

INITIAL FIRE SAFETY INSPECTION REPORT

GMS Textiles Ltd. (Extension)

RSC ID: 24562

Tansutrapur, Kaliakoir, Gazipur

Geographical Coordinates of factory building: 24.08601434, 90.18938204

Other Factories:

1. GMS Textiles Ltd. (ID:23937)



Inspected By: Ahammad Kabir & A N Faisal Ahmed

Date: 14 November, 2023

Fire Safety Inspection Report

GMS Textiles Ltd. (Extension)

Introduction:

GMS Textiles Ltd. (Extension) Complex was surveyed for fire safety on **14 November, 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. Dyeing Building -02, Proposed Area: 180500 sft. RCC construction, Proposed 6 story & occupied up to 2nd floor.

Construction Date: January, 2022 to ongoing. ; Occupying date: July'2023

Building Approval Authority & Date: **Not available.**

2. Chemical Building, Area: 40200 sft. 6 story RCC building

Construction Date: December, 2018 - October, 2021 . ; Occupying date: November, 2021

Building Approval Authority & Date: Gazipur Zilla Parishad ; 02-01-2022

3. Mechanical Workshop, Area: 750 sft. Single storey steel shed.

Construction Date: November, 2022- February, 2023 ; Occupying date: March,2023

Building Approval Authority & Date: Gazipur Zilla Parishad ; 02-01-2022

Factory Address: Tansutrapur, Kaliakoir, Gazipur

Points of contact:

Name: Emaz Uddin Bhuiyan

Designation: DGM- HR & Compliance

Contact No: 01984411625

Email: emaz.uddin@gmstextile.com

Name: Md. Khalid Hasan

Designation: Deputy Manager (Fire & Safety)

Contact No: 01984411147

Email: compliance.fire@gmsbd.com



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: Finding & recommendation

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The exit stairs are not separated from work areas, storage, lift machine room and other spaces on each floor by fire rated construction. Location: Dyeing building - 02 and chemical building.	Provide minimum 2-hr rated fire wall and 1.5-hr fire rated doors for buildings that are 4 or more stories. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. 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. Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry.	Within 3 Months
				

F-2	Fire-Rated Construction	Elevator shafts are directly open into exit enclosure which is a violation of RSC Technical Guidelines (Standard)-6.14.3. Location: Chemical building.	An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure. (As per 6.14.3 of RSC Technical Guidelines (Standard) V1.0) Recommended to follow "SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES" for remediation.	Within 3 Months
				
F-3	Fire Rated Construction	Store room discharged directly into the exit stair enclosures. Location: Chemical building and Dyeing Building.	Openings from exit enclosure to storage shall be provided with a vestibule with fire rated construction and openings. Provide a 2 hr. fire rated door on the exit stair side and a 1- hr. fire rated door on the storage side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 Months

				
F-4	Fire Rated Construction	The fire pump room is not provided with adequate fire separation.	Provide fire pump room with 2 hr rated fire separation when not sprinklered and 1 hr rated fire separation when provided with automatic sprinklers in accordance with NFPA 20 Or, Physically separate the pump room from the protected building by a minimum of 50 ft. (15.3 m) in accordance with NFPA 20	Within 3 months
				
F-5	Fire Rated Construction	The exit discharge path (Passageway) is not separated by fire-rated construction. Location: Chemical Building (North side)	Provide minimum 2 hr. fire rated exit discharge path which will lead to the assembly area or public road.	Within 3 months



F-6	Fire Rated Construction	The industrial steam/gas dryers are not separated by fire-rated construction and open to the factory floor. Location: Dyeing Building.	Separate the industrial dryer area by a minimum 2-hr fire rated construction. Seal and/or protect all openings to maintain the required fire separations. Provide proper ventilation and consult with a qualified engineer	Within 3 months
F-7	Fire Rated Construction	Areas used for combustible storage are not separated by fire rated construction. Location: Dyeing Building (Ground and first floor)	Provide defined storage areas and limit the storage arrangement as follows:- 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 3. Enclose the storage area from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months
F-8	Means of egress	Handrails are not provided on both sides of exit stair. Location: Dyeing Building	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 3 months



F-9	Means of egress	The width of the exit stair is less than 1.5 m (60 in.). Location: Chemical building	In new and interim construction and constructed stairs post 24 November 2013, stairs shall have a minimum width of 1.5 m (60 in.) for all industrial occupancies and 2.0 m (79 in.) for all assembly occupancies. For assembly use areas provided for prayer halls, dining halls and like areas that are for integral use by the factory workers, the minimum width for the primary occupancy use of the building shall be permitted to be used.	Within 3 months
				
F-10	Mean of Egress	Walking surface were not found level from exit discharge of all stair and are not protected from slip or tripling hazard.	Provide an level walking surface in exit discharge in accordance with 6.3.4 of RSC Technical Guidelines (Standard).	Within 3 Months



F-11	Fire Alarm & Detection System (FADS)	Automatic fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standards. Location: Dyeing building - 02 and chemical building.	Design & Installation of Fire Alarm & Detection system shall be in accordance with RSC standard and NFPA 72. Submit as-built design, documents and calculations to RSC for review prior installation/modification. After installation/modification, 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 2 months and installation within 4 months.
 				
F-12	Fire Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	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 after installation.

F-13	Fire Protection	Standpipe system installation requires detailed review to confirm compliance with NFPA 14, 20, 22, & 24 or as per RSC Technical guidelines (Standard). Location: Chemical building	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install/ modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA 14, 20, 22 and 24. 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 modification (If require) within 4 months after review of design.
F-14	Fire Protection System (Sprinkler)	Sprinkler system installation requires detailed review to confirm compliance with NFPA 13, 14, 20, 22 and RSC Technical Guideline (Standard). Location: Chemical building.	Submit the fire pump, standpipe and sprinkler system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC Technical Guideline (Standard) and NFPA 13, 14, 20, 22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Design Review within 2 months and modification (If require) within 4 months after review of design.

F-15	Inspection, testing, and maintenance of the Fire Pump (ITM).	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation.
F-16	Fire Protection System(ITM of Sprinkler)	Inspection, testing, and maintenance for the automatic fire sprinkler system is not in accordance with NFPA 13 and 25 or as per RSC standard.	Inspect, test and maintain the fire pump and sprinkler system, and keep written records on-site, in accordance with NFPA 13 and 25 or as per RSC standard.	Within 1 Month after installation.
F-17	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the standpipe system is not in accordance with NFPA 13 and 25 or as per RSC standard.	Inspect, test and maintain the fire pump and standpipe system, and keep written records on-site, in accordance with NFPA 14 and 25 or as per RSC standard.	Within 1 Month after installation.