

INITIAL FIRE SAFETY INSPECTION REPORT

AMC Knit Composite Ltd. (Extension - 2)

RSC ID: 25894

24.158863, 90.412000

Baniar Chala, Member Bari, Gazipur

Other Factory : AMC Knit Composite Ltd. [24102]



Inspected By: Tanvir Jubayer Rahman

Date: 04-May-2025

Fire Safety Inspection Report

AMC Knit Composite Ltd. (Extension - 2)

Introduction:

AMC Knit Composite Ltd. (Extension - 2) [ID: 25894] complex was surveyed for fire safety on **04-May-2025** 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): A short description of the structures of this RSC ID are following,-

SI	Name	Construction year	Type
01	6-Storied Chemical Building Six storied RCC building (G+5) Approx. Area: 32,400 Sft Note: The building was partially occupied during the inspection. Ground floor to third floor found occupied. On the other floors, construction finishing work was on-going.	Construction Start : January 2023 Construction End: December 2024 Occupied year : January 2025 Approval Date: Not available. (The factory has applied for building approval to LGED)	New Construction

Other Structures in the factory premises:

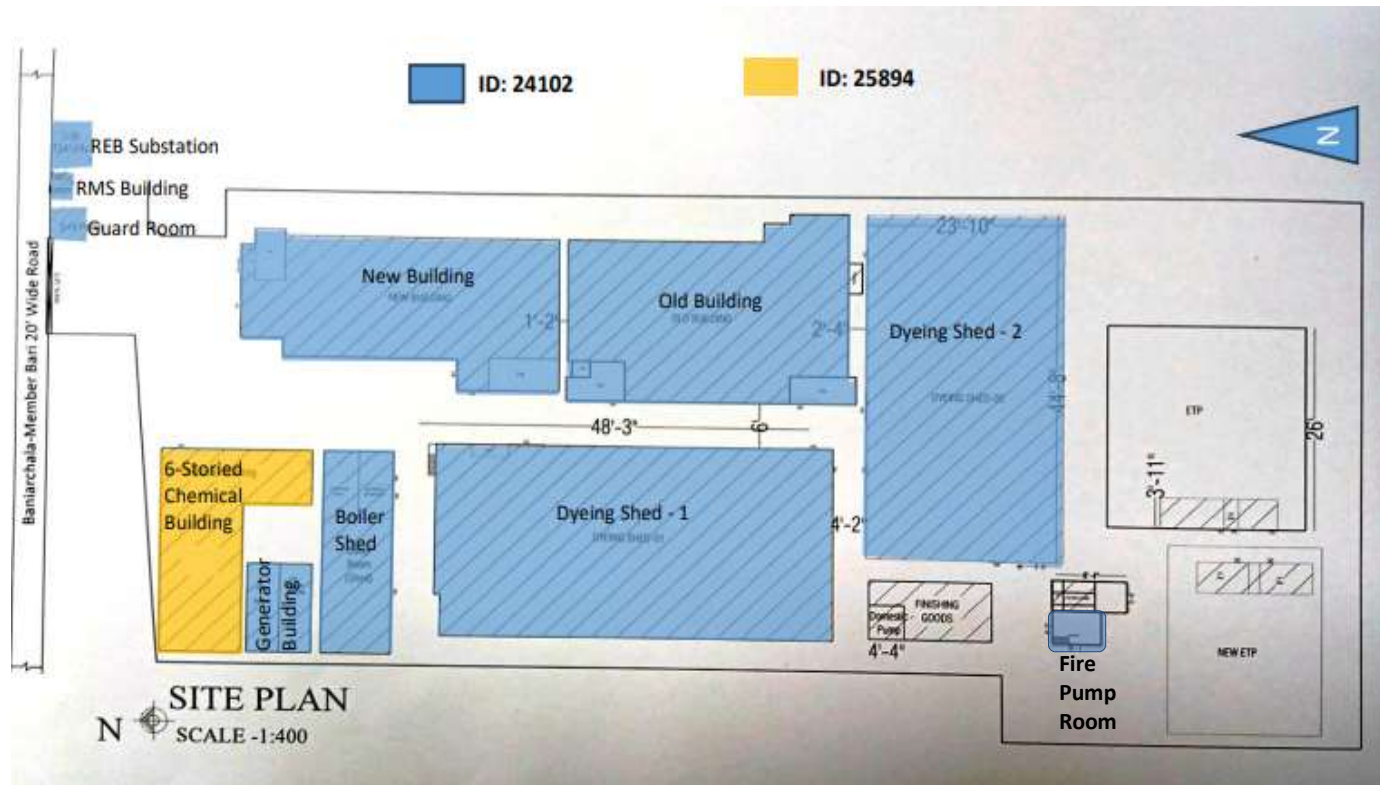
Old Building (6-Storied RCC Production building), **New Building** (7-Storied RCC Production building), **Dyeing shed-1** (single storied steel shed with a mezzanine), **Dyeing Shed-2** (single storied steel shed), **Boiler shed** (single storied prefabricated steel shed), **Gas Generator Building** (2- storied Composite building), **Security building** (2- storied RCC), **REB Sub-station building** (2- storied RCC), **RMS room** (single storied masonry building), **Fire pump room** (single storied RCC).

Above mentioned Structures are covered under RSC ID: 24102.

Sub-chemical store (3-Storied RCC Building), WTP shed (single storied non-engineering shed) ETP-1, ETP-2. - Non-covered RSC Structures.

Factory Address: Baniar Chala, Member Bari, Gazipur

Factory Premises Layout with building name and RSC ID:



Additional Information:

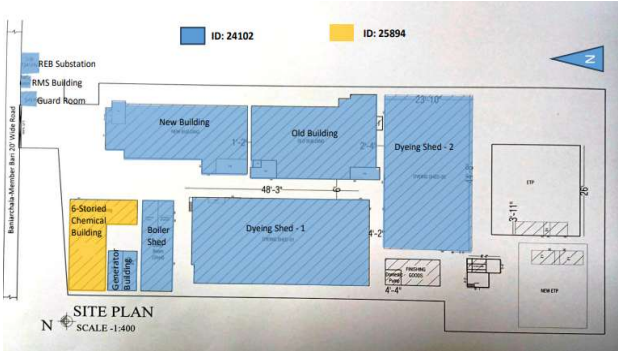
The six storied building is provided with only one exit stair. Single exit serving the ground floor to 5th floor, whereas single exit is permitted only for ground floor for Occupancy-J (with maximum occupant 5 and maximum travel distance 8m, ref: table-4.3.4 of BNBC 2020).

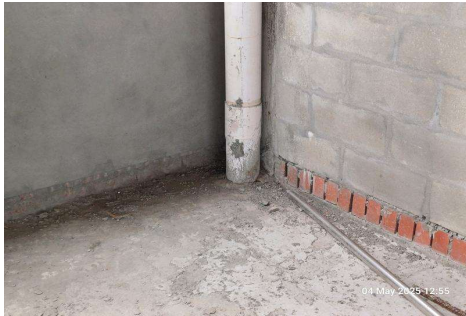
Findings & Recommendations :

AMC Knit Composite Ltd. (Extension - 2)

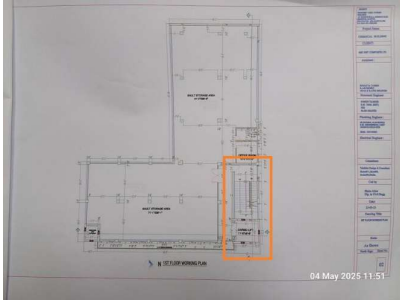
Table 1 summarizes the major fire safety issues identified during the inspection of main buildings. Recommendations have been provided to address each issue. An implementation schedule shall be developed by the factory to remediate each of the similar types of findings throughout the premises. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for approval.

Table-1: For 6 Storied Chemical Building

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire Rated Construction	The required fire separation distance for the 6-Storied Chemical Building (occupancy-J2) does not comply with the requirements of BNBC 2020.	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2020 Part 3 Table 3.2.2 & 3.2.3 and BNBC 2020 Part 3 Section 2.4.1.3.	Within 6 Months
				

F-02	Fire Rated Construction	Penetrations caused by PVC plumbing pipes and utility risers through floor and ceiling assemblies have been found unsealed. Location: All floors.	Seal all penetrations and openings in floor/ceiling assemblies by a listed through-penetration fire stop system tested in accordance with ASTM E814 or approved alternative standard to maintain minimum 3-hr. fire resistance rating. Installation shall be as per manufacturer published installation guideline and the certification authority guideline to ensure the fire-rating in accordance with section 4.7 of RSC Technical Guideline (Standard) Or, Provide a minimum 2-hr fire rated shaft to separate the penetration from each floor if required.	Within 3 Months
 				

F-03	Fire Rated Construction	Elevator shafts open directly into the exit enclosure, which doesn't comply with RSC Technical Guidelines (Standard) , section 6.14.3. Location: Ground floor.	Provide a minimum 2-hr fire rated elevator shaft to separate it from stair enclosure. No discharge is accepted through elevator shaft. Seal all openings to maintain fire separations.	Within 3 Months
				
F-04	Fire Rated Construction	Elevator shafts open directly into the work area without proper fire separation due to unprotected opening. Location: 4th & 5th Floor	Elevator shaft shall be separated from production area by 2 hours fire rated construction. 2-hr fire barriers shall be protected with minimum 1.5-hr fire protective opening assemblies.	Within 3 Months
				

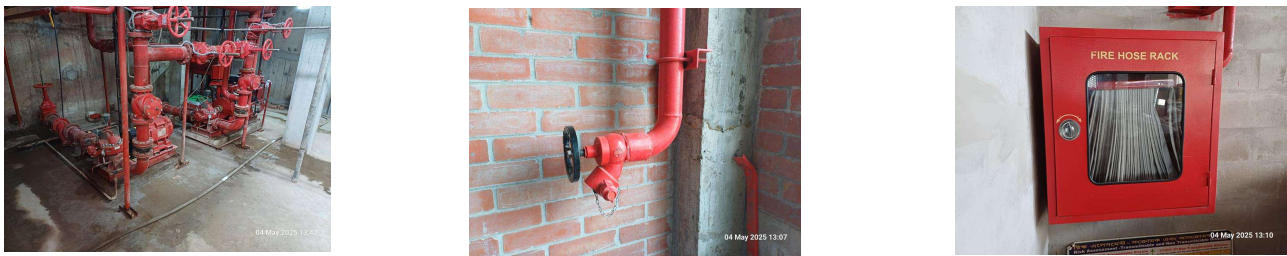
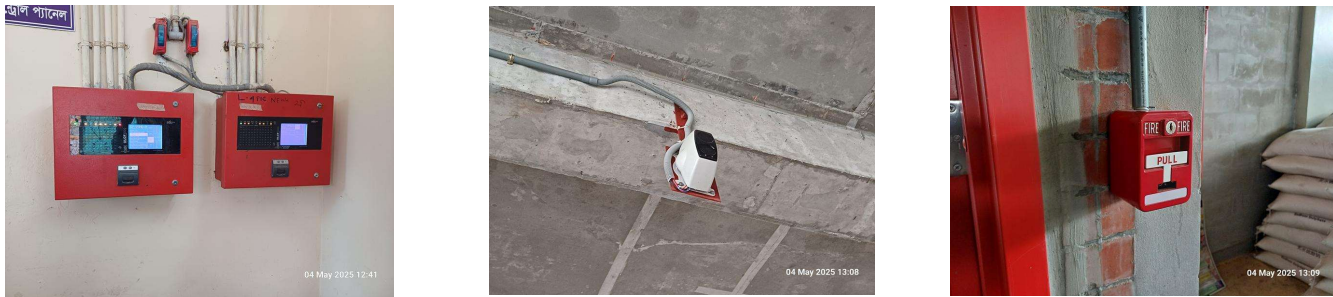
F-05	Means of Egress	A single means of exit has been provided for the 6-Storeyed Chemical Building (occupancy-J2) Location: All floors.	The number of means of egress from any floor, story or portion thereof shall not be less than 2 except where a single exit is permitted by RSC Technical Guideline (Standard), section 6.6.2. Provide additional exit and ensure that the exit doors or means of egress openings are located a distance apart as per RSC Technical Guideline (Standard) section of 6.6.6	Within 3 Months
				
F-06	Means of Egress	Stair clear width was found less than 60 inches (Stair-01 clearance width 52 inch).	Stairs shall have a minimum clear width of 60 inches for all industrial occupancies as per RSC Technical Guideline (Standard) section of 6.5.6	Within 3 Months
				

F-07	Means of Egress	The exit stair enclosures are not separated from work areas and other spaces on each floor by fire-rated construction. Location: All floors.	The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating for buildings with 3 or fewer stories and a minimum of 2- hr. fire resistance rating for buildings 4 or more stories. Provide 1-hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction for building with 3 or fewer stories. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction for building with 4 or more stories in accordance with section 6.3.1.2 of RSC Technical Guidelines (Standard)¹ V1.0. Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft. beyond the end of the stair to achieve the required separation. The rated assembly shall be approved and/or designed by a qualified fire protection engineer. 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
  				

F-08	Means of Egress	Storage room discharges directly into exit stair enclosure without vestibules. Location: ground floor to 3rd floor.	Openings from exit enclosure to Storage areas/ basements/ transformer rooms/ generator rooms/ boiler rooms and similar normally unoccupied spaces shall be provided with a vestibule with fire rated construction and openings in accordance with section 6.14.3 of RSC Technical Guidelines (Standard)¹ V1.0. Provide a min 1-hr fire rated door on the exit stair side and a 1.5 hr. fire rated door on the Store, generator, sub-station room side . Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure as per RSC Technical Guidelines (Standard)¹ V1.0. section 6.14.3. The minimum width for vestibules shall not be less than 1.1m and length 1.8m.	Within 3 Months
 				
F-09	Means of Egress	Exit stairs serve more than 5 stories and do not have required reentry provisions on all floors.	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC Technical Guidelines (Standard) ¹ V1.0. Section 6.8.3.1.	Within 3 Months
F-10	Means of Egress	Common path of egress travel exceeds 8 m. Location: Ground to 3rd floor. Occupancy/Process: Chemical storage (Occupancy J)	The common path of egress travel for Group J (high hazard) occupancies shall not exceed 8 m (25 ft). Reconfigure the egress arrangement to reduce the maximum common path of travel.	Within 3 Months

F-11	Means of Egress	Fire evacuation maps is not posted at the entrance of all exit stair. Location: All floors.	Fire evacuation maps shall be posted at the entrance to each exit stair in accordance with RSC Technical Guidelines (Standard) ¹ V1.0 Section 13.3.	Within 1 Month
F-12	Means of Egress	Aisles were found missing on several locations throughout the building. Location: All floors.	Provide minimum aisle widths of 36-in. Aisles mark shall be clearly visible.	Within 1 Month
				
F-13	Means of Egress	Building did not have stair designation signs and occupant load signs at required locations on all floors. Location: Building-4	Provide stair designation signs and occupant load signs at required locations.	Within 1 Month

F-14	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors.	Test the emergency lighting system on each floor and provide additional emergency fixtures to supply adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and along exit discharge paths and a minimum 2.5 lux along exit access aisles.	Within 1 Month
 				
F-15	ITM Emergency Lighting	Inspection, testing and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 Month
F-16	ITM 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.	Within 1 Month
F-17	Fire Suppression System (SUPS)- Standpipe System	The 6 storied chemical building has an occupied floor greater than 10 meter (71 feet) where required standpipe system found under installation. The system requires a detailed review to confirm compliance with NFPA 14,20, 24 and RSC Technical Guidelines (Standard).	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC Technical Guidelines (Standard)¹ V1.0. and NFPA 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 within 2 month and modification/ installation with 4 months

				
F-18	ITM of Standpipe system	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 14 and 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 14 and 25.	Within 1 Month after installation
F-19	ITM of fire pump	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 10 and 25 or as per RSC standard.	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 20 and 25 or as per RSC standard.	Within 1 Month after installation
F-20	Fire Alarm & Detection System (FADS)	The factory has installed a fire alarm and detection system in the 6 storied chemical building, that requires a detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standard).	Submit the fire alarm and detection system design to RSC for review. Once the design is reviewed, install and modify the fire detection and alarm system throughout the building 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 within 2 month and modification/ installation with 4 months
				

F-21	ITM of Fire Alarm and Detection System	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 NFPA 72. (After Installation)	Within 1 Month after installation
F-22	Human Element Program	The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 Month
F-23	Human Element Program	Fire drills are not conducted according to section 13.2 of RSC Technical Guidelines (Standard) V1.0.	Fire drills shall be conducted according to section 13.2 of RSC Technical Guidelines (Standard) ¹ V1.0. Fire drills shall be conducted on a monthly basis as outlined in BNBC 2020 Part 4 Appendix A.	Within 3 Months