

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI **HEADQUARTERS: DELHI FIRE SERVICE: NEW DLEHI - 110 001**

No. F.6/DFS/MS/Assembly/(UG)/SZ/2018/ 180

Dated: 28/1/18

FIRE SAFETY CERTIFICATE

Certified that the Naraina Underground Metro Station of Line-7, comprising of fur levels (Undercroft, Platform, Concourse & Ground, Level) owned / occupied by Delhi Metro Rail Corporation was inspected by the officer concerned of this department on 18/01/2018 in the presence of Mr. Deepak Kumar Gupta (Dy. CEE) and found that the said Metro Station building have complied with the fire prevention and fire safety requirements in accordance with rule 33 of the Delhi Fire Service Rules, 2010 and that the premises is fit for occupancy class "Group D (Assembly building)" with effect from 23+1-12-- for a period of three years in accordance with rule 36 unless renewed under rule 37 or sooner cancelled under Rule 40 and subject to compliance of the conditions under rule-38 of the Delhi Fire Service Rules, 2010.

Issued on.....29.11.13......at New Delhi by.

(Vipin Kental) **Chief Fire Officer** Tel: 011-23412225

Copy to:-

1. Papiya Sarkar, Chief Architect, DMRC, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, 39
New Delhi-110001

2. The Director (Projects), DMRC, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi-110001

Conditions for the validity of fire safety certificate:-

- 1. All the means of escape/entry/exit shall be kept free from any obstruction.
- 2. All the fire safety arrangements provided therein shall be maintained in good working condition at all time as seen during inspection. Any loss of life or property due to non-functional fire safety measures shall be at the responsibility of the management.
- 3. All the staff members must know the correct method of operation of firefighting system.
- 4. The owner/ occupier shall submit a declaration every year in Form 'K' provided in the first schedule of Delhi Fire Service Rules 2010. The form is available on www.dfs.delhigovt.nic.in
- 5. This fire safety certificate may not in any way be treated as regularization of unauthorized construction, if any.
- 6. "The owner/occupier shall apply for renewal of this Fire Safety Certificate to the Director in Form 'J' [sub rule (1) of rule 37] along with a copy of this Certificate, six months prior to its expiry."

1. Name & address of the building: Naraina Underground Metro Station, Line-7 : Assembly, Group-D 2. Type of Occupancy 3. Type of Case : New 4. Details of previous NOC : N/A 5. Fire Safety directives letter No : F6/DFS/MS/2013/2 dated 23/07/2013. : 18.01.2018 6. Date of inspection 7. Name of the Inspecting Officers: M.K.Chattopadhyay, DO(SW) 8. Name and designation of officers : Mr. Deepak Kumar Gupta, Dy. C.E.E from the building side : 2017[Undercroft + Platform + Concourse + Ground] 9. Year of Construction : DMRC/12/CA/187-PH-III dated 29.12.2017 10. Applicant's letter No. Provided at site Remarks **NFPA** Minimum Standards on fire S. MR/NMR Requirement prevention and fire safety U/R 33 No. 1 Access to building 12 mts MR Required Road width 06 mts N/A N/A Gate width 06 mts Width of internal road MR N/A Number, Width, Type & Arrangement of Exits 2 a. Number of staircases N/A N/A N/A Upper Floors MR (50% capacity of (1). Undercroft to Platform- 2 Nos Provided Escalators is counted for (2).Platform to Concourse-6 Nos +2 Basements evacuation in NFPA) Escalators (3). Concourse Ground- 03 Nos + 02 Escalator. b. Width of staircases Upper Floors N/A N/A N/A (1). 1.40m x 2 Nos (2). 2.50 m x 2 Nos, 1.50 m x3 2.8m & 1.2m Basements Nos& 1.42 m x 1 Nos + 1.13 m x 1 Nos (3). 4.50m x (maintenance c. Protection of exits 2 Nos, 1.23 m x 1 Nos staircase) Fire check door MR Provided Required Required in Fireman Staircase & Provided MR Pressurization Emergency Staircase NA NA NA e. No. of continuous staircases to terrace NA NA NA g. Width of Corridor MR Provided 01 mt. h. Door Size 3 Compartmentation. Provided MR Required Fire check door MR Provided Required Sealing of electrical shafts MR Provided 90 minute Fire Rating of shaft door NA NA NA Water Curtain MR Provided Required Fire Dampers Smoke Management System. 4 MR Provided Required in platform, Basements concourse NA tunnels NA Upper floors Fire Extinguishers 5 MR Provided 95 No's Total numbers ABC/W.CO2/CO2

	Total numbers on each floor	at Concourse & 6 Nos at Platfo		MR		
	Length of hose reel hose	30 & 45 m	Provided	MR		
	Nozzle diameter	6 mm	Provided	MR		
7	Automatic fire detection and alarming system.					
/	Type of detectors	Smoke & Heat	Provided	MR		
	Location of Main Panel	Station Control Room	Provided	MR		
		Required	Provided	MR		
	Location of Repeater Panel Alternational Services of Proving	Required	Provided	MR		
	Alternate source of powerHooters' Location	All areas	Provided	MR		
	Hooters Location			MR		
8	MOEFA	Required	Provided			
9	Public Address System.	N/A	Provided	N/A		
10	Automatic Sprinkler System. Under track MVW nozzle, Store Provided MR					
	Basement	rooms at Concourse & platfo				
	Upper Floor	N/A	N/A	N/A		
	Sprinkler above false ceiling	N/A	N/A	N/A		
11	Internal Hydrants					
11	Size of riser/down-comer	150mm	Provided	MR		
	Number of hydrants per floor	3 No. in ancillary building, 7 Nos at Concourse & 6 Nos at Platform		MR		
	Hose Box	3 No. in ancillary building, 7 Nos at Concourse & 6 Nos at Platform Provided		MR		
12	Yard Hydrants.					
12	Total number of hydrants	2 Nos	Provided	MR		
	Hose Box	02 Nos at ancillary building	Provided	MR		
13	Pumping Arrangements.					
15	Ground Level	-	-	-		
	 Discharge of main Pump 	Hyd-2839 LPM, SPK- 2839 LPM	Provided	MR		
	➤ Head of Main pump	Hyd- 90 mts, SPK- 56 mts	Provided	MR		
	Number of main pumps	02	Provided	MR		
	Jockey Pump out put	Hyd-189 LPM, SPK- 189 LPM	Provided	MR		
	Jockey pump head	Hyd- 90 mts, SPK- 56 mts	Provided	MR		
	> Standby Pump out put	2839 LPM	Provided	MR		
	> Standby Pump Head	56 mts.	Provided	MR		
	Auto Starting/ Manual stopping	Required	Provided	MR		
	Pump House Access	Required	Provided	MR		
	Terrace level	-	-	-		
	Discharge of pump	N/A	N/A	N/A		
	➤ Head of the pump	N/A	N/A	N/A		
	> Power Supply	N/A	N/A	N/A		

7	Auto Starting of pump	N/A	N/A	N/A		
	Captive Water Storage for fire fighting.					
	 Underground tank capacity 	N/A	N/A	N/A		
	Draw-off connection	Required	Provided	MR		
	Fire service inlet	Required	Provided	MR		
	Access to tank	Required	Provided	MR		
	Overhead Tank capacity	2 x 1,00,000 Lts	Provided	MR		
15	Exit Signage.	Required	Provided	MR		
16	Provision of Lifts.					
	Pressurization of Lift Shaft	N/A	N/A	N/A		
	Pressurization of Lift lobby	N/A	N/A	N/A		
	Communication In lift Car	Required	Provided	MR		
	Fireman's Grounding Switch	Required	Provided	MR		
	Lift Signage	Required	Provided	MR		
17	Standby power supply	Required	D.G.Set Provided	MR		
18	Refuge Area.					
	Total Area	N/A	N/A	N/A		
	> Location	N/A	N/A	N/A		
19 Fire Control Room						
	Detector System Panel	Required in SCR	Provided	MR		
	Flow Switch Panel	Required	Provided	MR		
	PA System Panel	Required	Provided	MR		
	Batter backup	Required	Provided	MR		
	Building Floor Plans	Required	Provided	MR		
20	Special Fire Protection Systems for Protection of special Risks, if any:	Clean Agent flooding system for Electrical Panels & Transformer	Provided NOVEC 1230	MR		

The fire protection systems provided in the building were randomly tested, checked and found functional at the time of inspection.

Keeping in view of the above compliance of the minimum standards of fire prevention and fire safety measures as required under the rule 35 of the Delhi Fire Service Rules 2010, Fire Safety Certificate is recommended.

Accordingly DFA is put up for approval and signature.

10/DO/SW 23/1 /20/8

Lapry

M.K.CHATTOPADHYAY
Div. Officer (SW)