

## Office of the Regional Fire Officer, Bengaluru North Range, Karnataka Fire & Emergency Services, Hebbal Fire Station Premises, Manyata Embassy Business Park, Nagawara Ring Road,Bengaluru-560 045.



No. 60/RFO/BNR/FSR/2022

Dated: 29 -03-2022.

ANNEXURE – B Group - B Educational Building

To, The Principal, Kendriya Vidyalaya, AFS, Yelahanka, Bengaluru- 560 063. Him

74/3/22

Sir,

Sub: Issue of "Fire safety recommendation" with respect to fire prevention, fire fighting and evacuation measures required at "Kendriya Vidyalaya"

at AFS, Yelahanka, Bengaluru.

Ref: Your request letter dated: 14-03-2022.

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With reference to the subject cited above, the premises of "Kendriya Vidyalaya" at AFS, Yelahanka, Bengaluru was inspected by me on 22-03-2022 with respect to Fire prevention, Fire fighting and Evacuation measures to be complied in the above premises. The details are as under:-

## Part-A. Details of the building / premises :-

| 01 | Name and Address of the Applicant.        |   | The Principal, Kendriya Vidyalaya, AFS, Yelahanka, Bengaluru- 560 063.  |
|----|---|---|---|
| 02 | Name and Address of the premises.         | ÷ | Kendriya Vidyalaya,<br>AFS, Yelahanka,<br>Bengaluru- 560 063.   |
| 03 | Name and address of the<br>Building owner | i | Kendriya Vidyalaya,<br>AFS, Yelahanka,<br>Bengaluru- 560 063.   |
| 04 | Number of buildings                       | : | 3 Building i.e. Main building, Vivekananda Block & Primary Block.   |
| 05 | Number of floors                          | : | Main building: Ground & 2 upper floors.<br>Vivekananda Block: Ground & 1 <sup>st</sup> floor.<br>Primary Block: Ground floor. |

| ,   | Floor wise details of occupancy |   |   |  |  |
|-----|---------------------------------|---|---|--|--|
| 06  | Main building                   |   | 08 class rooms, 1 Lab, 1 Staff room, 1 Principal  |  |  |
|     | Ground floor                    |   | 08 class rooms, 1 Lab, 1 Storm Office & 1 Medical room, 1 Visitors room, 1 Office & 1 Medical room. |  |  |
|     | 1 <sup>st</sup> floor           |   | 09 class rooms, 1 Lab, 1 Library, 1 Scouts & guides room & 1 Humanities department.                 |  |  |
|     | 2 <sup>nd</sup> floor           |   | 06 class rooms, 2 Labs & 1 Counselor room.  |  |  |
|     | Vivekananda Block               |   | 06 class rooms, 1 Junior activity room, 1 Vice  |  |  |
|     | Ground floor                    |   | of class rooms, 1 Art department, 1 Sports department, 2 Lab & 1 Store room.                        |  |  |
|     | 1 <sup>st</sup> floor           |   | 06 class rooms, 1 Multipurpose activity hall, Work experience department, 2 Labs & Language room.   |  |  |
|     | Primary Block                   |   |   |  |  |
|     | Ground floor                    | : | 16 class rooms, 1 Lab & 1 HM room.  |  |  |
| 07  | Height of the building          | : | Main building: 11.50 Mtrs. Vivekananda Block: 8.10 Mtrs. Primary Block: 3.20 Mtrs.                  |  |  |
| 08  | Site area                       | : | 50,502.00 Sq.Mtrs.  |  |  |
| 09. | Built-up area of each floor     |   |   |  |  |
|     | Main building                   |   |   |  |  |
|     | Ground floor                    | : | 2,340.00 Sq. Mtrs.  |  |  |
|     | 1 <sup>st</sup> floor           | : | 2,340.00 Sq. Mtrs.  |  |  |
|     | 2 <sup>nd</sup> floor           | : | 1,427.00 Sq. Mtrs.  |  |  |
|     | <u>Vivekananda Block</u>        |   |   |  |  |
|     | Ground floor                    | : | 1,179.00 Sq. Mtrs.  |  |  |
|     | 1 <sup>st</sup> floor           | : | 1,598.00 Sq. Mtrs.  |  |  |
|     | Primary Block                   |   |   |  |  |
|     | Ground floor                    | : | 1,044.00 Sq. Mtrs.  |  |  |
| 10. | Total built-up area             | : | 9,928.00 Sq. Mtrs.  |  |  |
|     |                                 |   | 0   |  |  |

|    | Surrounding properties:-              |   |                     |  |                             |  |  |
|----|---------------------------------------|---|---------------------|--|-----------------------------|--|--|
|    |                                       | North (front)   | 12.5                | 0 Mtrs. wide Air   | Force road                  |  |  |
|    |                                       | South (Rear)  | Play ground         |  |                             |  |  |
|    | East(Side)<br>West (Side)             |   | : Air Force area.   |  |                             |  |  |
|    |                                       |   | Air force property. |  |                             |  |  |
| 2. | Set-back area available around the    |   |                     |  |                             |  |  |
|    |                                       | North (front)   | Min                 | imum 3.00 mtrs   |                             |  |  |
|    | South (Rear)                          |   |                     | imum 3.00 mtrs   |                             |  |  |
|    |                                       | East(Side)  |                     |  |                             |  |  |
|    |                                       | West (Side)   | Minimum 3.00 mtrs.  |  |                             |  |  |
|    | Allowed setbacks (c                   |   |                     | imum 3.00 mtrs   |                             |  |  |
|    | constructions.                        | space) snou   | ld be i             | maintained free  | from further obstructions   |  |  |
|    | afety point of view :-<br>Details     |   |                     | are considered   | l absolutely essential from |  |  |
| )  | (02)                                  |   | Existing<br>(03)    |  | (04)                        |  |  |
| •  | Accessibility to the premises         | The premises accessible from 12.50 Mtrs. wide Air Force road & is hardened to carry the Weight of 45,000 Kgs. |                     | Adequate   |                             |  |  |
|    | No. of entrances                      | Provided 2 entry/exit of 6.00 Mtrs. width from BIAL Airport road located on the western side.                 |                     | Adequate   |                             |  |  |
|    |                                       |   |                     |  |                             |  |  |
|    | No. of staircases/                    |   |                     | western side.  | Adequate                    |  |  |
| •  | No. of staircases/<br>lifts available | road located o  |                     |  | Adequate                    |  |  |
| -  | · ·                                   | road located o  |                     | Main building: 2 (one staircase is terminated at 2 <sup>nd</sup> floor)  Vivekanand a Block: one staircase & one ramp. | Adequate                    |  |  |
|    | · ·                                   | noad located o  | n the v             | Main building: 2 (one staircase is terminated at 2 <sup>nd</sup> floor)  Vivekanand a Block: one staircase & one ramp. | Adequate                    |  |  |

|     |                    |  |          | Vivekanand                |  |
|-----|--------------------|--|----------|---------------------------|--|
|     |                    |  |          | a Block:                  |  |
|     |                    |  |          | Staircase<br>each of 1.70 |  |
|     |                    |  |          | Mtrs. & one               |  |
|     |                    |  |          | ramp of                   |  |
|     |                    |  |          | 1.80 Mtrs.                |  |
|     |                    | Width of treads  | :        | 30 cms.                   |  |
|     | •                  | Height of risers   | :        | 15 cms.                   |  |
|     |                    | Nos. of riser per  | :        | 13 risers                 |  |
|     |                    | flight   |          | per flight                |  |
|     |                    | Height of handrails  | :        | 1.00 Mtr.                 |  |
|     |                    | Head room  |          |                           |  |
|     |                    | clearance  | :        | 2.6 mtrs                  |  |
| 04. | Fire extinguisher  | Provided 11 No   | 's       | of ARC type               | The following outinguish                                   |
|     |                    | extinguishers ea   | ach      | of 06 kg                  | The following extinguishers, should be provided in all the |
|     |                    | capacity, 08 No  | 's       | of ABC type               | Blocks.  |
|     |                    | extinguishers ea   | ach      | of 04 kg                  | A) One water mist  |
|     |                    | capacity, 02 No  | 's       | of ABC type               | extinguisher of 9 ltrs                                     |
|     | •                  | extinguishers ea   | ach      | of 02 kg                  | capacity should be kept                                    |
|     | ·                  | capacity, 02 No  | 's       | of ABC type               | near each staircase  |
|     |                    | extinguishers ea   | ach      | of 01 kg                  | landing.   |
|     |                    | capacity & 02 N  | lo's     | of Co <sub>2</sub> type   | B) One mechanical foam                                     |
|     |                    | extinguishers each of 4.50 kg capacity in the entire premises. |          |                           | extinguisher of 9 ltrs                                     |
|     |                    |  |          |                           | capacity & one ABC type                                    |
|     |                    |  |          | •                         |  |
|     |                    |  |          |                           | composite and the second                                   |
|     |                    |  |          |                           |  |
|     |                    |  |          |                           | provided near diesel generator.                            |
|     |                    |  |          |                           | C) One CO2 extinguisher of                                 |
|     |                    |  |          |                           | 4.5 kgs capacity should be                                 |
|     |                    |  |          |                           |  |
|     |                    |  |          |                           | Cucii  |
|     |                    |  |          |                           | electrical panel board & electrical room.                  |
|     | •                  |  |          |                           | D) One ABC type  |
|     |                    |  |          |                           | cype type  |
|     |                    |  |          |                           | capacity should be located                                 |
|     |                    |  |          |                           | as to be available within                                  |
|     |                    |  |          |                           | 15 mtrs radius.  |
| 05. | Diesel generators. | Not no   |          |                           |  |
|     | 3 = 213,31         | Not pr   | υνι      | iuea                      | Diesel generator of 15 KVA                                 |
|     |                    |  |          |                           | capacity should be provided to                             |
|     |                    |  |          |                           | supply alternate source of                                 |
|     |                    |  |          |                           | power supply for emergency                                 |
|     |                    |  | 2        |                           | provisions in the building.                                |
|     |                    |  | <b>D</b> |                           |  |

| <b>'</b> 06. | Ein   | 4             |   |
|--------------|---|---------------|---|
|              | First aid Hose reel<br>hose.                | Not Provided. | Main building: 3 Hose reel hose systems near the staircase landing should be provided.  Vivekananda block: 2 Hose reel hose systems near the staircase landing should be provided.  |
|              |   |               | (one hose reel system should be provided for every 1,000 Sq.Mtrs. on each floor). Hose pipe of 100 mm dia GI 'C' class pipe & Hose reel hose of 19 mm size and of adequate length to reach the farthest point of the floor should be provided with shut off branch having a nozzle of 5 mm size. The hose reel hose should be connected at each floor landing.            |
| 07.          | Terrace tank over respective tower terrace. | Not Provided. | Main building: Hose reel hose systems should be connected to an overhead tank of 5,000 liters capacity.  Vivekananda block: Hose reel hose systems should be connected to an overhead tank of 5,000 liters capacity.  Note: If the existing building is   |
|              |   |               | not capable of sustaining the weight of 5,000 litres tank capacity, provision shall be made to provide water tank on the side of the building with support from the ground level by providing RCC column structure or MS column structure.  If there is no options to provide even the above mentioned overhead tank provision shall be made to provide underground water |

|     |  | V              | tank of capacity with  |
|-----|--|----------------|--|
|     | •  |                | submersible pump of 5-7 HP capacity.   |
| 08. | At the terrace tank level with minimum pressure of 3.5 kg/cm <sup>2</sup> .  | Not Provided.  | Main building: Hose reel hose system should be connected to a Booster pump capable of delivering 450 litres of water per minute.   |
|     |  |                | Vivekananda block: Hose reel hose system should be connected to a Booster pump capable of delivering 450 litres of water per minute.   |
|     |  |                | Further the systems should be connected to an alternation source of power supply.  |
|     | Automatic sprinkler system   | Not provided   | Not required   |
| 10. | Escape routes  | Not marked     | Directions in which the Teachers/Staff/Students have to move in the event of any emergency should be displayed in the corridor on each floor during evacuation in each building.   |
|     | Fire order (fire safety plans)   | Not displayed  | A notice board indicating the action to be taken by the school staffs/employees in Case of an emergency should be displayed along with Telephone Numbers of Yelahanka Fire Station i.e. 080-29733407, 22971500/550/600 & 101, and telephone numbers of nearest Ambulance Service & Police station. |
| 12. | No smoking board.  | Not displayed. | COPTA Sec-4, direction "No Smoking area smoking here is an offence" board should be written in English & Kannada both languages shall be   |
| L   | and the same of th |                | both languages shall be  |

| 13. | Fire Siren                         | Not installed                 | prominently displayed at inside the entry/exit of each floor.  A fire Siren shall be installed in the premises to inform the inmates in case of fire emergency & evacuate the area.   |
|-----|------------------------------------|-------------------------------|---|
| 14. | Nominate one Fire<br>Nodal Officer |                               | A Fire Nodal Officer shall be nominated either from teaching or non-teaching staff.   |
| 15. | Fire fighting<br>training          | Not trained                   | At least 40% of teaching & non teaching staff should be got trained in fire prevention And fire fighting evacuation measures at R.A.Mundkur Fire & Services Academy, Bannerughatta Road, Bangalore-560 029 or Regional Training center. |
| 16. | Fire precautionary r               | neasures :-                   | in the store room, UPS  |
|     | A) Explosive an                    | d flammable materials should  | not be stores in the store room, UPS  |
|     | room, Electi                       | rical panel area, class rooms | s, laboratory & electrical sum panel  |
|     | •                                  |                               |   |

- premises.
- B) Accumulation of combustible waste in and the premises should be avoided.
- C) The exit ways shall be always kept clear without any obstruction.
- D) Liquefied petroleum gas should not be stores in the building.

side.

- E) The doors shall not be kept locked / latched during working hours and shall be
- free from obstruction. F) During the class hours the class room doors shall not be locked from inside to out
- G) As per Honorable Supreme Court order all teachers and staffs shall be trained to handle safety equipment, initiate emergency evacuation and protect their students in the event of fire and other emergency and the school shall observe the Fire Safety Day on April 14<sup>th</sup> of every year be conducting Fire Safety drills with co-ordinate Fire Service department.

Under the above circumstances, Karnataka Fire & Emergenty Services Department is issuing Fire Safety Recommendation to "Kendriya Vidyalaya" at AFS, Yelahanka, Bengaluru. Subject to condition and compliance of the above recommendations as shown in Column-4 of Part-B within 3 months and compliance to the undersigned.

"This Fire Safety'Recommendation is valid for Only One Year from the date of issue and it is renewable.

All requirements recommended above are as per National Building Code-2016 Part-4 clause 3.1.3 of Fire and Life safety will have to be complied with mandatorily.

ಕೆಣದ್ವೀಯ ವಿದ್ಯಾಲಯ, ಎ.ಎಫ್.ಎಸ್, ಯಲಹಂತ, ದೆಂಗಳೂರು 480  $\ell\ell$ केन्द्रीय विदयालय, ए.एफ. एस येलाहंका, बेंगलुरु-560 083

KENDRIYA YIDYALAYA, A.F.S., YELAHANKA, BENGALURU-360 043

Yours faithfully,

Nagawara Ring Road

Bangalore - 560 045.

विद्यालय प्रबंधन समिति Vidyalaya Management Committee

केन्द्रीय विद्यालय एएफएस यलहंका बेगलूर

Kendriya Vidyalaya AFS, Yelahanka,bengaluru