

INITIAL FIRE SAFETY INSPECTION REPORT

Masihata Sweaters Ltd (Extension)

RSC ID: 24617

South Panishail, BKSP, Kashimpur, Gazipur

Google Coordinate: 23.993310N, 90.262116E

Other Factories: Masihata Sweaters Ltd (ID-9506)



Inspected By: Nainin Nowrose & Md. Jahidul Kabir

Date: 15 November 2023

Fire Safety Inspection Report

Masihata Sweaters Ltd (Extension)

Introduction:

Masihata Sweaters Ltd (Extension) complex was surveyed for fire safety on **15/11/2023** 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 total 11 structures in the premises under this ID. Those are :

1. Building-2 (Single storied RCC building with basement),

Construction: Nov, 2021 to Jun, 2022 & Occupied: Dec, 2022

Design Approved by Gazipur City Corporation on 22 March 2014

Construction Period: Interim

Per floor area of the building: 5249.0218 sqm.

2. Building-3 (Daycare Shed)

3. Building-6 (ETP)

4. Building-7 (Medical & Canteen Shed)

5. Building-8 (Fire Pump & Control Room)

6. Building-10 (Utility Building)

7. Building-11 (Chemical Store Shed)

8. Building-12 (LPG Shed)

9. Building-13 (RMS & Checker Room)

10. Building-16 (Smoke Zone & Air Compressor)

11. Diesel Generator Room

Factory Address: South Panishail, BKSP, Kashimpur, Gazipur

Findings & Recommendations :

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 review.

Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The compressor is not separated by fire-rated construction.	Separate the compressor room by a minimum 2-hr fire rated construction or by a minimum spatial separation of 3 m (10 ft) where located exterior to the building. Seal and/or protected all openings to maintain the required fire separations. All exhaust systems shall discharge to the exterior of the building in a safe location.	Within 3 months
				

F-2	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire rated construction. Location: Building-2.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	Within 3 months
				

F-3	Fire Rated Construction	Store room discharge directly into the exit stair enclosures. Location: Basement of Building-2.	Openings from exit enclosure to storage room, generator and hazard 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, substation room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
				

F-4	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces by fire-rated construction due to non rated openings. Gap below fire door was found more than 19mm. Location: Building-2 & Utility Building.	Provide minimum 2-hr rated fire wall and 1.5-hr fire rated doors for buildings that are 4 or more stories and minimum 1-hr rated fire wall and 0.75-hr fire rated doors for buildings that are less than 4 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
 				

F-5	Fire Rated Construction	Unsealed penetrations and openings are located in exit stair enclosure due to passing cable riser. Location: Utility Building.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation as per RSC Technical Guidelines (StandardV1.0) section 6.3.1.2.3 and remove the cables from stair enclosure.	Within 1 month
				

F-6	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies due to passing expansion joint and pvc toilet pipe. Location: Building-2.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 2-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's guideline. (Type-1 Construction). or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. (Type-1 Construction).	Within 3 months
				

F-7	Fire Rated Construction	Liquefied or compressed gas cylinders are located within the factory without proper separation.	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, CIOB and all other applicable agencies, codes and standards.	Within 3 months
-----	-------------------------	---	--	-----------------

				
F-8	Means of Egress	Exit discharge path from Utility building is not even and smooth.	Level the exit discharge path to ensure smooth and safe evacuation from building.	Within 1 month



F-9	Means of Egress	The emergency evacuation maps was not provided in required location.	Fire evacuation maps shall be update and posted at the entrance to each exit stair.	Within 1 month
F-10	Means of Egress	Sliding doors are provided at building exits. Location: West exit, Building-2.	Replace all collapsible and sliding doors along the means of egress with side-hinged, swinging egress doors.	Within 1 month

				
F-11	Means of Egress	Aisles marking has not been provided on the floor properly. Location: Building-2.	Provide minimum aisle width of 36-in and mark properly.	Within 1 month
 				

f-12	Means of Egress	A single means of egress (stair) is provided from the utility building.	For utility, ground or basement story is allowed a single exit with maximum of 50 occupants and 23 m (75ft) travel distance. All other stories which houses utility occupancy require a minimum of 2 egress exits. Provide additional means of egress according to RSC Technical Guidelines (Standard) section 6.6.2.	Within 3 months
				
F-13	Egress Lighting	Manual on-off switch is provided for emergency lighting / exit sign units.	Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off.	Within 1 month

				
F-14	Egress Lighting	The directional signs are not provided where there is a change in direction and where the continuation of the egress path is not obvious.	Install 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
 				

F-15	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 1 month
				
F-16	ITM of Egress Lighting	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with RSC Technical Guidelines (Standard).	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with RSC Technical Guidelines (Standard). Keep written records on-site.	Within 1 month

F-17	Fire Alarm and Detection System (FADS)	The fire alarm system installation requires detailed review to confirm compliance with NFPA 72 and RSC technical guidelines (standard).	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review. Once reviewed, install or modify the fire detection and alarm system (where required) throughout the building in accordance with RSC technical guidelines (standard) and NFPA 72. The factory management shall contact RSC to conduct the final acceptance testing after the installation, testing & commissioning.	Design- within 1 Month Modification if required- within 3 Months
				

F-18	ITM of Fire Alarm and Detection System (FADS)	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	1 Month after installation.
F-19	Fire Protection System (Automatic Sprinkler System)	Sprinkler system has been installed throughout the building instead of fire alarm detectors. Sprinkler System installation requires detailed review to confirm compliance with NFPA 13,14, 20, 22,24 and RSC standards. Location: Building-2.	Design & Installation sprinkler system shall be in accordance with RSC standard. Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Design within 1 month & Modification if required within 3 months

				
F-20	Fire Protection System (ITM of Sprinkler)	Inspection, testing, and maintenance for the automatic fire sprinkler system is not in accordance with NFPA 13 and 25 or as per RSC standard.	Inspect, test and maintain the automatic fire sprinkler system , and keep written records on-site, in accordance with NFPA 13 and 25 or as per RSC standard.	Within 1 Month after installation.

F-21	Inspection, testing, and maintenance of the Fire Pump (ITM).	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 20, 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the fire pump in accordance with NFPA 20, 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month after installation.
F-22	ITM of 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