to be provided in the external wall of the building.
3. All the staircases of the building shall be negotiable to each other in each floor without entering into any room and shall be extended up to respective terrace. The roof of the stair wall shall be 1M above the surrounding roof area.
4. The width of the staircases and corridors and travel distance of different categories of occupancies shall have to conform the relevant building rules.

5. The width of the staircases and corridors and travel distance of different categories of occupancies shall have to conform the relevant building rules.
6. Fire and Smoke check doors at the entrances of all the Staircase enclosures at each floor level shall be provided. The F.C.D. shall be at least one hour Fire resisting wire glass window fitted with self closing type open able in the direction of escape.
7. Considering the staircases are only means of evacuation, emergency lighting arrangement directional, exit, sign etc. shall be made conforming the relevant I.S. Code in this regards.

D. LIFT:

1. The walls of the lift enclosure of the building shall be at least two hours FIRE resisting type respectively marked in the plan with the event at top of area not less than $0.2m^2$.
2. The lift of the building shall be designed at high speed "Fire Lift" and conspicuously indicated marked in the plan.
3. One of the lift cars of the building shall be large enough to accommodate standard Ambulance Stretcher and Medical Attendants.
4. The Electric power shall be from separate supply mains in the building and cables run with in the lift shafts, light and fans in the lift cars shall be operated from 24 volts, supply on emergency in case of failure of normal power supply lift shall automatically trip over alternate power supply.
5. Arrangement shall be provided for extraction of smoke in all the lift shaft by incorporation smoke venting system designed to permit 30 Air changes per hour in case of Fire and shall be of such design as to operate on actuation of Sprinkler or Fire Alarm. In case of failure of normal electric supply. It shall automatically trip to alternate supply.
6. Exit doors of the lift lobby shall be through a self- closing smoke stop door of 1 hour fire resistance
7. The speed of the fire lifts in the building shall be such that it can reach the top from the ground floor within 1 minute in visual indications of floor numbers shall incorporated in the lift cars.
8. All other requirements shall conform the I.S. specification including the communication facility in the lift cars connecting to the Fire Control Room of the building.
9. All Lifts runs towards basement shall be pressurized a positive pressure of 25 to 30 Pa. shall be maintained inside the lift wall and lobby. The pressurization shall be maintained round the clock.

E. REFUGE AREA:

1. The Refuge area on calculating the area at the rate of $0.3 m^2$ / person on the basis of floors arca shall be provided on the external wall as cantilever projection or any other suitable means at 23.7M, 40.2M, 53.4M, 66.6M & 79.8M levels of the building.
2. The refuge area shall be of Fire resisting construction and protected with self closing F.C.D. at the entrance from the corridor or the staircase lobbies.
3. The position of refuge Areas shall be such that they are negotiable by the Fire service Ladder from the ground floor.

F. FIRE FIGHTING WATER:

1. Water exclusively for Fire Fighting operation shall be ensure minimum 2,00,000 lts. all the time.

2. The Fire water reservoir shall have overflow arrangement with the domestic reservoir to avert stagnancy of water.
3. Provision of necessary manhole shall be made on the top of the reservoir as per specification.
4. Provision of replenishment at the rate of atleast 2000lts./min. from two separate sources of water supplies shall be made.
5. The deep tube wells for the replenishment of the reservoir shall be incorporated with the auto starting facility with the actuation of auto detection and suppression arrangement of the premises and shall also be connected with dual power supply units.
6. Provision of placing Fire Appliances on the underground water reservoir shall have to be made to draw water in case of emergency.

G. WATER LAYOUT SYSTEM :

a. Ringmain Hydrant System:

- i. 200 mm dia Ringmain water layout arrangement covering the entire premises of the project with provision of pillar type yard hydrants with door hose boxes, containing 2 lengths of 63mm delivery hose and short branch pipe shall be provided at all the strategic location and surrounding the buildings conforming I.S. 3844-1989 (upto date amendment).
- ii. The system shall be so designed that shall always be kept charged with water under pressure and capable to discharge min. 2850 ltrs./min. at the pressure 3.5kg/sq.cm. at any point.

b. Wet Riser & Hose Reels System:-

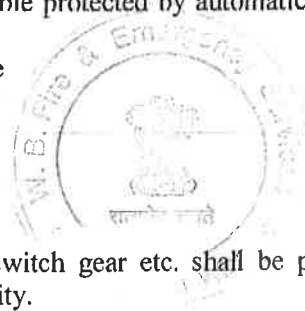
- i. The building shall be provided with Wet Riser and Hose Reel unit with provision of outlets in each floor at the staircases landings/half landings as per suitable at the rate of one such unit of Wet Riser and Hose Reel per 1000sq.m. of floor area.
- iii. The Wet Riser installation shall be made in reference to the height of the office building in stage wise distributions.
1st Stage Ground floor to 7th floor 200mm dia twin Hydrant outlet.
2nd Stage 7th Floor to Top Floor 150mm. Dia. Twin Hydrant outlet.
- iii **Hose Reel Unit:-** Provision of hose reel units on swiveling drum in conjunction with wet riser near each landing valves shall be made at each floor level of the office building.
- iv All other requirements of the water base Fire Protection System shall be made as per I. S. Specification 3844-1989 (with upto date amendment).

c. Automatic Sprinkler Installation :

- i. All floors common area of the building shall be suitable protected by automatic Sprinkler installation conforming the grade as per I.S. Specification.
- ii. The Sprinkler arrangement shall be laidout in Zonewise
Zone 1-Gound to 7th floor.
Zone2- 7th floor to Top floor.

d. Water Projector Protection.

The Electrical installations viz. transformer, HT,LT switch gear etc. shall be protected by high or medium velocity Water Projector System as per suitability.



H. FIRE PUMP :

1. 2850 Lts. per min. giving a pressure not less than 0.3N/m². The pump provided will be of multi stage type with suction and delivery size not less than 15cm. dia with low level riser upto six storied and high level riser delivery for upper floors. A set hall valves to supply the tank with at least 2850 ltrs. Per min. from the fire pump. Alternatively a multistage, multioutlet pump may be installed.
2. A standby Pump of equal capacity shall be provided on alternative source of supply. Provision of Jockey pump have to be made to keep up the water based system under pressurized condition at all the time.

I. ELECTRICAL DISTRIBUTION SYSTEM:

1. Electrical distribution system of all the building shall be made in the form of concealed wiring or in heavy gauge M.S. conducted continuously bonded to earth cables shall be I.S. marked and preferably be of F.R.L.S. categories.
2. Electrical distribution System shall conform all the requirements laid down in I.S. 1646-1982.
3. For every 230V wiring above false ceiling 660 grade insulated cable shall be used Transformer Switch Gear H.T.,L.T. and other electrical rooms shall be at the ground floor level the other electric rooms shall be at least 4hrs. fire resisting capacity adequate ventilation arrangement shall have to be made in all the rooms, Dry and explosion proof type transformer shall be installed.
4. All electrical installation viz. Transformers, Switch Gears, L.T., HT rooms shall be protected with both auto detection and suppression systems as per suitability.

J. AUTO DETECTION AND ALARM SYSTEM :

1. Auto Fire Alarm System which analogue addressable smoke heat detectors as per suitability shall be installed in all floor area of the building except Car parking area.
2. Addressable analogue manual call boxes incorporating with sounders shall be installed in all the floor area of the building in such a manner that maximum travel distance shall not be more than 22.5m in order to reach any of the call point.
3. Both way Public address system linked between all floors and Control Room shall have to be established.
4. All the installation shall also satisfy the I.S. Specification 2189 as amended and the code of practice as laid down in N.B.C. pt. IV.

K. AIR CONDITIONING SYSTEM :

1. The A.H.U. shall be separated for each floor with the system Air Ducts for individual floors.
2. Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the Air Conditioning system.
3. The system of auto shut down of A.H.U. shall be incorporated with the auto detection and alarm system.
4. The air handling units room shall not be used for storage of any combustible materials.
5. Escape route like staircase, common corridors, lift lobby etc. shall not be used as return air passage.

6. Wherever the ducts pass through Fire wall of floors, the opening arounding the ducts shall be sealed with Fire resisting materials such as asbestos rope vermicrete concrete etc.
7. The metallic ducts shall be used even for the return air instead of space above the false ceiling.
8. The materials used for insulating the duct system (inside or outside) shall be of non- combustible materials glass wool shall not be wrapped or secured by any materials of combustible nature.
9. Area more than 750 sq. m. on individual floor shall be segregated by a Fire wall and automatic fire damper for isolation shall be provided.
10. Air duct services main floor area, corridors etc. shall not pass through the staircase enclosures.
11. The air handling units shall be separation for each floor, and air ducts for every floor shall be separated and in no way interconnected with the ducting of any other floor.
12. If the air handling units serve more than 1 floor, the recommendation given above shall be complied with in addition to the conditions given below:-
 - a. Proper arrangements by way of automatic Fire dampers working on fuseable link for isolating all ducting at every floor from the main riser shall be made.
 - b. When the automatic Fire alarm operates the respective air handling units of the air conditioning system shall automatically switched off.
13. The vertical shaft for treated fresh air shall be of masonry construction.
14. The air filters for air handling units shall be of non combustible materials.
15. The air handling units room shall not be used for storage of any combustible materials.
16. Inspection panel shall be provided in the main trunking to facilitate the cleaning of ducts of accumulated dust and to obtain access for maintenance of fire dampers.
17. No combustible materials shall be fixed nearer than 15cm to any duct unless such duct properly enclosed and protected with non combustible materials (glass wool or Spun wool with neoprene facing enclosed and wrapped with aluminium sheeting) at least 3.2m thick. And which would not readily conduct heat.

L. FIRE DAMPER :

1. Fire damper shall be located in conditional air ducts and return air duct/passages at the following points.
 - a. At the fire separation wall.
 - b. There ducts/passage enter the central vertical shaft.
 - c. Where the ducts pass through floors.
 - d. At the inlet of supply Air Duct and the return air duct of each compartment on every floor.
2. The dampers shall operate automatically and shall simultaneously switch off the air handling fans. Manual operation facilities shall also be provided.

3. Automatic Fire Dampers shall be so arranged so as to close by gravity in the direction of Air movement and to remain rightly closed open operation of a fusible link.

M. FIRST AID FIRE FIGHTING SYSTEM :

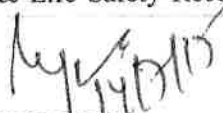
1. First Aid Fire fighting arrangement in the style of placing suitable type of portable Fire Extinguishers-I.S.I. mark, Fire Buckets etc. in all floors and venerable locations of the premises shall be made in accordance with I.S. 2190-1992.
2. Special rescue equipment like Smoke Hood, self contained B.A. set portable lights at least two pairs (4sets) shall be made available in the main fire Control Room of the premises.

N. GENERAL RECOMMENDATIONS :

1. Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.
2. Floor number, directional sign, showing the nearest exit Refuge Area and Fire Points etc. shall have photo luminescent signals at each floor of all blocks of building including shall be made available conforming the relevant I.S. Specification.
3. If diesel oil is stored beyond the specified quantity license shall be accorded from the appropriate authority.
4. The occupants, employees and security staff shall be conversant with installed First aid Fire Fighting equipments of the building and to operate in the event of Fire and Testing.
5. Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipments and means of escapes installed in the building to keep them in perfectly good working conditions at all times by authorized competent agency is this regard.
6. A crew of trained Fireman under the experienced Officer shall be maintained round the clock for safety of the building.
7. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
8. Each year a certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services certifying about the satisfactory services, performance of all the Life and Fire Safety arrangements and installation of the building.

On compliance of all the above Fire and Life safety recommendations, the Director General, West Bengal Fire & Emergency Services shall be approached for necessary inspection and testing of the installation, Final N.O.C. in favor of the occupancy shall be issued on being satisfied with the tests and performances of safety aspects of installation of the building.

N.B.: Any deviation and changes the nature of use of the building in respect of the approved plan drawing, without obtaining prior permission from this office, this Fire & Life Safety Recommendation will be treated as cancelled.


DIRECTOR
FIRE PREVENTION WING
WEST BENGAL FIRE & EMERGENCY SERVICES

GOVERNMENT OF WEST BENGAL
Office of the Competent Authority, Kolkata under
The Urban Land (Ceiling and Regulation) Act, 1976
Nagarayan, 4th floor, DF-8, Bidhannagar
Kolkata - 700 064

No 341 - U.L.
XVI - 3793/2015

Dated 6/4/2015

To

Shri/Smt . M/s ASPS Developers LLP.

68/2, Harish Mukherjee Road
Kolkata - 700 025

Sub : Your application for No-objection Certificate dated 18.03.2015 in respect of Premises No. 45, Christopher Road, Kolkata-700046 in terms of Rule 4(4) of the Kolkata Municipal Corporation Building Rules 1990.


1. In consideration of your application and prayer thereof No-objection certificate is hereby granted in terms of rule 4(4) of the Kolkata Municipal Corporation Building Rules, 1990 in respect of the landed property mentioned hereunder.
2. A statement required in terms of provision of section 22(1) of the Urban Land (Ceiling and Regulation) Act, 1976 must be filed by you after demolition or destruction of existing structures within the stipulated time.
3. It is, however, mentioned that this certificate will not deter the undersigned from proceeding against the holder if it is subsequently reveals that there is excess vacant land under the Urban Land (Ceiling & Regulation) Act, 1976.

Schedule of land

Premises No. : 45, Christopher Road, Kolkata-700046. (inclds. 41, 43, and 47 (portion) Christopher Road, Kol-46

Area :- 17351.54 Sq. mtr (Seventeen thousand three hundred fifty-one point five four sq.mtr.)

The tank area measuring 2495.56 sq.mtr. must be kept intact.


06, 04, 15
Competent Authority, U.L.C.
Kolkata.

No - U.L.
XVI - 3793/2015

Dated,2015

Copy forwarded to :

1. The Deputy Chief Engineer (Building), The Kolkata Municipal Corporation, 5 S.N. Banerjee Road, Kolkata - 700 013 for information. He is also requested to intimate the date of demolition or destruction of existing structures of the premises land in due time.

2. The Special Secretary, Urban Development Department, Urban Land Ceiling Branch, 'Nagarayan', 3rd Floor, Salt Lake City, Kolkata - 700 64.

Competent Authority, U.L.C.
Kolkata.

