

INITIAL FIRE SAFETY INSPECTION REPORT

Magpie Composite Textile Ltd. (Extension)

RSC ID: 24553

832/833, Dewan Idris Road, Amtoli, Ashulia, Savar, Dhaka

Other Factories: Magpie Composite Textile Ltd._ID-9804 (In the premises)



Inspected By: Pantha Pallob Das & Md. Anisuzzaman

Date: 28-May-2023

Fire Safety Inspection Report

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Introduction:

Magpie Composite Textile Ltd. (Extension); complex was surveyed for fire safety on **28/05/2023** 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): The Factory premises building are below:

1. Building -1 (7 Storied RCC building)
2. Building -2 (4 Storied RCC building which is planned to be constructed up to 6 storied)
3. Building-3 (2 Storied generator building)
4. Building -4 (3 Storied RCC ETP building which is planned to be constructed up to 4 storied)
5. Building-5 (Under construction single storied RCC lab building which is planned to be constructed up to 4 storied.)
6. Single storied dyeing shed (steel structure)
7. Single stored boiler shed.
8. Single storied Wastage shed.
9. Single storied tea room (Shed-3).
10. RMS room (Shed-5)
11. Fire control room
12. Security room/Gate room

Here, all the buildings are under ID-9804.... Except building-2 & 4.

The inspection conducted and report generated for building-2 & 4 which is under 24553.

Findings & Recommendations :

Table 1 (F-1 to F-19) summarizes the fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline. 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 review.

Table-1: Finding & Recommendation

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction.	Dedicated Rooms used for combustible storage are not separated by fire rated construction due to unprotected opening. Location: First floor of building-2(production 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 0.75 hr. (45 Minutes) fire rated fire rated barrier construction.	Within 3 months
 				

F-2	Fire Rated Construction.	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: First floor & 3rd floor of building-2 (production 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 fire rated barrier construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) , maximum area of 23m² (250 ft²) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (1000 ft²).	Within 3 months
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F-3	Fire Rated Construction.	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Busbar penetration, unprotected opening for fire standpipe & sewage line of the building-2.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's guideline. (Type-1 Construction). or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. (Type-1 Construction).	Within 3months
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F-4	Fire Rated Construction.	Chemical storage area is not properly separated by fire-rated construction with general store. Location: First floor of building-4(ETP building)	Separate the chemical storage room by minimum 4-hr fire rated construction with adjacent storage occupancy (present general store). Seal all penetrations and protect the openings to maintain the required fire separations. Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline. Keep SDS of all chemicals in the storage area for review.	Within 3 months
 				

F-5	Means of Egress	The exit stairs are not separated from work areas, other spaces on each floor by fire rated construction due to unprotected opening. Location: Building-2 and 4.	The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes certified opening protection. The clearance under the bottom of a fire door shall be a maximum of 19mm. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 months
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F-6	Means of Egress	The exit discharge path (Egress Court) was less than 10 ft wide and was not separated from the building interior. Location: Exit stair -2 and 3 of building-2 exit stair-1 of building-4(ETP building).	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft. to provide a minimum 2-hr fire separation.	Within 3 months
 				
F-7	Means of Egress	A single means of egress is provided in the first floor containing J occupancy. The common path of travel for the general store exceeds 30 m to reach the exit (Single). Location: First floor of building-4.	Provide another exit for the chemical store or relocate into another location following section 6.6 of RSC technical guideline (standard). For general store located the common path shall be limited to 30 m with maximum occupants 30.	Within 1 month

F-8	Means of Egress	Parapets or guards are not provided in occupiable roof as per standard. Location: Building-2 &4.	Construct parapet or guards with a minimum height of 1067mm (42 inch.).	Within 1 month
				
F-9	Means of Egress	Updated fire evacuation maps is not posted at the entrance of all exit stair. Location: Building-2 & 4.	Updated fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-10	Means of Egress	Updated occupant load sign and stair designation is not posted at the exit stair at all level. Location: Building-2 & 4.	Occupant load sign and stair designation is not posted at the exit stair at all level.	Within 1 month

F-11	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: Building-2 & 4.	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 1month
F-12	Egress Lighting	Exit sign is not provided at exit. Location: Building-2 & 4.	Illuminated 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 1month
F-13	ITM of Egress Lighting	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1month

F-14	Fire Protection System(Standpipe	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 ,20 ,22 & 24 or as per RSC standard.	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install and modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA 14,20,22 and 24 (If required). After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 1 month and modification within 3 months (If require).
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F-15	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe & pump system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after modification (if require).
F-16	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the pump system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe & pump system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after modification (if require).
F-17	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per RSC standard.	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per RSC standard.	Within 1 Month

F-18	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 1 month and modification within 3 months (If require).
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F-19	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 Month after modification (if require).
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