

INITIAL FIRE SAFETY INSPECTION REPORT

N R Knitting Mills Limited. (Extension)

RSC ID: 25995

Enayetnagar, Bholail, Fatullah

GPS: 23°37'08.2"N ,90°28'42.0"E

Other Factories: NR Knitting Mills Limited [ID-9897];

NRG Knit Composite [ID-9359];

NRG Knit Composite (Unit-1) [ID-23565]



Inspected By: Kazi Raian Mahmood

Date: 16-Feb-2025

Fire Safety Inspection Report

Introduction:

N R Knitting Mills Limited. (Extension) complex was surveyed for fire safety on **16/02/2025** 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):

1. 4 Storied RCC Child Care & Medical Building (G+3), (Construction duration: Jan 2003 - Jan 2004; Floor Occupied: Feb 2004)
2. Single Storied RCC Fire Pump & Control Room (B+G), (Construction duration: Oct 2014 - May 2015; Floor Occupied: Jun 2015)
3. Wastage Shed (G), (Construction duration: Jan- 2023, Mar-2023; Floor Occupied: Apr 2023)

Factory Address: Enayetnagar, Bholail, Fatullah

Points of contact:

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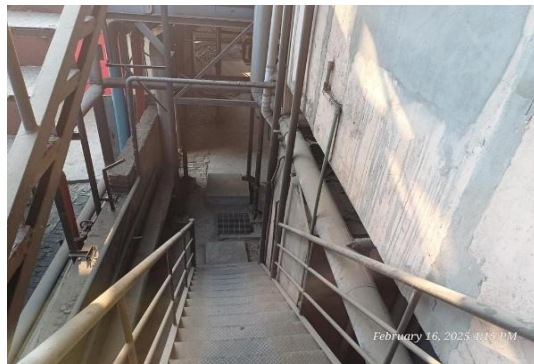
Md. Afzal Hossain
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Findings & Recommendations :

Table 1 summarize the fire safety non-compliant issues identified during the inspection for the 4-storied RCC Childcare and Medical buildings (G+3), single storied RCC Fire Pump and Control Room (B+G) and Wastage shed. 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:

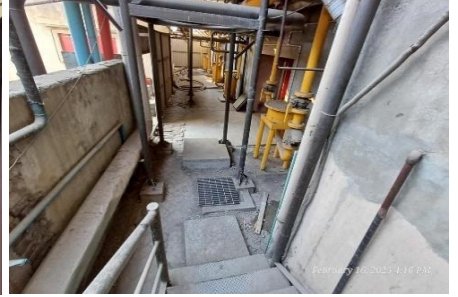
Sl No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	Both the exit stairs (South East and South West Stairs) are not separated from work areas, other spaces on each floor by fire-rated construction due to the following reasons: i. Fire doors are not provided at all exits. ii. Fire doors were not functional properly. iii. Unprotected opening was found at floor areas adjacent to the stairs. (Location: 4-storied Existing RCC Childcare and Medical Building)	Provide minimum 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.	Within 3 months
  				

2	Fire Rated Construction	Unprotected opening has been observed building to building within close proximity as follows, i. Opening of Single storied compressor shed at 8-ft-6 inches away from the Stair-2 (South West) of the 4 storied RCC Childcare & Medical building. ii. Exhaust of the generator and other openings at 3-storied RCC Utility Building at 7-ft-3-inches away from the Stair-2 (South West) and adjacent to toilet area of the 4 storied RCC Childcare & Medical building.	All buildings and structures shall be separated from other buildings in accordance with BNBC 2006 Part 3 Table 3.2.2 and BNBC 2006 Part 3 Section 2.4.1.3. Exterior walls of exit enclosures in interim and existing buildings must meet the requirements of BNBC 2006. (See also 6.14.5). i. Provide 2-hr fire-rated separation to the stair with surrounding structures. ii. Seal all the penetration and unprotected openings within 10-ft from the stair with 2-hr fire rated construction.	Within 3 months
  				

3	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies due to sanitary piping & cable riser at west corner of the 1st and 2nd floor of the building . (Location: 4-storied Existing RCC Childcare and Medical 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
 				

4	Fire Rated Construction	Electrical circuit breaker & electrical connections and other storage materials are located in the exit stair-1 (South East) enclosure. (Location: 4-storied Existing RCC Childcare and Medical Building)	Remove and re-locate all electrical connections and other storage materials from exit stair enclosures.	Within 3 months
 				

5	Fire Rated Construction	Exit Stair-2 (South West) discharge path is obstructed, uneven and doesn't discharge directly outside the building on the ground floor. (Location: 4-storied Existing RCC Childcare and Medical Building)	A maximum of 50 percent of the number and capacity of the exit enclosures can discharge through areas on the level of exit discharge where all of the following are met: (1) Automatic sprinkler protection is provided throughout the level of exit discharge or portion of the level of discharge where separated from non sprinklered portions of the floor by fire barriers with the same fire resistance rating as the exit enclosure. (2) The interior discharge is not through a storage or hazardous occupancy. (3) The entire area of the level of exit discharge is separated from areas below by construction having a fire resistance rating not less than that required for the exit enclosure. (4) The way to the exterior shall be free and unobstructed and shall be readily visible, even and identifiable from the point of discharge of the interior exit.	Within 3 months
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6	Fire Rated Construction	The substation room is not separated by fire rated construction due to openings, non-rated doors, and penetrations. (Location: 4-storied Existing RCC Childcare and Medical Building)	Separate the substation room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations. When located to the exterior of a building 3m (10 ft.) spatial distance shall be maintained around the substation.	Within 3 months
				

7	Fire Rated Construction	Exit access corridors serving Stair-2 (South West) and Stair-1 (South East) Stairs at 2nd and 3rd floors are not fire separated with unprotected opening from floor areas. (Location: 4-storied Existing RCC Childcare and Medical Building)	Exit access corridors serving an occupant load exceeding 30 shall be separated by walls having a fire resistance rating of 1 hr unless provided with automatic sprinkler protection throughout the story or building.	Within 3 months
 				
8	Means of egress	Aisles were not provided at all floors. (Location: 4-storied Existing RCC Childcare and Medical Building)	Provide minimum aisle widths of 36-in.	Within 1 month

				
9	Means of egress	Occupiable floor is not provided with guard rails in compliant manner at all floor. (Location: 4-storied Existing RCC Childcare and Medical Building)	Guards shall be provided at all open sides of means of egress that exceed 760 mm (30 in.) above the floor or finished ground below. Open guards shall have intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34 in.)	Within 1 month
				

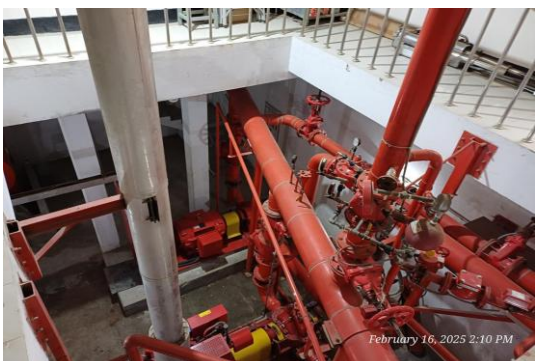
10	Means of egress	Fire evacuation maps was not posted at all the required locations. (Location: 4-storied Existing RCC Childcare and Medical Building, Wastage Shed)	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
11	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors. (Location: 4-storied Existing RCC Childcare and Medical Building and wastage shed)	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
12	Emergency Lighting	Exit signage and directional signs were not provided along a path of egress. (Location: 4-storied Existing RCC Childcare and Medical Building, Wastage room and Fire Pump and Control Room)	Provide exit signs above all building exits to the exterior, all doors to the exit stairs; and 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
13	ITM Emergency Lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guidelines (Standard). (All Building)	Inspect, test and maintain the emergency lighting system in accordance with The RSC Technical Guidelines (Standard). Keep written records on-site.	Within 1 month

14	Means of egress	Building did not have occupant load signs at all the required locations. (All Building)	Provide occupant load signs at required locations.	Within 2 weeks
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15	Fire Alarm & Detection system	Automatic fire alarm and detection system installation has been found complete which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (Standard). (All Building)	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. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	Design Review within 2 months and installation/modification within 4 months
  				
16	Fire Protection System (Standpipe)	The building has highest occupiable floor level more than 10 meter (33 ft.) which requires standpipe system. (Location: 4-storied Existing RCC Childcare and Medical Building)	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. 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 month and installation within 4 months (If require).

				
17	ITM of Fire Alarm System	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard. (All Building)	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 installation.
18	ITM of Standpipe System	Inspection, testing and maintenance for the standpipe system was not in accordance with standard. (Location: 4-storied Existing RCC Childcare and Medical Building)	Inspect, test and maintain the standpipe system in accordance with of NFPA 25 and keep written records on-site.	Within 1 Month after installation.

19	ITM of Pump System	Inspection, testing, and maintenance for the Fire pump & water system is not in accordance with NFPA 25 or as per RSC standard. (Location: 4-storied Existing RCC Childcare and Medical Building, Fire Pump and Control Room)	Inspect, test and maintain the fire pump & water system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after installation.
20	ITM extinguisher	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10. (All Building)	Inspect, test and maintain the portable fire extinguishers and keep written records on- site, in accordance with NFPA 10 and RSC Technical Guidelines.	Within 1 month

21	Fire Rated Construction	Electrical and Fire equipment accessories storage areas are found not separated from the fire pump room from basement to ground floor. (Location: Fire pump and control room)	Separate the fire pump rooms by minimum 2-hr fire-rated construction with other occupancies. Remove the storage area from the fire pump room as alternate solution.	Within 2 months
 				
22	Fire Rated Construction	Rooms used for chemical waste storage are not properly separated by fire rated construction in the wastage shed with the surrounding structures (Screen print washing area). (Location: Wastage Shed)	Where more than one occupancy occurs and is not separated in accordance with 3.4.4, the most restrictive requirements for each occupancy shall apply for fire protection, means of egress, type of construction, and allowable building height and area. Ensure the chemical store fire separated by minimum 4-hr fire rated construction barrier with only occupancies with G and H following table 3.2.1 of BNBC-2020. No opening is permitted in the 4-hr rated wall towards any other occupancy. Follow section 2.13 of BNBC-2020 as a guideline chemical store while rearranging.	Within 3 Months

 February 16, 2025 2:23 PM  February 16, 2025 2:29 PM  February 16, 2025 2:29 PM				
23	Human Element Program	The required no smoking signs are not present in the factory. (All buildings)	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 week