

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: TMSS Apparels Ltd

RSC ID: 24990

**ADDRESS: 66/3, Dhorpara, Sataish, Chowrasta, Tongi, Gazipur-1712, Bangladesh.
23.921204224139352, 90.36925573893828**

Other Factories: None



Inspected By: Yusuf Ahmed and Md. Musa

Date: 26/12/2023

Fire Safety Inspection Report

Factory Name: TMSS Apparels Ltd

Introduction:

TMSS Apparels Ltd complex was surveyed for fire safety on **26 December 2023** by The RSC Inspection Team.

The purpose of the survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the RSC. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The inspection did not include identification of minor deficiencies, which will be further addressed as part of follow-up inspections.

Limitations

The information in this fire safety inspection report was obtained during a visit to the facility and during interviews with local factory management. It has not been possible to provide independent verification for all the information and data collected, and, therefore, The RSC cannot accept general responsibility for omissions or errors arising from inaccuracies in this report from the information obtained.

The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations as stated in this report will eliminate all hazards, risks or exposures or that hazards, risks or exposures not referred to in this report do not exist. Compliance with the findings and recommendations stated in this report does not relieve the factory owner from obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

General Factory Information

Factory Building name(s):

1. Building 1-6-Storied Main Building
2. Building 2- Single Storied Maintenance building (Boiler, Compressor, maintenance room)
3. Building 3- Single Storied Utility building (Substation, Meter room, Generator room)
4. Building 4-Single Storied Security & RMS room
5. Building 5-Single Storied Fire Pump Room

Findings & Recommendations :

Table 1 summarizes the major fire safety issues identified during the inspection. Recommendations have been provided to address each issue.

An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for approval.

Table-1:

Sl No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Alarm & Detection System (FADS)	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit the fire alarm system design to RSC for review. Once the design is reviewed, install and modify the fire detection and alarm system throughout the buildings in accordance with review comment, RSC Technical Guidelines (Standard) and NFPA 72. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 2 months and installation/modification within 4 months
				

2	Fire Suppression System (SUPS)	A Standpipe system was found to be installed in the factory, which is required to be reviewed and verified. Location: Building-1 (Main Building)	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC standard and NFPA 14,20,22 and 24. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design Review within 2 months and installation/modification within 4 months
		 		
3	Means of Egress	Doors along means of egress are provided with non compliant locking features.	Remove all non compliant locking features from egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate

		   		
4	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy, Location: 4th & 5th floor	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m² and is separated by a minimum 3.0 m (10ft) from other storage areas and they do not exceed 10 percent of the building area of the story in which they occur. or, If sprinkler protected, Maximum height 12 ft (3.66 m) and maximum area of 1000 ft² (93 m²) and separated by a at least 25 ft (7.62 m) and does not constitute more than 10 percent of the building area or 4000 ft² (372 m²) of the sprinklered area, whichever is greater. or, Enclose the storage area from the surrounding occupancy with a minimum 1 hour construction.	Within 1 month

					
5	Means of egress	Electrical Panel was found located inside the exit stair-1 enclosure.	Remove or relocate the Electrical Panel from the exit stair enclosure.	Within 1 month	
					
6	Fire Rated Construction	Rooms used for combustible storage are not separated by fire rated construction due to non functional fire door, unsealed penetration and unprotected openings. Location : Ground floor and 1st floor of the Building-1 (Main Building).	Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated barrier construction.	Within 3 months	

  				
7	Means of Egress	Sliding type doors was provided along means of egress [Office, Staff canteen]. Location: 1st floor of the Main Building.	Replace all collapsible/sliding/shutter type doors & gates by the side-hinged swinging type doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Within 1 month
				
8	Means of Egress	Building did not have stair designation signs and occupant load signs at required locations.	Provide stair designation signs and occupant load signs at required locations.	Within 1 month

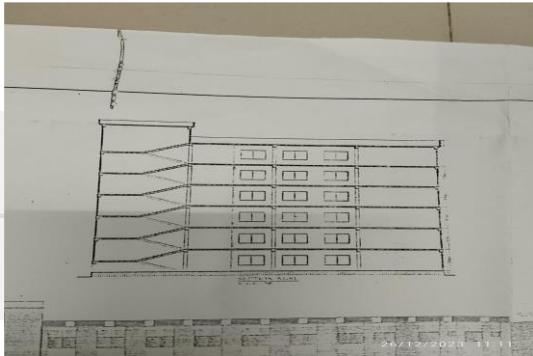
9	Means of Egress	Directional signs are not provided where direction of the path of travel to an exit has changed at several locations.	Illuminated directional signs shall be provided where there is a change in the direction for the path of travel and the direction to an exit is not obvious.	Within 1 month
10	Means of Egress	Storage was located in exit stair enclosure on ground floor and inside dining room on the roof floor of the Main Building.	Remove storage from the exit stairs, egress path and dining room.	Immediate
 				
11	Fire Rated Construction	The compressor room is not separated from the storage area by fire-rated construction. Location: Maintenance building	Separate the compressor room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
				

12	Fire Rated Construction	Storage room discharges directly into exit stair enclosure without vestibules. Location : Main Building on 1st floor	Openings from the exit enclosure to the storage room, shall be provided with a vestibule with fire-rated construction and openings. Provide a 1.5 hr. fire-rated door on the exit stair side and a 1 hr. fire-rated door on the store side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure. The minimum width for vestibules shall not be less than 1.1 m and length 1.8 m.	Within 3 months
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13	Egress Lighting	Exit signs were not provided every required exit also some exit signs were not illuminated properly.	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs shall be placed throughout the facility anywhere the continuation of the egress is not obvious. Lighted exit signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 1 month

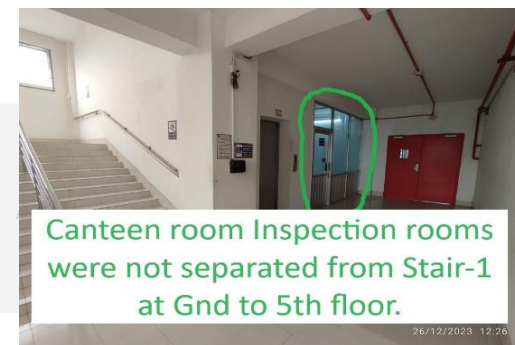


14	Means of Egress	Aisles marks were not provided in the storage room. Location: 1st floor of the Main Building.	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 1 month
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15	Means of egress	Minimum handrails height was not maintained at stair 3.	Provide handrails on both sides of the exit stair. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.)	Within 2 months

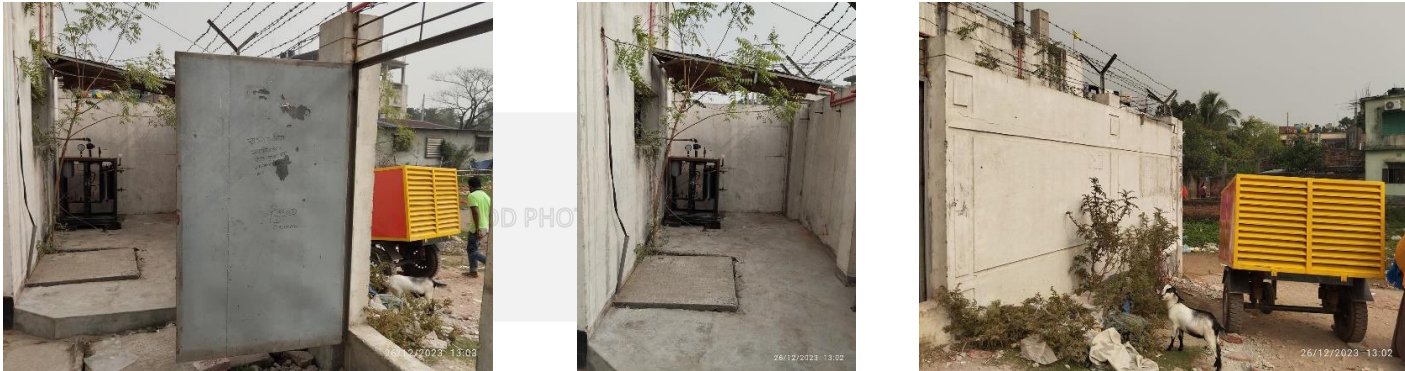
16	Fire Rated Construction	Elevator shafts are directly open into the exit enclosure which is a violation of RSC Technical Guidelines (Standard)-6.14.3. Location: Stair-1	An exit stairway shall not be built around a lift shaft unless both are located in a smoke-proof enclosure and made of a material with a fire-resistance rating required for the type of construction of a smoke-proof enclosure. (As per 6.14.3 of RSC Technical Guidelines (Standard) V1.0) Ensure the lift shaft is enclosed by a minimum 2-hour fire-rated wall with a minimum 1.5-hr fire-rated protective openings. Recommended to follow RSC "SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES" for remediation.	Within 3 months
 				

17	Fire Rated Construction	Unsealed penetrations and openings by electrical riser and PVC pipes were found in the fire rated floor/ceiling assemblies. Location: Main Building.	Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level or seal all penetrations and openings in floors/ceiling assemblies by 3-hr fire rated listed/certified materials. The installation of such fire rated materials shall be following certified design	Within 3 months
 				
18	Means of Egress	Each exit stairs serve more than 5 stories and do not have required re-entry provisions.	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 3 months
				

19	Fire Rated Construction	The exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction. Location: Ground to 5th floor (Stair-1, Stair-2 & Stair-3) Exit stair-1 was not separated from the inspection room from 1st floor to 5th floor and from canteen room on ground floor.	Separate the exit stairs from work areas and other building spaces on all floor levels by minimum 2-hr fire-rated construction. Provide minimum 1.5-hr fire-rated doors and seal all unprotected openings and penetrations to maintain the fire separation. Ensure that all fire doors are self-closing and positive latching, and are provided with fire exit (panic) hardware where serving production floors or assembly occupancies. If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system. Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 03 months
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20	Fire Rated Construction	Liquefied or compressed gas cylinders were located beside the factory premises and high pressure reducing unit was found inside the boiler room. Location: South-East Corner beside the Boiler Room.	Remove the storage of liquefied or compressed flammable gas (LPG/CNG) cylinders. Or, Ensure the following arrangements: 1. The storage building must be at least 3 meters away from any other buildings and boundaries. 2. The exterior walls of the building must have a fire resistance rating of 3 hours using noncombustible construction. 3. Doors and other openings in the exterior walls must be protected with suitable closing devices having a fire protection rating of 3 hours. 4. The building is to be used for no other purpose than the storage of LPG/CNG cylinders. 5. The building must be mechanically ventilated to control the accumulation of flammable vapors. 6. The installations must be approved and accepted by the requirements of the AHJ, Gas supply company regulations, manufacturers/supplier's instructions/guidance, Chief Inspector of Boiler (CIOB) and Chief Inspector of Explosives Bangladesh (CIEB). For details please see SUPPLEMENTARY PAPER ON TECHNICAL GUIDANCE NOTE FOR USE OF LIQUIFIED OR COMPRESSED FLAMMABLE GAS IN FACTORY PREMISES published on the RSC website.	Within 03 months
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21	Means of Egress	Parapets or guards were not provided in helipad area.	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 1 month
				
22	ITM of Fire Alarm & Detection System (FADS)	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with the NFPA 72 standard.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with table 14.3.1 of NFPA 72.	Within 1 month
23	ITM of Fire Suppression System (SUPS)	Inspection, testing and maintenance for the fire protection system (standpipe) was not in accordance with the NFPA 25 standard.	Inspect, test and maintain the fire protection system and keep written records on-site, in accordance with NFPA 25.	Within 1 month

24	ITM of Fire Pump System (SUPS)	Inspection, testing and maintenance for the fire pump system was not in accordance with the NFPA 25 standard.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25.	Within 1 month
25	ITM of Fire Extinguisher	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and The RSC Technical Guidelines (Standard).	Within 1 month
26	Emergency Light	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: Main Building.	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 1 month
27	Egress Lighting ITM	Inspection, testing, and maintenance for the emergency lighting system were not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The RSC Technical Guidelines (Standard) and keep written records on-site.	Within 1 month