

INITIAL FIRE SAFETY INSPECTION REPORT

Kenpark Bangladesh Apparel (Pvt.) Ltd.(K-5) (Extension)

RSC ID: 24555

**Plot No: 14 – 23, sector No: 02 Karanphuli EPZ, Chattogram, Bangladesh
22.277765, 91.788178**

Other Factories: Kenpark Bangladesh Apparel (Pvt.) Ltd.(K-5) (ID-11820) (in the premises)



Inspected By: Md. Hasibur Rahman Abir and Md. Musa

Date: 14/09/2023

Fire Safety Inspection Report

Kenpark Bangladesh Apparel (Pvt.) Ltd. (K-5) (Extension)

Introduction:

Kenpark Bangladesh Apparel (Pvt.) Ltd.(K-5) (Extension) (ID: 24555) complex was surveyed for fire safety on 14 September 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. 7- storied building with mezzanine floor (Production Building-C)**
- 2. 2- storied Utility building (Utility Building-2)**
- 3. Diesel tank room**
- 4. CMS shed**
- 5. Single storied Guard room -2 (west)**
- 6. Single storied Guard room -1 (east)**
- 7. Single storied garbage fire boiler room**
- 8. Single storied garbage storage room**
- 9. Single storied garbage segregation room**
- 10. Single storied Guard room**
- 11. Single storied car parking & driver waiting shed**

Findings & Recommendations :

Factory ID: 24555

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:

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Alarm & Detection System (FADS)	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	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 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.	Within 2 months for review and 04 months for installation

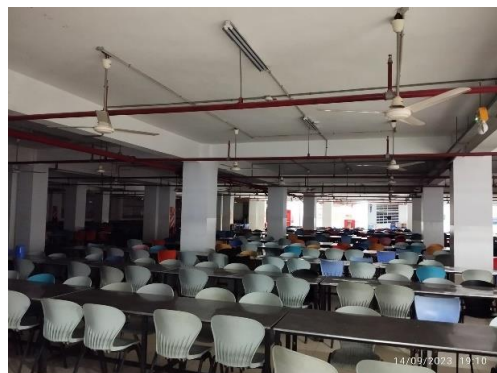


2	Fire Suppression System (SUPS)	The fire pump set installation requires detailed review to confirm compliance with NFPA 20 and RSC standard.	Submit the fire pump system drawing to RSC for review. Once reviewed, install, or modify the pump system throughout the building in accordance with RSC Technical Guideline (Standard) and NFPA 20, 22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Within 2 months for review and 04 months for installation
 				

3	Fire Suppression System (SUPS)	The firefighting system (sprinkler & standpipe) installation requires detailed review to conform compliance with NFPA 13, 14.	Submit the fire standpipe and sprinkler system drawing to RSC for review. Once reviewed, install, or modify the pump 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.	Within 2 months for review and 04 months for installation
				
4	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction. Several fire doors were not latching properly and stair-B not separated from office facility and DB at ground floor.	The exit stair enclosure shall be provided with a minimum a minimum of 2- hr. fire resistance rating. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction. 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



5	Fire Rated Construction	Dining capacity at 6th floor (reported more than 700 occupant) is not separated from storage as well as sewing section of 5th floor with fire-rated construction. The factory has separated the dining area from storage by gypsum board and 5th floor slab constructed by concrete which does not meet BNBC table 3.2.1. Location: 7-storied building on 6th floor.	To classify the occupancy as E4, it's necessary to limit the occupant load to 300 or below. Afterward, ensure a three-hour fire separation from other occupancies. Openings within such fire barriers shall be protected by opening protectives having a fire protection rating of not less than 3 hr. Additionally, ensure that there are two safe and direct exits available for the dining facilities, or consider relocating them to a dedicated building.	Within 3 Months
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6	Fire Rated Construction	Unsealed floor penetrations through utility, sewerage line and expansion joints are located in the fire-rated floor/ceiling assemblies. The factory has installed fire stop sealant to seal the expansion joints penetration. Location: 7-storied building at Several floor	Seal all penetrations 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. Keep ready product datasheet, design method and certificate on site for verification.	Within 3 months
 The row contains four photographs documenting the fire safety issue. From left to right: 1. A green vertical pipe penetrating a floor/ceiling assembly with visible gaps around the base. 2. A red horizontal pipe with a fire stop sealant applied around its penetration point. 3. A close-up of multiple pipes (blue, grey, and red) with fire stop sealant applied around their base. 4. A red horizontal pipe with a fire stop sealant applied around its penetration point, with a white box and a yellow ladder visible in the background.				

7	Fire Rated construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location:7-storied building at 3rd floor	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m² and is separated by a minimum 3.0 m (10ft) from other storage areas and they do not exceed 10 percent of the building area of the story in which they occur. or, If sprinkler protected, Maximum height 12 ft (3.66 m) and maximum area of 1000 ft² (93 m²) and separated by a at least 25 ft (7.62 m) and does not constitute more than 10 percent of the building area or 4000 ft² (372 m²) of the sprinklered area, whichever is greater. or, Enclose the storage area from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months
 				

8	Fire Rated construction	Elevators open inside the factory production floors. The factory initially provided a TUV certificate for the elevator landing, but no credible listing mark was found on the elevator. Subsequently, the factory sent an Exova Warringtonfire certification, which is required to undergo review and on-site verification with the landing.	Provide a minimum 2-hr fire-rated shaft and 1.5-hr fire rated lift landing doors or 1.5-hr rated opening protection from each floor level and seal all penetrations in floor/ceiling assemblies to maintain the fire separation.	Within 3 Months
 				

9	Means of Egress	Some area did not have updated occupant load signs at required locations. Location: 7-storied building at Dining area	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
10	Means of Egress	Directional signs are not adequate where direction of the path of travel to an exit has changed. Location: 7-storied building at 5th floor	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 3 Months
11	Means of Egress	Sliding type doors have provided along means of egress [Storage, building exits, exit discharge]. Location: 7-storied building at 5th floor, packing section	Replace all collapsible/sliding/shutter type doors & gates by the side-hinged swinging type doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Within 1 Month

12	Fire Rated Construction	Storages were found underneath the cutting tables.	Remove all storages from underneath the cutting tables.	Within 3 months
 				

13	Chemical Store	The chemical storage area is not properly separated by fire-rated construction because of the damaged fire door. Location: 7-storied building at ground floor	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.	Within 3 months
 				

14	Means of Egress	Handrails were not provided on both sides of the exit discharge stair. Location: 7-storied building on ground floor Stair E&F.	Provide handrails on both sides of the exit stair. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.). 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 1 Month
				

15	Means of Egress	Uneven path of travel and blockage was observed in exit access.	Remove unnecessary items and level exit path to the public way.	Within 1 Month
 				

16	Means of Egress	The utility room door open onto the stair landing in a way that it reduces the landing width to less than the stair width. Location : 7-storied building on 1st floor	Modify the egress door so that it opens in the direction of the exit path. Ensure that, when opened, the door leaf in a means of egress leaves not less than one-half of the required width of the stair unobstructed.	Within 3 Months
				
17	Fire Rated Construction	Storage room/areas discharges directly into the exit stair enclosure. Location: 7-storied building	Openings from exit enclosure to storage room, generator and transformer spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-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 standard 6.14.3.	Within 3 months



18	Fire Rated Construction	The exterior exit stair-B is not properly separated from the building. Location:7-storied building on 1st floor	Where nonrated walls or unprotected openings enclose the exterior of the stairway and the walls or openings are exposed by other parts of the building at an angle of less than 180 degrees (3.14 rad), the building exterior walls within 3050 mm (10 ft) horizontally of a nonrated wall or unprotected opening shall have a fire-resistance rating of not less than 1 hr. Openings within such exterior walls shall be protected by opening protectives having a fire protection rating of not less than ¾ hr.	Within 3 months
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19	Means of Egress	Each exit stairs serve more than 5 stories and do not have required re-entry provisions.	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 3 months
20	Fire Alarm & Detection System (FADS)	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with standard.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72.	Within 3 months
21	Fire Suppression System (SUPS)	Inspection, testing and maintenance for the fire protection system (sprinkler & standpipe) was not in accordance with standard.	Inspect, test and maintain the fire protection system and keep written records on-site, in accordance with NFPA 25.	Within 3 months
22	Fire Suppression System (SUPS)	Inspection, testing and maintenance for the fire pump system was not in accordance with standard.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20, NFPA 25.	Within 3 months

23	Egress Lighting	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with the RSC standard. Keep written records on-site.	Within 1 month
24	Fire Suppression System (SUPS)	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 and The RSC Technical Guidelines (Standard).	Within 1 month