INITIAL FIRE SAFETY INSPECTION REPORT

Alim Knit (BD) Ltd (Extension)

RSC ID: 24780

ADDRESS: Nayapara, Kashimpur, Gazipur, Bangladesh

Other Factories: Alim Knit (BD) Ltd(ID-11273) & Mondol Knit Tex Ltd(ID-9959)

RSC RMG SUSTAINABILITY COUNCIL

Inspected By: Md. Anisuzzaman
Date: 24th December 2023

Fire Safety Inspection Report

Alim Knit (BD) Ltd (Extension)

Introduction:

Alim Knit (BD) Ltd (Extension).;. complex was surveyed for fire safety on **24/12/2023** 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): There are 10 structure under this ID-24780 which are listed below:

1.Building-3, 5-Storied RCC Structure(Construction: Feb-2010 to April-2011 & Occupied: Sept-2011,total area=721 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
2. Boiler Shed, Single storied steel structure(Construction: Feb-2010 to April-2010 & Occupied: May 2010, total area=134 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
3. Generator Building, Two Storied RCC Structure (Construction: Dec-2010 to July-2011 & Occupied: Aug- 2011, total area=194 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
4. Thermo Oil Heater & EGB Boiler Building, Three Storied RCC Structure (Construction: Feb-2011 to Sept-2011 & Occupied: Oct- 2011, total area=159 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
5. Diesel Generator Shed, Single Storied Steel Structure (Construction: Feb-2010 to May-2010 & Occupied: Jun- 2010, total area=110 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
6. ETP , Single Storied RCC(Construction: Jan-2010 to Mar-2011 & Occupied: April- 2011, total area=418 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
7. Fire Control & Guard room, Single storied RCC(Construction: Mar-2012 to Oct-2012 & Occupied: Oct- 2012, total area=68 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
8. WTP (Construction: Feb-2010 to Mar-2010 & Occupied: April- 2010, total area=71 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
9. Security Control Room , Single Storied RCC (Construction: Dec-2010 to Feb-2011 & Occupied: Mar- 2011, total area=27 SQM, Design approved by Gazipur city corporation / April 2013, Existing Buildings)
10. Conveyor Belt Shed; Single storied Steel Shed (Construction: Dec-2013 to Jan-2014 & Occupied: Jan- 2014, total area=111.52 SQM, Interim Buildings)

Factory Address: Nayapara, Kashimpur, Gazipur, Bangladesh

Points of contact:

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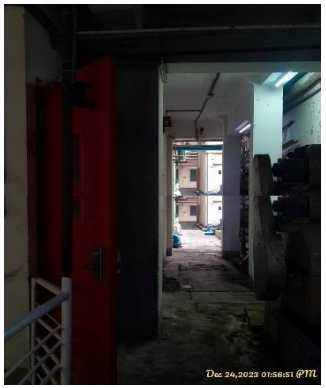
Findings & Recommendations :

Table 1- 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 approval

Table-1: Finding & recommendation .

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	Chemical store room is not properly separated due to non-funcational fire door. **Location: Ground of building-3**	Separate the chemical storage room by 4-hr fire rated construction. Seal all penetrations and protect the openings to maintain the required fire separations. Keep 16-points MSDS of all chemicals in the storage area. ** As per BNBC, chemical storage room will be Type-1 construction. Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline.	Within 3 months
				

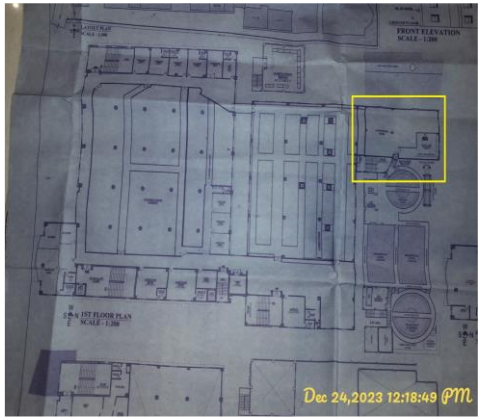
F-2	Fire rated construction	The 5-storied building-3 is not separated from 9-storied main production building-2 by fire-rated construction.	Separate the 5-storied building-3 and 9- storied building-2 is fire separated by minimum 2-hr fire rated construction.	Within 3 months
	  			
F-3	Fire Rated Construction	Generator room is not separated due to installed non-funcational fire door. **Location:** Ground floor of generator building.	Separate the Generator room from other occupancies by minimun 2-hr fire rated construction. 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

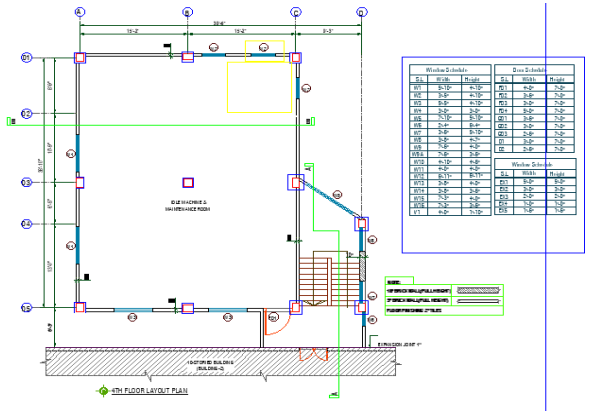
		 		
F-4	Fire Rated Construction	Boiler room is not separated due to installed non-funcational fire door. **Location: Boiler shed.**	Separate the boiler room from other occupancies by minimun 1-hr fire rated construction. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 months
		 		

F-5	Fire Rated Construction	The factory is using/storing liquified gas cylinders without proper separations Location: Ground floor of the building-3.	The factory shall follow TECHNICAL GUIDANCE NOTE FOR USE OF LIQUIFIED OR COMPRESSED FLAMMABLE GAS IN THE FACTORY PREMISES. LPG/CNG cylinders are permitted to be stored in a separate dedicated building on the factory premises within its boundaries if the building meets the following conditions. 1. The storage building must be at least 3 meters away from any other building 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).	within 3 months
				

F-6	Mean of Egress	The exit discharge path (Passageway) is not separated by fire-rated construction.	Provide minimum 2 hr. fire rated exit discharge path which will lead directly outside.	Within 3 months
				
F-7	Mean of Egress	The exit stairs are not separated from [work areas, other spaces] on each floor by fire rated construction due to unprotected opening & non-funcational doors **Location: Building-3**	The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes 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. 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 Technical Guideline (Standard) V1 6.8.3.1.	Within 3 months

				
F-8	Means of Egress	A single means of egress is provided in the 5-Storied building-3 .	Single exit is allowable on ground floor when the occupant load is limited to 50 with maximum travel distance 23 meter. Single exit is allowable on 1st floor when the occupant load is limited to 30 with maximum travel distance 23 meter. All other stories require a minimum of 2 egress exits. So, provide additional means of egress for 5-Storied building-3 .	Within 1 month





F-9	Means of Egress	Exterior exit stairs are not properly separated from the building within 10 feet of stair. Location: Generator building	Exterior exit stairs shall be separated from the building with a rating requirement of [1 hr. fire rating for 3 or fewer stories or 2 hr. fire rating for 4 or more stories]. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure.	Within 2 months

F-10	Means of Egress	Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch). Location: Building-3	Provide parapets or guards with a minimum height of 1067mm (42 inch.).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 3 months
 				
F-11	Means of Egress	Handrails are not provided on both sides of both exit stairs.	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	Within 3 month
				

F-12	Means of Egress	Building did not have occupant load signs at required locations.	Post the occupant load for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	Within 1 month
F-13	Mean of Egress	Updated fire evacuation maps is not posted at the entrance of all exit stair.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-14	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes .	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 3 months
F-15	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).

  				
F-16	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).
F-17	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. 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).

		 		
F-18	Fire Protection System(Sprinkler System)	Based on the type of structure and height of the main building sprinkler system is not mandatory but installed in lieu of detector so it is now mandatory and shall be ensured compliant as per NFPA-13. Location: 5-Storied building-3	Submit the sprinkler system drawing to RSC for review. Once the design is reviewed, install and modify (if required) the sprinkler system throughout the building in accordance with review comment, RSC Standard and NFPA 13,20,22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing. **Note: If the system is omitted then compliant detection system shall be ensured for the building following RSC Technical Guideline (Standard)-V1.0**	Design Review within 1 month and modification within 3 months (If require).

	 			
F-19	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the Standpipe & sprinkler system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe & sprinkler 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-20	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the fire pump system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire 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-21	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 3 months