GOVERNMENT OF WEST BENGAL OFFICE OF THE DIRECTOR GENERAL WEST BENGAL FIRE & EMERGENCY SERVICES 13-D, Mirza Ghalib Street, Kolkata-700016.

Memo No.:

WBFES/ 6189/

/16 / Kol / Hotel.B / 956 /14 (956/14)

Date: 21/09/16

From:

The Director In-Charge Fire Prevention Wing

West Bengal Fire & Emergency Services

To:

The Authorised Signatory

'ANIK INDUSTRIES LTD'

(Formerly Madhya Pradesh Glychem Industries Ltd.)

54/10 D.C. Dey Road Kolkata-700015

Sub:

Revised Fire Safety Recommendation of a proposed construction of B+G+VIII storied Hotel Building of Block –A, LB + UB + G + 1st +Service Floor + 2nd to 12th storied Hotel Building of Block-B & G+XXIII storied Residential cum Club cum Service Apartment, at the premises no. 30-1111, Plot No.- BG-9, New Town Kolkata.

This is in reference to your letter dated 30.05.2016 regarding Revised Fire Safety Recommendation of a proposed construction of B+G+VIII storied Hotel Building of Block –A, LB+UB+G+1st +Service Floor + 2nd to 12th storied Hotel Building of Block-B & G+XXIII storied Residential cum Club cum Service Apartment, at the premises no. 30-1111, Plot No.- BG-9, New Town Kolkata.

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

This **Fire Safety Recommendation** is hereby issued in cancellation of earlier issued Fire Safety Recommendation vide this office memo no. WBFES/ 4714/14/Kol/ RB /956/14(956/14) dated 14.10.14.

Enclo:

- 1) Recommendation
- 2) One set of revised plan

DIRECTOR IN-CHARGE
FIRE PREVENTION WING
WEST BENGAL FIRE & EMERGENCY SERVICES

RECOMMENDATIONS

A. CONSTRUCTION:

- 1) The whole construction of the existing building shall be carried out as per approved plan drawings conforming the relevant building rules of West Bengal Municipal Building Rules.
- 2) The floor area exceeds 750 Sq meter shall be suitably compartmented by separation walls up to ceiling level having at least two hours fire resisting capacity.
- 3) The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specification.
- 4) Provision of ventilation at the crown of the central core duct of the building shall be provided.
- 5) Arrangements shall have to be made for scaling all the vertical ducts by the materials of adequate fire resisting capacity.

B. OPEN SPACE & APPROACH:

- 1) The open space surrounding the building shall confirm the relevant building rules as well as permit the accessibility and maneuverability of fire appliance with turning facility.
- 2) The approach roads shall be sufficiently strong to withstand the load of fire engine weighting up to $45\,\mathrm{M.T.}$
- 3) The width and height of the access gates into the premises shall not be less than 6 M X 5 M, 5.5 M X 5M, 5M x 5M respecting abutting the road.

C. STAIRCASE:

- 1) The staircase of the building shall be enclosed type. Entire construction shall be made of bricks / R.C.C type having fire resisting capacity not less than 4 hours.
- 2) The staircase of the building shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building.
- 3) The width of the staircases shall be made as marked in the plan corridors and the exit doors shall conforming the relevant building rules as well as rules of the cinematograph Act with up to date amendments.
- 4) All the staircases shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.
- 5) Fire and smoke doors at the entrances of all the staircase enclosure as marked in the plan at each floor level shall be provided. The F.C.D shall be of at least two hour fire resisting wire glass window fitted with self-closing type open able in the direction of escape.
- 6) One of the Staircase in each building of Block-C shall be pressurized.

D. LIFT (IF ANY):

- 1) The walls of the lift enclosure shall be at least two hours fire resisting type.
- 2) Collapsible gate shall not be permitted.

- 3) One of the lift shall be designed for fire lift. The word "FIRE LIFT" shall be conspicuously written at ground floor.
- 4) Lift & Lift Lobby Communicated to the Basement shall be pressurized as per guide line of NBC Part-IV, Annex-C.

E. REFUGE AREA:

- 1) Refuge area is not less than 15 sq meters shall be provided on the external wall with cantilever projection or other suitable means of the buildings at
 - ❖ Block- A:- 24.1 M. level.
 - ❖ Block- B:- 26.225 M. & 38.825 M. Level respectively.
 - ❖ Block- C1:- 25.95 M., 41.45M, 56.95M., 69.35 M. level respectively.
 - ❖ Block- C2 & C3:- 25.95 M., 41.45M, 56.95M., 72.45 M. level respectively.
- 2) The refuge area shall be of fire resisting construction and protected with self closing FCD 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.

F. BASEMENT:

- 1) The basement shall be adequately ventilated.
- 2) The basement shall be protected Auto Sprinkler System, Hydrant System and Hose Reel System as per requirement.
- *3)* Additional staircase from the open air as shown in the drawing shall be constructed beside the ramps conforming relevant I.S. specification.
- 4) Mechanical extractor for smoke venting system from lower/upper basement levels shall also be provided. The system shall be of such design as to operate on actuation of heat/smoke sensitive detector or sprinkling. It shall also have an arrangement to start it manually.
- 5) Mechanical extractors shall have an alternative source of supply.

G. FIRE FIGHTING WATER:

Under ground water reservoir water capacity at 5,50,000 Ltr and overhead reservoir of 20,000 L exclusively for each building for firefighting purpose with replenishing arrangements @ 1,000 L.P.M. preferably from two different sources of water supply shall be provided. The Fire Water Reservoir shall have overflow arrangement with the domestic Water Reservoir as well as to avoid stagnancy of water. The water reservoir shall be kept full at all time.

H. HYDRANT SYSTEM:

1) Each building shall be provided with wet riser of 150 mm internal diameter pipe line with provision of landing valves at the staircase landings / half landings at the rate of one such riser for 1000 sq.m of floor area. The overhead Reservoir shall be connected with the adequate diameter pipe with wet risers of hydrant and sprinkler of 150 mm diameter pipe line. The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge 2850 L.P.M. at the ground floor level outlet and minimum 900 L.P.M. at the top most outlet. In

both cases the running pressure shall not be less that 3.5 kg/sq.cm. All other requirements shall confirm I.S. 3844-1989.

- 2) Provision for Hose Reel in conjunction with wet riser shall be made at each floor level. Confirming the relevant I.S. specification.
- 3) Provision of standard Hose Reel Hose supplied from the overhead reservoir through Booster Pump shall have to be made in all the floor of the building satisfy the code of I.S. 3844-1989.
- 4) Yard Hydrant / Ring Main Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S. specification.
- 5) Provision of three way collecting head for uses of Fire services must be provided at the entrance of the building.

I. SPRINKLER INSTALLATION:

The automatic sprinkler installation shall be provided in basement and in all floor areas of each building as per I.S. 9972. Alarm gang to be incorporated along with the sprinkler system.

J. FIRE PUMP:

Provision of the fire pump shall have to be made to supply water at the rate designed pressure and discharge into the water based system which shall be installed in the building. One such pump shall always be kept on stand-by preferably be of diesel driven type.

A separate Fire Pump shall have to be provided for the total Sprinkler Installation of each building. Provision of jockey pump shall also have to be made to keep the water based system under pressurized condition at all the time. All the pumps shall be incorporated with both manual and auto starting facilities. The suction of pumps shall preferably of positive type or in case of negative suction the system shall be wet riser-cum-down comer with suitable terrace pump with overhead tank.

Fire Pump Room shall have to be constructed separately for each building as shown / marked in the revised plan.

K. <u>ELECTRICAL INSTALLATION & DISTRIBUTION</u>:

- 1) The electrical installation including transformers, switch gears, main & meters etc. and the distribution system of the premises shall be made satisfying the code of practice for fire safety in general building as laid down in I.S. 1946-1982.
- 2) The vertical & horizontal Electrical ducts shall be sealed at each floor level by fire resisting materials.
- 3) The electrical installation shall be adequately protected with $CO_2/$ D.C.P. extinguishers.
- 4) Alternative power supply Arrangements shall have to made to supply with the help of a Generator to operate at least the Fire Pump, Pump for deep tube well, Fire Alarm System, Fire Lift etc. and also for illuminating the staircase, corridors etc. and other places of assembly of the buildings incase of normal power failure.

L. INTELLIGENCE ANALOGUE SYSTEM:

- Auto Fire Alarm System with analogue addressable smoke / heat detector as per suitability shall be installed in each floor of the buildings.
- 2) Addressable analogue manual call boxes incorporating with sounders shall be installed in all floor area of the building in such a manner that maximum travel distance shall not be more than 22.5 M in order to reach any of the call point.
- 3) Intelligent Analogue based fire alarm panel shall be installed and all shall also be connected with main panel at the fire control room of the premises having direct dialing facility to the local fire service unit.
- 4) Both way public address systems shall be made available in all floors of the buildings. The system shall be connected to the Main Control Room.
- 5) All the installation shall also be satisfy the I.S. 2189 (as amendment) and the code of practice as laid down in the N.B.C Part-IV.

M. AIR CONDITIONING SYSTEM (IF ANY):

- The A.H.U shall be separated for each floor with the system Air Ducts for individual floor.
- 2) Arrangement shall be made for isolation at the strategies location by incorporating Auto Damper 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 unit's room shall not be used for storage of any combustible materials.

N. FIRST AID FIRE FIGHTING SYSTEM:

First Aid Fire fighting arrangements in the style of placing suitable type of portable fire extinguishers, fire buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with I.S.2190-1992.

O. GENERAL RECOMMENDATIONS:

- 1) Fire License shall have to be obtained from the License section of the Department for proposed storing of highly combustible articles and processing with L.P.G, which come under the per view of License Section.
- 2) Disposable type B.A. Musk to be kept in readiness for emergency Fire situation.
- 3) Fire Notice for fire fighting and evacuation from the building shall be prepared and be displayed at a vulnerable places of the buildings.
- 4) Floor numbers and directional sign of escape routs shall be displayed prominently.
- 5) The employees and security staff shall be conversant with installed fire fighting equipments of the building and to operate in the event of Fire & Testing.
- 6) Arrangement shall be made regular checking, testing and proper maintenance of all the fire safety installation and equipments installed in the building to keep them in perfectly good working conditions at all times.
- A crew of trained fireman under the experienced officer shall be maintained round the clock for safety of the buildings.

- 8) Mock fire practice and evacuation drill shall be performed periodically with participation of all occupants of the buildings.
 - 9) 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 & fire safety arrangements and installation of the buildings.

This shall be treated as **Fire Safety Recommendation** 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 favour of the occupancy shall be issued on being satisfied with the tests and performances of safety aspects of installation of the buildings.

N.B: Any deviation and changes the nature of use of the buildings in respect of the approved plan drawing, without obtaining prior permission from this office, this fire safety recommendation will be treated as cancelled.

DIRECTOR IN-CHARGE FIRE PREVENTION WING WEST BENGAL FIRE & EMERGENCY SERVICES