INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**MAM APPAREL & TEXTILES LTD**
Address:	**MAM Tower, 3233/B, Loharpool, Saraypara, Pahartali, Chittagong Chittagong Chittagong Bangladesh**
Assessor:	**Shaheedullah**
Date:	**20 May 2014**

Introduction to the Report

The following report contains a site profile and summary of non-conformities identified during an onsite assessment commissioned by the Alliance for Bangladesh Worker Safety (Alliance) and conducted by a third-party Qualified Assessment Firm (QAF). The assessment was conducted against the Alliance for Bangladesh Worker Safety Assessment Protocols (APs) and Fire Safety and Structural Integrity Standard, which is harmonized with the factory assessment guidelines developed by Bangladesh University of Engineering and Technology (BUET) for the Bangladesh National Tripartite Plan of Action (NTPA). The goal of the Alliance process is to provide clear and practical technical requirements by which Bangladeshi Ready Made Garment (RMG) Factories producing for Alliance members may be consistently and fairly evaluated for fire, structural, and electrical safety in a non-duplicative manner. Each assessment will prompt action plans that will be used by RMG factories to systematically and sustainably improve safety conditions for garment workers. Beyond tracking and reporting on action steps taken in a transparent manner, the Alliance organization and its members will seek to further support factory improvements through technical assistance, training, implementation support for functional Worker Committees, and in some cases financial assistance and wage support for workers if factories are closed for remediation.

The contents of the report do not constitute a guarantee of compliance with the applicable laws, the Alliance Standard or the absolute or continued safety against fire, electrical and/or structural integrity issues that may lead to injury or loss of life. The report is designed to provide a non-exhaustive summary of risk issues, based on a limited sampling and duration of time onsite by the named QAF. Neither the QAF nor the Alliance can certify or guarantee the quality, outcome, or effectiveness of actions taken in response to the report.

For more information and report feedback please go to: www.bangladeshworkersafety.org.

GENERAL INFORMATION

General Information	
Factory Name:	MAM APPAREL & TEXTILES LTD
Address:	MAM Tower, 3233/B, Loharpool, Saraypara, Pahartali, Chittagong Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	4202
Audit Duration:	2 Days 16 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	April-5,2014
Final Report Date:	May-16,2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	1.Factory Building(2-storied RCC Building plus roof is covered by CI sheet) 2.Child care and Dining room(One storied Tin shed) 3.Generator room(One storied Tin shed)
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	Levels-3
Approximate Building Area (SF):	28,000 sft
Date of Building Construction:	2003-2005
Date of Last Building Renovation/Addition:	N/A
Ancillary Structures in Complex:	1.Child care and Dining room(One storied Tin shed) 2.Generator room(One storied Tin shed)
Approximate Ancillary Structures Area (SF):	1100 sft

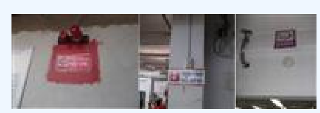
Number of Occupants:	297
Number of Ancillary Levels (Stories):	One

ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	There are four stair wells serving as exit enclosures provided with 5 inch solid wall proper plaster & paint of 1.5 hours fire resisting rating.Existing doors on four nos. exit enclosures are of "steel doors" which do not have fire resistance rating.	
Source of Findings:	Photograph: Shows the photographs of collapsible gates(steel made) at exit enclosures.	
Suggested Plan of Action:	There shall be provided fire-resistive rated construction barriers at exit enclosures. Consult a qualified fire protection engineer to design the required rated construction barriers in accordance with Alliance Standards Part 4 Section 4.5 Separation	
Suggested Deadline Date:	14 Aug 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are openings and penetrations through rated walls and/or assemblies protected?	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Openings and penetrations through rated walls and/or assemblies of production floor are not provided with proper protection and fire stops system in 1st floor.	
Source of Findings:	Photograph: Production floor with opening and penetration.	
Suggested Plan of Action:	Proper opening and penetration protection shall be provided for the fire resistance rated walls and assemblies of production floor in accordance with Alliance standards part 4, sec-4.6 & 4.7	
Suggested Deadline Date:	14 Aug 2014	
Standard:	Includes doors, windows, ducts, piping, etc. Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations	
Question:	Certificates of Occupancy for each building have been issued and are on file.	

Priority Level:	Low
Non-Compliance Level:	1
Description:	There is no occupancy certificate of the factory for each building.
Source of Findings:	Document Review: No document in favor of occupancy certificate has been found.
Suggested Plan of Action:	Occupancy type certificates shall be collected and file-up accordingly for each building or ancillary structure.
Suggested Deadline Date:	30 Jun 2014
Standard:	Are certificates of occupancy provided for each building or ancillary structure?
Question:	Occupancy Type
Priority Level:	
Non-Compliance Level:	
Description:	
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Provide Occupancy Type for each building and structure. Reference Alliance Standards Part 3 Use and Occupancy
Question:	Construction Type
Priority Level:	
Non-Compliance Level:	
Description:	The building elements have exterior non bearing walls is 125 mm with fire resisting rating 1.5 hours and 125mm RC slabs with 19 mm cover over reinforcement with fire resisting rating 2 hours that's why considering of building construction Type-2.
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Provide construction type for each building and ancillary structure. Reference

	Alliance Standards Table 3.3.1	
Question:	Height of Highest Occupied Floor Level Above Grade	
Priority Level:		
Non-Compliance Level:		
Description:	Two-storied RCC Building plus roof is covered by CI sheet.The building height of 29.5 feet above grade level.	
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Provide maximum height of highest occupied floor level above grade for each type of building and ancillary structure.	
Fire Protection Systems		
Question:	Trouble or alarm notifications were not indicated on the fire alarm control panel.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	There was no centralized fire alarm control panel for the facility.	
Source of Findings:	Visual Assessment: There was no centralized fire alarm control panel found during visual assessment of the facility.	
Suggested Plan of Action:	Install a centralized fire alarm control panel in compliance with Alliance Standards Part 5 Section 5.7.	
Suggested Deadline Date:	16 Jun 2014	
Standard:	Alliance Standard Part 13 Section 13.10 Maintenance of Fire Protection Equipment	
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Fire alarm and smoke detectors are installed at different locations but they are standalone devices and are not connected to a centralized control panel.	
Source of Findings:	Photograph: Standalone smoke detector and fire alarm.	

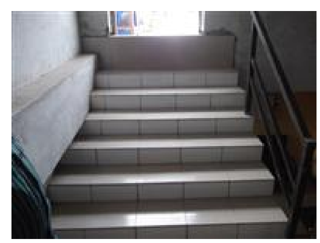
Suggested Plan of Action:	There shall be installation of Pull stations at egress points. Smoke detectors, visual and audible devices shall also be provided and spaced appropriately based on occupancy type in compliance with the Alliance Standard. Reference NFPA 72.
Suggested Deadline Date:	16 Aug 2014
Standard:	Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices spaced appropriately based on occupancy type. Reference NFPA 72
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Fire department connections(siamese) has not been found in the factory premises to allow fire department pumper equipment to supplement the fire protection system.
Source of Findings:	Visual Assessment: Visual Assessment: Siamese connection has not been found.
Suggested Plan of Action:	Fire department connections shall be provided & clearly identified for the Fire Protection System in compliance with Alliance standard part 5 section 5.5.4.
Suggested Deadline Date:	15 Nov 2014
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections
Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?
Priority Level:	Medium
Non-Compliance Level:	3
Description:	During document review & subsequent visual assessment, no such central command station for monitoring fire alarm and detection system has been found.
Source of Findings:	Visual Assessment: Visual Assessment: During document review & subsequent visual assessment, no such command station was found.
Suggested Plan of Action:	There shall be a central command station for monitoring fire alarm and detection system in compliance with Alliance standard part 5, section 5.7.5.
Suggested Deadline Date:	15 Jun 2014
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring

Question:	Are portable fire extinguishers installed throughout the building at required locations and mounted at the correct height?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	The floor area of the building is 28,000 sft,than the available number of portable fire extinguishers(1 extinguisher per 550 sft) is 51 nos.(28000/550=51 nos). The existing number of 27 portable fire extinguishers is under this,the quantity is not satisfactory.
Source of Findings:	Visual Assessment: Visual Assessment,it has been found insufficient number of portable fire extinguishers.(Attached photos)
Suggested Plan of Action:	Additional(51-22)24 nos. of portable fire extinguishers shall be provided of the factory in accordance with BNBC Part 4 and NFPA 10. [The number of extinguishers required according to Fire Prevention and doing Act 2003 (1 extinguisher per 550 sft)]
Suggested Deadline Date:	16 Aug 2014
Standard:	BNBC Part 4 Section 4.10 and NFPA 10

Means of Egress

Question:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.
Priority Level:	High
Non-Compliance Level:	3
Description:	Existing doors along path of egress have minimum width of 0.8 m (32 in.) but do not have required rating(Doors are of steel made).
Source of Findings:	Photograph: Non rated steel collapsible doors instead of rated fire door.
Suggested Plan of Action:	Replace collapsible door with a minimum 0.9 m (39 in.) side-swinging fire rated door with automatic closer and latches. Enclose remainder of opening with fire resistance rated construction.
Suggested Deadline Date:	16 Aug 2014
Standard:	Alliance Standard Part 6 Section 6.5.6 Minimum Widths. Increased occupant loads will require a door width greater than 0.8 m.

Question:	Doors are not locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices have been removed where required.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	During visual assessment it has been found that doors are not locked in the direction of egress, but locking features have not yet been removed.	
Source of Findings:	Photograph: Photograph shows locking features that are not removed.	
Suggested Plan of Action:	All locking features from the egress doors shall be removed in compliance with the Alliance standard part 6, section 6.8.	
Suggested Deadline Date:	30 May 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Existing doors in a means of egress are not of side-hinged swinging type. They are steel collapsible doors and do not have required rating.	
Source of Findings:	Photograph: Non rated steel collapsible doors .	
Suggested Plan of Action:	There shall be side- hinged swinging type of doors provided in the means of egress in compliance with Alliance standard part 6, section 6.8.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	During inspection, there have been no occupant loads found that are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Source of Findings:	Document Review: During documents review and inspection no records of posting of occupant loads were found.	
Suggested Plan of Action:	There shall be posting of occupant loads for every assembly and production floor in a conspicuous space near the main point of egress in compliance with	

	Alliance Standard Part 6, Section 6.4.4.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load	
Question:	All paths of egress are provided with compliant means of illumination.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	All path of means of egress have insufficient illumination less than 10 lux of the factory.	
Source of Findings:	Visual Assessment: Visual Assessment,insufficient illumination less than 10 lux of the factory.	
Suggested Plan of Action:	Install appropriate means of illumination at the noted locations. The source of illumination shall provide not less than 50 lux at the illuminated surface with a contrast of not less than 0.5. Approved self-luminous signs, which provide evenly illuminated letters having a minimum luminance of 0.2cd/m2, may also be used in comply with Alliance Standards Part 6 Section 6.7 Egress Illumination and Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape	
Suggested Deadline Date:	15 Nov 2014	
Standard:	Alliance Standards Part 6 Section 6.7 Egress Illumination and Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape	
Question:	Handrails are provided on both sides of each stairway. Intermediate handrails are provided when the stair width exceeds 2.2 m (87 in.). Handrails are not mounted lower than 760 mm (30 in.) or higher than 1100 mm (44 in.).	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Handrails have been provided on one side of each stairway only.	
Source of Findings:	Photograph: Shows handrails on one side only.	
Suggested Plan of Action:	There shall be handrails on the other side of each stairway in compliance with Alliance standard part 6, section 6.9.	
Suggested Deadline Date:	15 Nov 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	
Question:	Emergency power for means of egress illumination is verified at least once per year. If battery operated lights are used, these lights are tested on a monthly basis. Functional testing of battery powered lights is provided for a minimum	

	90 min once per year.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	During inspection, Document not found for lights are tested on a monthly basis in compliance with Alliance standard part 10 section 10.12 Illumination of exit signs and means of escape.	
Source of Findings:	Document Review: No such documents have been found.	
Suggested Plan of Action:	Factory shall be developed a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery operated si9gns are used,these lights are tested on a monthly basis.Functional testing of battery powered signs is provided for a minimum 90 min once per year.	
Suggested Deadline Date:	16 Jun 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	
Question:	Emergency power for exit signs is tested at least once per year. If battery operated, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	During inspection, Document not found for lights are tested on a monthly basis in compliance with Alliance standard part 10 section 10.12 Illumination of exit signs and means of escape.	
Source of Findings:	Document Review: No such documents have been found.	
Suggested Plan of Action:	The factory shall develop a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery operated signs are used, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.	
Suggested Deadline Date:	15 Jun 2014	
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
Question:	Stair designation signs are provided at each floor entrance from the stair to the floor in English and Bengali. Signs indicate the name of the stair and the floor level. Signs are posted adjacent to the door.	
Priority Level:	Low	

Non-Compliance Level:	1
Description:	Stair designation signs are not provided in English and Bengali at production floor entrance from the stair.
Source of Findings:	Visual Assessment: Visual Assessment, no stair designation signs of English and Bengali at each floor entrance from the stair was found.
Suggested Plan of Action:	There shall be installed signage adjacent to each stair door indicating the stair name and the floor level at the noted locations in accordance with alliance standard part 6 section 6.9 stairs
Suggested Deadline Date:	16 Jun 2014
Standard:	Alliance Standard Part 6 Section 6.9 Stairs

Fire Safety Programs

Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	No records in favor of implementation and documentation of training programs in accordance with the Alliance Safety Training Curriculum have seen found.
Source of Findings:	Document Review: No such documents has been found.
Suggested Plan of Action:	There shall be training programs that are implemented and documented in accordance with the Alliance Safety Training curriculum. Ref. alliance standards part 13.
Suggested Deadline Date:	16 Jun 2014
Standard:	Alliance Standards Part 13
Question:	A written housekeeping policy is established and enforced.
Priority Level:	Low
Non-Compliance Level:	3
Description:	Documentation for written housekeeping policy has not been found during inspection.
Source of Findings:	Document Review: During document review it has not been found there a written housekeeping policy established and enforced.
Suggested Plan of Action:	There shall be written corporate and plant policies established on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings. A documented line of authority for authorizing a cleaning delay and rescheduling

	shall also be provided. As a general rule the maximum tolerable deposit thickness for loose fluffy lint is 13 mm (½ in.) over a maximum of 46.5 m2 (500 ft2). Limit dense deposits to 6 mm (¼ in.) and oil saturated deposits to 3.2 mm (⅛ in.). Housekeeping policy shall be in accordance with Alliance standards part 13 section 13.6
Suggested Deadline Date:	15 Feb 2015
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping
Question:	A Fire Safety Director position has been filled.
Priority Level:	Low
Non-Compliance Level:	2
Description:	The position of a fire safety director has not been filled for the factory.
Source of Findings:	Document Review: No document in favor of filled position of a fire safety director has been found
Suggested Plan of Action:	There shall be created a Fire Safety Director position and the position be filled with an individual that has had sufficient training to be able to carry out the required duties to be performed in compliance with Alliance standards part 13, section 13.1 and section 13.10.
Suggested Deadline Date:	15 Nov 2014
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director
Question:	Are all applicable permits up to date including Fire License & Boiler License.
Priority Level:	Low
Non-Compliance Level:	2
Description:	During assessment only up to date fire license was found.But up to date boiler license was not found.
Source of Findings:	Document Review: Document Review, up to date boiler license was not found.
Suggested Plan of Action:	Up to date boiler license shall be obtained from the concern department and be filed accordingly.
Suggested Deadline Date:	16 Aug 2014
Standard:	Alliance Standard Part 13 Human Element Programs
Question:	A hot-work permit program has been established.
Priority Level:	Low
Non-Compliance Level:	1

Description:	The factory owner did not establish a hot-work permit program.
Source of Findings:	Document Review: No such document was found.
Suggested Plan of Action:	There shall be developed a hot work permit program. The program must comply with the requirements of NFPA 51B and alliance standards part 13 section 13.4.
Suggested Deadline Date:	15 Nov 2014
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B