

INITIAL FIRE SAFETY INSPECTION REPORT

AKH ECO APPARELS LTD.--Extended buildings

RSC ID: 24196

495, Balitha, Shahbelisher, Dhamrai, Dhaka-1800, Bangladesh

23.9166 N, 90.1136 E

Other Factories: AKH ECO APPARELS LTD. (In the premises)



Inspected By: Pantha Pallob Das & Nainin Nowrose

Date: 07 September 2021

Introduction:

AKH ECO APPARELS LTD.--Extended buildings complex was surveyed for fire safety on 07/09/2021 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 total 4 structures in the premises under this ID. Those are i. Building-3 (4 storied RCC-Warehouse), ii. Building-9 (4 storied Steel Structure), iii. Shed-1 and iv. Building-10 (Pump house).

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: Building-3

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	Exit Enclosures are not properly fire separated from other occupancy on each floor by fire rated construction due to glass opening on ground floor and non-functionality of installed fire rated doors. Location: Building 3.	Provide minimum 2-hr fire rated separation in exit enclosures with minimum 1.5-hr fire rated doors and seal all unprotected openings and penetration to separate the exit stairs from work areas and other building spaces on all floor levels with similar rating of fire door. 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	Elevator shafts are directly open into the inside of stair-3. Located: Building 3.	For new construction, elevators shall not open into an exit enclosure as per ACCORD Standard-6.14.3. So, ensure separate enclosures for the elevator shafts with minimum 2 hr. fire rating. If elevator is not being installed then the door opening can be sealed by minimum 2-hr fire rated construction.	Within 3 month



3	Means of Egress	Common path of egress travel was more than more than 30 m for normal storage on every floor of the building-3. The same scenario is for Shed-1 also.	The maximum common path of travel for the general storage shall be 30 where occupant load is not more than 30 . So, Reconfigure the egress arrangement to reduce the maximum tolerable common path of travel.	Within 1 month
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4	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards. Location: Building-3.	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 2 months and modification within 4 months (If require).
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5	Fire Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 & Accord standard	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.	Within 1 Month after installation.

6	Fire Protection System (Standpipe System).	Standpipe system and fire pump installation requires detailed review to confirm compliance with NFPA 14, 20, 22, 24 and ACCORD standard. Location: Building-3.	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with Accord standard and NFPA 14 and 20. The factory management shall contact RSC to conduct the final acceptance testing after the installation, testing & commissioning.	Design Review within 2 months and modification within 4 months (If require).
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7	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per Accord standard. Location: Building-3.	Inspect, test and maintain the standpipe system in accordance with NFPA 25 or as per Accord standard and keep written records on-site.	Within 1 Month after installation.
8	Fire Protection System(ITM of fire pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25 or as per Accord standard. Location: Building-3.	Inspect, test and maintain the fire pump in accordance with NFPA 25 or as per Accord standard and keep written records on-site.	Within 1 Month after installation.

Table-2: Building-9

SI No.	Category	Findings	Required Action	Remediation Time Frame
9	Fire Rated Construction	The main structural element of the building is constructed by steel which is non-rated and were found in exposed condition without any fire protection. Building-9 & Shed-1.	The building shall be type-I or II construction. So, provide require rating in the structural elements of the building. Consult with a qualified fire protection engineer. Follow BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1 as reference.	Within 6 months



10	Fire Rated Construction	Exit Enclosures are not properly fire separated from other occupancy on each floor by fire rated construction due to glass opening on ground floor and non-functionality of installed fire rated doors. Location: Building 9.	Provide minimum 2-hr fire rated separation in exit enclosures with minimum 1.5-hr fire rated doors and seal all unprotected openings and penetration to separate the exit stairs from work areas and other building spaces on all floor levels with similar rating of fire door. 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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11	Means of egress	Aisles were not provided east side of 3rd floor of the building.	Minimum 0.9 m unobstructed aisles shall be provided so that the common path of travel shall not be more than 30 m for the storage area.	15 Days
12	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards. Location: Building-9 and Shed-1.	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 2 months and modification within 4 months (If require).



13	Fire Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 & Accord standard	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.	Within 1 Month after installation.
14	Fire Protection System (Standpipe System).	Standpipe system and fire pump installation requires detailed review to confirm compliance with NFPA 14, 20, 22, 24 and ACCORD standard. Location: Building-9.	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with Accord standard and NFPA 14 and 20. The factory management shall contact RSC to conduct the final acceptance testing after the installation, testing & commissioning.	Design Review within 2 months and modification within 4 months (If require).



15	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per Accord standard. Location: Building-9.	Inspect, test and maintain the standpipe system in accordance with NFPA 25 or as per Accord standard and keep written records on-site.	Within 1 Month after installation.
16	Fire Protection System(ITM of fire pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25 or as per Accord standard. Location: Building-9.	Inspect, test and maintain the fire pump in accordance with NFPA 25 or as per Accord standard and keep written records on-site.	Within 1 Month after installation.