

INITIAL FIRE SAFETY INSPECTION REPORT

Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd.

RSC ID: 24143

14, Gedda, Karnapara, Ulail, Savar, Dhaka-1340, Bangladesh.

23°49'38" N 90°15'31" E

Other Factories: None



Inspected By: Pantha Pallob Das & Md. Sadid Rahman

Date: 24-Feb-2021

Fire Safety Inspection Report

Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd.

Introduction:

Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd. complex was surveyed for fire safety on 24/Feb/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): Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd.

1. Building 1- Fire Control & CCTV Monitoring (3 Story RCC with Basement)
2. Building 2- ETP Building (4 Storied RCC)
3. Building 3- New Accessories (3 Storied Steel Structure)
4. Building 4- Sub station Yard (2 Storied RCC)
5. Shed 1- Acid Wash & Blech Mixing Area (Single Story Steel Shed)
6. Shed 2- Main Chemical Store (Single Story Steel Shed)
7. Shed 3- Waste Management Zone (Single Story Steel Shed)
8. Shed 4- Acid Wash (Old Yarn Store)(Single Story Steel Shed)
9. Shed 5- Incineration Stem Boiler (Single Story Steel Shed)
10. Shed 6- Generator & Substation (Single Story Steel Shed)
11. Shed 7- Compressor and Electrical Material Store (Single Story Steel Shed)
12. Shed 8- kitchen and Washing Area (Single Story Steel Shed)
13. Shed 9- Rice and Vegetable Godown (Single Story Steel Shed)
14. Shed 10- Ansar dormitory (Single Story Steel Shed)

Factory Address: 14, Genda, Karnapara, Ulail, Savar, Dhaka-1340, Bangladesh.

Table-1: Findings & Recommendations of Building- 2, 1, 4 and Shed- 2, 3, 4, 5, 6, 7 & 8.

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The exit enclosure are not separated from work areas, other spaces on each floor by fire-rated construction due to Non Functionality of Fire door and Unprotected Opening. Location - B# 2- ETP Building.	The exit stair enclosure shall be provided with a minimum 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



F-2	Fire Rated Construction	None of the exit discharge the occupants directly outside of the building or to a fire rated passageway. Location : Ground Floor, B# 2- ETP Building	All the exits shall be discharged directly outside of the building or through a minimum 2-hr fire rated passageway.	Within 3 Months
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F-3	Fire Rated Construction	Elevator open directly inside of exit enclosure which is a violation of Accord Standard 6.14.3. Location : Stair-1, B# 2- ETP Building	In new construction, elevators shall not open into an exit enclosure [Accord Building Standard 6.14.3]. So, rearrange the facility to provide separate enclosure for lifts.	4 months
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F-4	Fire Rated Construction	Blower Rooms and Compressor Room are not separated by fire rated construction. Location : Ground Floor, B# 2- ETP Building Compressor Room shall be separated from other occupancies by a minimum 1-hr fire rated construction (wall, floor, slab etc.). Seal all penetrations and openings (door, window etc.) by minimum 0.75-hr (45 min) fire rated materials to maintain the fire separation if required. All exhaust systems shall discharge to the exterior of the building in a safe location. Or Relocate it to exterior of the building and maintain a minimum 3m (10 ft.) spatial separation distance from the building.	Within 3 Months
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F-5	Fire Rated Construction	Exit stair is not separated from Compressor and Substation by fire-rated construction due to unprotected openings. Location: B# 4- Substation Yard	Separate the exit stair from Compressor and Substation room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
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F-6	Fire Rated Construction	Compressor room is not separated by fire-rated construction. Location: B# 4- Substation Yard	Compressor Room shall be separated from other occupancies by a minimum 1-hr fire rated construction (wall, floor, slab etc.). Seal all penetrations and openings (door, window etc.) by minimum 0.75-hr (45 min) fire rated materials to maintain the fire separation if required. All exhaust systems shall discharge to the exterior of the building in a safe location. Or Relocate it to exterior of the building and maintain a minimum 3m (10 ft.) spatial separation distance from the building.	Within 3 months
				

F-7	Fire Rated Construction	The newly constructed Shed has been found steel-composite type and the steel columns and girders has been found in exposed condition without any fire protection. Location : Shed 2- Main Chemical Store, Shed 3- Waste Management Zone, Shed 4- Acid Wash (Old Yarn Store), Shed 5- Incineration Stem Boiler, Shed 6- Generator & Substation, Shed 7- Compressor and Electrical Material Store, Shed 8- kitchen and Washing Area ,	New constructed building shall be type-1, type-2 or type-3. Chemical store shed shall be type-1 construction. Provide required fire rating on the structural elements by following Table-3.2.4, 3.1.9 & Table 4.4.1 of the Accord Standard or Table 3.3.1 of BNBC-2006. Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members.	Within 6 months
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F-8	Fire Rated Construction	Exit stair (N-W) of 3 Stored Building Utility (RCC) has not been protected due to unprotected opening of Shed -4. Location: Shed 4- Acid Wash (Old Yarn Store)	The exit stair enclosure shall be provided with a minimum 1-hr. fire resistance rating. Provide 1 hr. fire rated separation in-between shed and stair of utility building.	Within 3 months
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F-9	Fire Rated Construction	Room used for combustible storage are not separated by fire rated construction. Location - Shed 4- Acid Wash (Old Yarn Store) and Printing Process Store	Separate the storage room by a minimum 1- hr. fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
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F-10	Fire Rated Construction	The boiler room is not separated by fire rated construction (openings, non-rated doors, penetrations). Location: Shed 5- Incineration Stem Boiler	Boiler Room shall be separated from other occupancies by a minimum 1-hr fire rated construction (wall, floor, slab etc.). Seal all penetrations and openings (door, window etc.) by 0.75-hr (45 min) fire rated materials to maintain the fire separation if required. All exhaust systems shall discharge to the exterior of the building in a safe location. Or Relocate it to exterior of the building and maintain a minimum 3m (10 ft.) spatial separation distance from the building.	Within 3 months
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F-11	Fire Rated Construction	The Generator and transformer room is not separated by fire rated construction (openings, non-rated doors, penetrations). Location : Shed 6- Generator & Substation	Separate the Generator and Transformer room by a minimum 2-hr fire rated construction. Seal and/or protected all fire separations.	Within 3 months
 				

F-12	Fire Rated Construction	Diesel fuel storage has been found with Substation and Electrical Material Store. Location: Shed 7- Compressor and Electrical Material Store	Provide minimum 2-hr fire rated construction for the diesel storage room. Additionally follow applicable local law as Petroleum Act for storing and handling of the fuel.	Within 1 month
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F-13	Fire Rated Construction	There are was a shed close to Kitchen without spatial distance or fire separation. Location: Shed-8	Kitchen shall be isolated from surrounded occupancies with minimum 9 meter spatial distance.	Within 3 Months
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F-14	Egress	A single means of egress has been provided from Embroidery area which discharge is inside store room without fire separation. Location : 1st Floor, B# 2- ETP Building	Single exit on 1st floor can be accepted where maximum common path of travel can be 23 m (in case of sprinkler 30 m) with maximum occupant load 30. So provide additional exit for the section which leads a fire rated vestibule/enclosure so that occupants do not discharge directly to the store room.	3 months
 				

F-15	Egress	Common path of egress travel exceeds 23 m. Location : 3rd Floor, B# 2- ETP Building	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 23 meter.	Within 3 month
				
F-16	Egress	C.N.G Storage Van was located inside of premises adjacent with egress path. Location: B# 4- Substation Yard	The storage or use of liquefied or compressed flammable gas cylinders shall be prohibited within the factory building.	Within 1 month



F-17	Egress	Common path of egress travel exceeds 8 m on chemical store Location : Shed 2- Main Chemical Store	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 8 m (25ft) for Group J (high hazard) occupancies.	Within 3 month
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F-18	Egress	Common path of egress travel exceeds 23 m. Location : Shed 4- Acid Wash (Old Yarn Store)	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 23 meter.	Within 3 month

				
F-19	Egress	Provided emergency evacuation plans and occupant load signs at the factory floor has been found Not Updated. Location: All buildings	Provide updated emergency evacuation plans and occupant load signs at required locations.	Within 1 Month



F- 20	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location : All buildings.	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
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F- 21	Egress Lighting	Exit sign with directional arrows are not provided at all floor. Location: All Buildings	Provide exit signs above all exits to the exterior and all doors to the exit stairs	Within 1 month
F-22	Fire Protection System (Standpipe)	The building with an occupiable floor greater than 10 m (33 ft) above the finished grade is not protected with an standpipe system. Location : B# 2- ETP Building	Provide standpipe system throughout the building in accordance with NFPA 14, 20, 22 & 24. Submit drawings, equipment datasheets, certification and other relevant documentation to the RSC prior installation for review.	Design Review within 2 months and installation within 4 months.
F-23	Fire Alarm & Detection system	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards. Location: B# 2- ETP Building	Replace the fire alarm system with a listed addressable fire alarm system in accordance with NFPA 72. Submit drawings, calculations, equipment datasheets, certification and other relevant documentation to the RSC prior installation for review.	Design Review within 2 months and installation within 4 months.



F- 24	Fire Alarm & Detection system	Addressable Fire Alarm System installation and modification was going on. Location : Building 1,4, Shed-2, 3, 4, 5, 6, 7, 8, 9, 10.	Complete the fire alarm installation as per NFPA 72. Submit drawings, calculations, equipment datasheets, certification and other relevant documentation to the RSC prior installation for review.	Design Review within 2 months and installation within 4 months.
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F-25	Egress Lighting [ITM]	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 month
F-26	Inspection Testing and Maintenance of Portable Fire Extinguisher. (ITM)	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

F- 27	Inspection Testing and Maintenance of Fire Protection System (ITM)	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 and ACCORD standards (After installation).	Within 1 month after installation.
F-28	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.
F-29	Human Element Program	"No Smoking" Sign has not been found on all factory floor.	Smoking shall be prohibited in any garment factory building, separate storage building, or any building or area where the Inspector of the Factories Rules (1.6.3.7) Part 53 requires that smoking be prohibited. Signs shall be posted in Bengali and English at all building entrances. If an Owner creates a designated smoking area outside the buildings, information on the location of these designated areas shall be posted on the signs required in 13.5.2.	Within 1 month

Table-2: Findings & Recommendations of Building 3- New Accessories

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-30	Fire Rated Construction	The exit enclosure are not separated from work areas, other spaces on each floor by fire-rated construction due to non rated structure. Location - B# 3- New Accessories	The exit stair enclosure shall be provided with a minimum 1-hr. fire resistance rating. Provide 1 hr. fire rated door and seal all penetrations and openings by 1 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



F-31	Fire Rated Construction	Elevator open directly inside of exit enclosure which is a violation of Accord Standard 6.14.3. Location : Stair-1, B# 3- New Accessories Building	In new construction, elevators shall not open into an exit enclosure [Accord Building Standard 6.14.3]. So, rearrange the facility to provide separate enclosure for lifts.	4 months
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F-32	Fire Rated Construction	The New Accessories in the newly constructed Building 3 is steel-composite type and the steel columns and girders has been found in exposed condition without any fire protection. Location : Building 3- New Accessories	New constructed building shall be type-1 or type-2 construction as per Table 3.2.4 of BNBC 2006. Provide required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the Accord Standard or Table 3.3.1 and Table 4.1.1 from BNBC Part 4. Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members.	Within 6 months
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F-33	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location :Building 3- New Accessories	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
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F-34	Egress Lighting	Exit sign with directional arrows are not provided at all Floor. Location: Building 3- New Accessories	Provide exit signs above all exits to the exterior and all doors to the exit stairs	Within 1 month
F-35	Fire Alarm & Detection system	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards. Location: Building 3- New Accessories	Replace the fire alarm system with a listed automatic fire alarm system in accordance with NFPA 72. Submit drawings, equipment datasheets, certification and other relevant documentation to the RSC prior installation for review.	Design Review within 2 months and installation within 4 months.



F-36	Egress Lighting [ITM]	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 month
F-37	Inspection Testing and Maintenance of Portable Fire Extinguisher. (ITM)	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

F-38	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.
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Table-3: Findings & Recommendations of Shed 1- Acid Wash & Blech Mixing Area

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-39	Fire Rated Construction	The Acid Wash & Blech Mixing Area in the newly constructed Shed 1 is steel-composite type and the steel columns and girders has been found in exposed condition without any fire protection. Location :Shed 1- Acid Wash & Blech Mixing Area	New constructed building shall be type-1 or type-2 construction as per Table 3.2.4 of BNBC-2006. Provide required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the Accord Standard or Table 3.3.1 and Table 4.1.1 from BNBC Part 4. Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members.	Within 6 months



F-40	Means of Egress	Egress doors and gates with locking features are provided at building exits. Location: Shed 1- Acid Wash & Blech Mixing Area	Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101 and ACCORD standard 6.8.2.	Immediately
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F-41	Fire Alarm & Detection system	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards. Location: Shed 1- Acid Wash & Blech Mixing Area	Replace the fire alarm system with a listed automatic fire alarm system in accordance with NFPA 72. Submit drawings, equipment datasheets, certification and other relevant documentation to the RSC prior installation for review.	Design Review within 2 months and installation within 4 months.
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F-42	Egress Lighting [ITM]	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 month
F-43	Inspection Testing and Maintenance of Portable Fire Extinguisher. (ITM)	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 3 month

F-44	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.
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