

FIRE SAFETY INSPECTION REPORT

NOVEL HURRICANE KNIT GARMENTS LTD

**BOKRAN, MONIPUR, MIRZAPUR, GAZIPUR - 1703,
BANGLADESH.**

OTHER FACTORIES: ARABI FASHIONS



ACCORD
on Fire and Building Safety in Bangladesh

April 24, 2014

SUMMARY

Novel Hurricane Knit Garments Ltd was surveyed for fire safety on 4/24/2014 by Hughes Associates, Inc. This summary identifies the major deficiencies that were identified during the inspection.

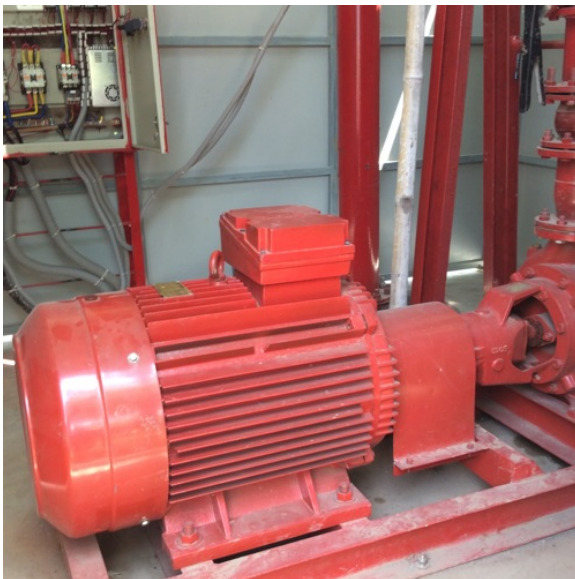
The purpose of this survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The inspection did not include identification of minor deficiencies, which will be further addressed as part of follow-up inspections.

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 Accord for approval.

Table 1. Findings And Recommendations

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Fire pump and jockey pump pressurize the hose reel system. Fire loop with hydrants are also provided. This is good, provides enhanced worker protection compared to average factory of similar size.	Initiate regular maintenance and testing program to maintain in good working order.	Within 1 month





F-2	Fire Rated Construction	Combustible plywood wall construction at water pump room under stair flight.	Provide minimum 1.5-hr fire rated doors and seal all unprotected openings to separate the exit stairs from all areas including pump room. Ensure that the fire doors are self-closing and positive latching.	Within 1 month
-----	-------------------------	--	--	----------------



F-3	Fire Rated Construction	Hazardous materials located in generator building in a separate room but is not separated by fire-rated construction. Spill containment is provided, compliance with other requirements such as exhaust ventilation rates, chemical resistant finishes, emergency power, detection, etc. was not evident and could not be verified.	Separate the hazardous materials / flammable liquid storage room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
-----	-------------------------	---	---	-----------------





F-4	Fire Rated Construction	Throughout the building factory floor is used for open storage of combustible materials which is not separated. dedicated storage warehouse areas on the ground floor was separated by fire-rated construction but openings are not protected.	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 23m ² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	Within 3 months
-----	-------------------------	--	--	-----------------



F-5	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction.	Provide minimum 1.5-hr fire rated doors and 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-6	Egress	The width of egress aisles is less than 36-inches in multiple locations on the ground and first floors.	Provide minimum aisle widths of 36-in.	Immediate
-----	--------	---	--	-----------





F-7	Egress	Egress doors / gates with locking features are provided at exit stairs and at exit discharge.	Remove locking features from all egress doors / gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
-----	--------	---	--	-----------





F-8	Egress	Storage was located in the egress path on the ground floor and on the first floor	Keep egress paths and stairs clear of storage.	Immediate
-----	--------	---	--	-----------





F-9	Egress	Storage was located in most of the exit stairs.	Remove all storage from exit stairs and egress paths.	Immediate
-----	--------	---	---	-----------





F-10	Egress	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, exit discharge.	Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Within 1 month
------	--------	---	--	----------------





F-11	Fire Protection	The fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards.	Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72.	Design within 4 months, install within 9 months
------	-----------------	--	--	---





F-12	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system were not per NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-13	Fire Protection	The fire alarm system does not appear to provide adequate audible notification coverage. Visual notification is only provided at two main exits from the floor. No test performed to verify compliance with NFPA 72	Provide additional notification appliances such that the fire alarmsystem is audible throughout the building in accordance with NFPA 72.	Within 6 months



F-14	Fire Protection	The building is equipped with single-station smoke alarms. Smoke alarm activation sounds only a local alarm and does not provide automatic fire alarm notification of occupants. Location of smoke detector is not optimum, mounted on walls and not provided in places away from the open factory floor where a fire is more likely to start and grow without detection.	Replace the single-station smoke alarms with automatic smoke detectors tied into the fire alarm system. Configure the fire alarm system to initiate occupant notification upon activation of any two smoke detectors in addition to the manual fire alarm stations.	Within 6 months
------	-----------------	---	--	-----------------



F-15	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes through out the building.	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
------	-----------------	---	--	-----------------

