## GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI HEADQUARTERS: DELHI FIRE SERVICE: CONNAUGHT PLACE NEW DELHI-110 001.

No.F.6/DFS/MS/Assembly(UG)/2018/SZ/ 4/2

Dated: 14/3/18

## FIRE SAFETY CERTIFICATE

Issued on...... at New Delhi.

(VIPIN KENTAL) HIEF FIRE OFFICER

Copy to:-

Sh. R.K. Saxena (CEE/RC1), Deini Metro Rail Corporation Ltd., Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi-110001

Following fire safety directives must be adhered to:-

- 1. All the fire safety arrangements provided therein shall be maintained in good working condition at all times.
- 2. The means of escape shall be kept unlocked and unobstructed for unhindered evacuation of occupants in case of emergency.
- 3. Any loss of life or property due to non-functional fire safety measures shall be at the risk and responsibility of the management.
- 4. The trained staff should be available round the clock.
- 5. Any deviations w.r.t. construction shall be verified by the concerned building sanctioning agency.
- 6. The certificate may not be treated in any case for the regularization of the unauthorized construction, if any.
- 7. The owner/occupier shall submit a declaration every year in the form 'K' provided in the first schedule of Delhi Fire Service Rules 2010, form is available on <a href="www.dfs.delhigovt.nic.in">www.dfs.delhigovt.nic.in</a>.
- 8. The owner/occupier shall apply for renewal of this Fire Safety Certificate to the Director in the Form 'J' [sub rule (1) of rule 37] along with a copy of this Certificate, six months prior to its expiry.

Underground Metro Station comprised of Concourse level, Platform level, Undercroft level & ancillary bldg. (ground plus one upper floor).

## **INSPECTION REPORT**

1. Name & address of the building: Dabri Mor Underground Station of Line-8, New Delhi-110045.

2. Type of Occupancy : Assembly Building D-7

3. Type of Case : New4. Details of Previous NOC : N/A

5. Fire Safety directives letter No : F.6/DFS/MS/2013/2317 dated 25.09.2013

6. Date of inspection : 01.03.2018

7. Name of Inspecting Officer : D.O M.K. Chattopadhyay & A.D.O. Sandeep Duggal

8. Name and designation of officers

From the building side : Sh. Rajesh Jain (Dy. CEE VAC) & Sh. Balwant (Dy. CEC DMRC)

9. Year of Construction : 2017

10. Applicant's letter No. : DMRC/MV/O/16/Elect./DFS dated 15.02.2018

S. No.	Minimum Standards on fire prevention and fire safety U/R 33	NFPA Requirement	Provided at site	Remarks MR/NMR
1.	Access to building	<u> </u>	-	
	<ul><li>Road width</li><li>Gate width</li><li>Width of internal road</li></ul>	Required N/A Approachable	Provided Directly accessible from road Abut on road	M/R N/A MR
2.	Number, Width, Type & Arrangement of Exit	S	Abut on road	
	a. Number of staircases			
	<ul> <li>Upper floors</li> </ul>	1 noAncl. Bldg	. Provided	M/R
	Basement	1. Undercroft to p		M/R
		3 no.'s  2. Platform to co 7 no.'s+ 02 E 3. Concourse to C no.'s+02 esc	oncourse Secalator Ground 3	
	L Wild Co.			
	b. Width of staircases	125 cms	Provided	M/R
	<ul><li>Upper floors</li><li>Basements</li></ul>	1. 1.25 (03 no.'s) 2. 4.2 m (02 no.'s)+3.	0m (02	
		no.'s)+1.25m (03 no.'s), + escalator - 01m (02 no.'s) 3. 4.7m (01 no.), +3.4m (01 no.), + 1.25M (01no.), + escalator -01M		
	c. Protection of exits	(02 no.'s)		
	Fire/smoke check door	~		
	Pressurization	Required	Provided	MR
	d. No. of continuous staircases to	Required in fireman emergency staircas	e & Provided	MR
	e. Width of Corridor			
	f. Door Size	N/A	N/A	N/A
		02 mtrs Provided 1.30/.91 mtrs Provided		MR
	:			MR
•	Compartmentation			<b>Y</b>
	Fire check door	Required	Provided	MR
	Sealing of electrical shafts	Required	Provided	MR
	Fire Rating of shaft door	30 mnts & 03 hrs	Provided	MR
	Water Curtain	N/A	N/A	N/A
	Fire Dampers	Required	Provided	MR
	Smoke Management System			1711(
	Basements	Required	Provided	MR
	Upper floor	N/A	N/A	N/A
	Fire Extinguishers			

5. Fire Safety directives letter No : F.6/DFS/MS/2013/2317 dated 25.09.2013

6. Date of inspection : 01.03.2018

7. Name of Inspecting Officer : D.O M.K. Chattopadhyay & A.D.O. Sandeep Duggal

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1.	Access to building			MR/NMR
	<ul><li>Road width</li><li>Gate width</li><li>Width of internal road</li></ul>	Required N/A Approachable	Provided Directly accessible from road Abut on road	M/R N/A MR
2.	Number, Width, Type & Arrangement of Exi	ts		
	a. Number of staircases			
	<ul> <li>Upper floors</li> </ul>	1 noAncl. Bldg		M/R
	Basement	1. Undercroft to p 3 no.'s 2. Platform to co 7 no.'s+ 02 E 3. Concourse to 0 no.'s+02 esc	oncourse Escalator Ground 3	M/R
	1. Wilds of stairpages			
	b. Width of staircases	125 cms	Provided	M/R
,	<ul> <li>Upper floors</li> <li>Basements</li> </ul>	1. 1.25 (03 no.'s) 2. 4.2 m (02 no.'s)+3.0m (02 no.'s)+1.25m (03 no.'s), + escalator - 01m (02 no.'s) 3. 4.7m (01 no.), +3.4m (01 no.), + 1.25M (01no.), + escalator -01M (02 no.'s)		led M/R
	c. Protection of exits		-	
	Fire/smoke check door			
	<ul> <li>Pressurization</li> </ul>	Required	Provided	MR
	d. No. of continuous staircases to terrace	Required in firema emergency stairca		MR
* 1	e. Width of Corridor	N/A	N/A	N/A
	f. Door Size			
		02 mtrs	Provided	MR
		1.30/.91 mtrs	Provided	MR
3.	Compartmentation	-		
	Fire check door	Required	Provided	MR
	Sealing of electrical shafts	Required	Provided	MR
	Fire Rating of shaft door	30 mnts & 03 hrs	Provided	MR
	Water Curtain	N/A	N/A	N/A
	<ul> <li>Fire Dampers</li> </ul>	Required	Provided	MR
4.	Smoke Management System	- Codemon		1
••	Basements	Required	Provided	MR
	Upper floor	N/A	N/A	N/A
5.	Fire Extinguishers			
	Total numbers	100 No.'s	Provided	M/R
	• Types	ABC/CO <sub>2</sub> type	Provided	M/R
	IS marking	ISI marked	Provided	M/R

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Underground Metro Station comprised of Concourse level, Platform level, Undercroft level & ancillary bldg. (ground plus one upper floor).

6.	First-Aid Hose Reels	nd plus one upper floo	or).	
	Total numbers on each floor	01 no. in ancillary bldg., 11 Provided		M/R
	<ul> <li>Length of hose reel hose</li> </ul>	no.'s at CL, 10 no.' 30 mtrs	s at PL Provided	27, 308, 5450
	Nozzle diameter	6 mm	Provided	M/R
7.	Automatic fire detection and alarming system	1		
	<ul> <li>Type of detectors smoke/heat</li> </ul>	Required	Provided	MR
	<ul> <li>Location of Main Panel</li> </ul>	Stn. Control room	Provided	MR
	<ul> <li>Location of Repeater Panel</li> </ul>	Required	Fireman S/case	MR
	Alternate source of power	Required	Provided	MR
	Hooters' Location	Required	All areas	MR
8.	MOEFA	Required	Provided	MR
9.	Public Address System	Required	Provided	MR
10.	Automatic Sprinkler System	T ** 1		
	Basement     Grand Floring	Undertrack MVW noz Store rooms at CL &		MR
	Ground Floor     Sprinkler above foliog coiling	N/A	N/A	N/A
	Sprinkler above false ceiling	N/A	N/A	N/A
11.	Internal Hydrants			10/11
	Size of riser/down-comer	150 mm	Provided	MR.
	<ul> <li>Number of hydrants per floor</li> </ul>	01 no. in ancillary bl		MR ·
	Hose Box	no.'s at CL, 10 no.'s 01 no. in ancillary bloo.'s at CL, 10 no.'s	dg., 11 Provided	MR
12.	Yard Hydrants			
	<ul> <li>Total number of hydrants</li> </ul>	02 no. in ancillary bldg	Provided	MR
	Hose Box	02 no. in ancillary bldg	. Provided	MR
13.	Pumping Arrangements		,	
	Ground Level			
	Discharge of main Pump	2839 LPM	Provided	MR
	➤ Head of Main pump	88 mtrs & 56 mtrs	Provided	MR
	Number of main pumps	Two	Provided	MR
	> Jockey Pump out put	189 LPM (02 no.'s)	Provided	MR
	> Jockey pump head	88 mtrs & 56 mtrs	Provided	MR
	Standby Pump out put (Electrical)	2839 LPM (02 no.'s)	The same of the sa	MR
	Standby Pump Head	88 mtrs & 56 mtrs	Provided	MR
	<ul><li>Auto Starting/Manual Stopping</li></ul>	Required	Provided	MR
	Pump House Access	Required	Provided	MR
	Terrace level	Required	TTOVIUCU	IVIK
	Discharge of pump	N/A	N/A	N/A
	Head of the pump	N/A		
	Power Supply	N/A N/A	N/A N/A	N/A N/A
	> Auto Starting of pump	N/A	N/A N/A	N/A
14.	Continu Water Ct.			
14.	Captive Water Storage for fire fighting	27/4	774	
	<ul> <li>Underground tank capacity</li> <li>Draw-off connection</li> </ul>	N/A	N/A	N/A
	Fire service inlet	Required	Provided	M/R
	> Access to tank	Required	Provided	M/R
	Overhead Tank capacity	Required	Provided	M/R
1.7		2,00,000 ltrs	Provided	M/R
15.	Exit Signage.	Required	Provided	M/R
16	Duavision of I ifts			

7.	Automatic fire detection and alarming system	l		
	Type of detectors smoke/heat	Required	Provided	MR
	<ul> <li>Location of Main Panel</li> </ul>	Stn. Control room	Provided	MR
	Location of Repeater Panel	Required	Fireman S/case	MR
His .	Alternate source of power	Required	Provided	MR
	Hooters' Location	Required	All areas	MR
8.	MOEFA	Required	Provided	MR
9.	Public Address System	Required	Provided	MR
10.	Automatic Sprinkler System	<u> </u>		
	Basement	Undertrack MVW nozzlo		MR
	Ground Floor	Store rooms at CL & P N/A	N/A	N/A
	<ul> <li>Sprinkler above false ceiling</li> </ul>	N/A	N/A	N/A
11.	Internal Hydrants	IN/A	IN/A	IN/A
11.	Size of riser/down-comer	150 mm	Provided	MR
	Number of hydrants per floor	01 no. in ancillary bldg		MR
-	Hose Box	no.'s at CL, 10 no.'s at	PL	
	• Hose Box	01 no. in ancillary bldg no.'s at CL, 10 no.'s at		MR
12.	Yard Hydrants	110. 5 at 62, 10 110. 5 at	12	X
	Total number of hydrants	02 no. in ancillary bldg.	Provided	MR
	Hose Box	02 no. in ancillary bldg.	Provided	MR
13.	Pumping Arrangements			
	Ground Level			1
	<ul><li>Discharge of main Pump</li></ul>	2839 LPM	Provided	MR
	> Head of Main pump	88 mtrs & 56 mtrs	Provided	MR
	Number of main pumps			
	> Jockey Pump out put	Two	Provided	MR
	> Jockey pump head	189 LPM (02 no.'s)	Provided	MR
	<ul><li>Standby Pump out put (Electrical)</li></ul>	88 mtrs & 56 mtrs	Provided	MR
		2839 LPM (02 no.'s)	Provided	MR
	Standby Pump Head	88 mtrs & 56 mtrs	Provided	MR
	Auto Starting/Manual Stopping	Required	Provided	MR
	Pump House Access	Required	Provided	MR
	Terrace level	*	1	
	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
	Auto Starting of pump	N/A	N/A	N/A
14.	Captive Water Storage for fire fighting			
	Underground tank capacity	N/A	N/A	N/A
	> Draw-off connection	Required	Provided	M/R
	Fire service inlet	Required	Provided	M/R
	Access to tank	Required	Provided	M/R
	Overhead Tank capacity	2,00,000 ltrs	Provided	M/R
15.	Exit Signage.	Required	Provided	M/R
16.	Provision of Lifts.	4		
	Pressurization of Lift Shaft	N/A	N/A	N/A
	<ul> <li>Pressurization of Lift Shaft</li> <li>Pressurization of Lift lobby</li> </ul>			
	Communication In lift Car	N/A	N/A	N/A
	Fireman's Grounding Switch	Required	Provided	M/R
	Lift Signage	Required	Provided	M/R
	~ ~.B	Required	Provided	M/R
				0

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Underground Metro Station comprised of Concourse level, Platform level, Undercroft level & ancillary

bldg. (ground plus one upper floor).

	olug. (gro	ind plus one upper moor	1.	
17.	Standby power supply	Required	Provided	M/R
18.	Refuge Area.			
	> Total Area	N/A	N/A	N/A
	Location	N/A	N/A	N/A
19.	Fire Control Room			8
	Detector System Panel	Required in SCR	Provided	M/R
	Flow Switch Panel	Required	Provided	M/R
	<ul> <li>PA System Panel</li> <li>Battery backup</li> <li>Building Floor Plans</li> </ul>	Required	Provided	M/R
		Required	Provided	M/R
		Required	Provided	M/R
20.	Special Fire Protection System for Protection of special Risks, if any:	Clean agent flooding system for Transformer & LT Panels	Provide	d MR

The fire protection systems provided in the building were tested, checked and found functional at the time of inspection. The shortcomings pointed out by this department vide letter no. F.6/DFS/MS/2018/471 dated 05.02.2018 has been rectified.

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

Signature of Inspecting Officer Name: - M.K. Chattopadhyay

Designation:- Divisional Officer

Signature of Inspecting Officer

Name: - Sandeep Duggal

Designation:- Asstt. Divisional Officer

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