INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**Mohara Asian Apparels Ltd**
Address:	**472, Kalurghat Industrial Area Kalurghat Chittagong Chittagong Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**26 Apr 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.

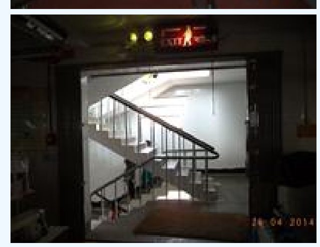
GENERAL INFORMATION

General Information	
Factory Name:	Mohara Asian Apparels Ltd
Address:	472, Kalurghat Industrial Area Kalurghat Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	4212
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05-14-2014
Final Report Date:	06-21-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 5 buildings in the premises out of which one is main production building and four are ancillary buildings. The buildings are named as: 1) Four story RCC main production building, 2) Single story HRD & childcare shed, 3) Single story Generator shed, 4) Single story RCC guard building, 5) Single story RCC Compressor building.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1) Four story RCC main production building: Building height (Highest occupied floor level): 9.75 m or 31.98 ft [Height up to roof: 12.75 m or 41.82 ft], Occupied levels: 4, 2) Single story HRD & childcare shed: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Occupied levels: 1, 3) Single story Generator shed: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Occupied levels: 1, 4) Single story RCC guard building: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Occupied levels: 1, 5)Single story RCC Compressor building: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Occupied levels: 1.
Approximate Building Area (SF):	Total area of buildings in the factory premises: 63142.00 sft. Building wise breakdown as follows: 1) Four story RCC main production building: 61405.00 sft (Ground floor: 18300.00 sft, 1st floor: 19075.00 sft, 2nd floor: 17877.00 sft, 3rd floor: 6153.00 sft), 2) Single story HRD & childcare shed: 711.00 sft, 3) Single story Generator shed: 560.00 sft, 4) Single story RCC guard building: 175.00 sft, 5) Single story RCC Compressor building: 291.00 sft.
Date of Building	Factory personnel informed the date of construction as follows: Started in 1985 and finished in 1986 (All

Construction:	buildings).
Date of Last Building Renovation/Addition:	Factory personnel informed the date of last building renovation as follows: 1) Four story main production building: Finished in 2013 (Horizontal extension of 1st floor).
Ancillary Structures in Complex:	1) Single story HRD & childcare shed, 2) Single story Generator shed, 3) Single story RCC guard building, 4) Single story RCC Compressor building.
Approximate Ancillary Structures Area (SF):	1) Single story HRD & childcare shed: 711.00 sft, 2) Single story Generator shed: 560.00 sft, 3) Single storyRCC guard building: 175.00 sft, 4) Single story RCC Compressor building: 291.00 sft.
Number of Occupants:	Total number of occupants: 1541. 1) Four story RCC main production building: 1523 (Ground floor: 400, 1st floor: 558, 2nd floor: 550, 3rd floor: 15), 2) Single story HRD & childcare shed: 10, 3) Single story Generator shed: 2, 4) Single story RCC guard building: 4, 5) Single story RCC Compressor building: 2.
Number of Ancillary Levels (Stories):	1) Single story HRD & childcare shed: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 2) Single story Generator shed: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 3) Single story RCC guard building: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 4) Single story RCC Compressor building: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1.
Occupancy Type:	1) Four story RCC main production building: [Ground floor: H2 (Storage), G2 (Cutting, Fabrics checking, Embroidery), K (Boiler, Generator), F1 (Office), K (ETP), 1st floor: G2 (Sewing, Finishing), H2 (Storage), F1 (office), E4 (Dining), 2nd floor: G2 (Sewing, Finishing, H2 (Storage), 3rd floor: H2 (Storage), E3 (Dining, Prayer room and training room)], 2) Single story HRD & childcare shed: B2 (Day care), F1 (Office), D1 (Doctor room), 3) Single story Generator shed: K (Generator, Transformer), J2 (Chemical Store), 4) Single story RCC guard building: F1 (Security station), 5) Single story RCC Compressor building: K (Compressor, meter room), J1 (Machine oil storage).
Construction Type:	1) Four story RCC main production building: Type 1, 2) Single story HRD & childcare shed: Non-rated, 3) Single story Generator shed: Non-rated, 4) Single story RCC guard building: Type 1, 5) Single story RCC Compressor building: Type 1.
Height of Highest Occupied Floor Level Above Grade:	1) Four story RCC main production building: 9.75 m or 32 ft, 2) Single story HRD & childcare shed: 15 cm or 0.5 ft above grade, 3) Single story Generator shed: 15 cm or 0.5 ft above grade, 4) Single story RCC guard building: 15 cm or 0.5 ft above grade, 5) Single story RCC Compressor building: 15 cm or 0.5 ft above grade.

ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are openings and penetrations through rated walls and/or assemblies protected?	 
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Doors & windows of the finished goods store, fabric store, boiler room, generator room on the ground floor, the carton store on 1st floor, accessories store on 2nd floor, fabric store and carton store on 3rd floor of main production building are not protected. Doors & windows of the sub-station room, generator room, chemical store, diesel stored in machine oil store room on the ground floor of the ancillary structures are not protected. Such unprotected openings are not allowed according to Alliance Standard Part 4 Section 4.6.	
Source of Findings:	Visual Assessment: Unprotected openings and penetrations were found at noted locations.	
Suggested Plan of Action:	Install fire rated doors and windows or fill in unprotected openings with fire resistive rated assemblies.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Includes doors, windows, ducts, piping, etc. Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations	
Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	 
Priority Level:	High	
Non-Compliance Level:	3	
Description:	There are 2 stairways in the 4 storied main building. Fire door without credible certification is fitted at exits of one staircase and collapsible type door is installed at another exit. Some walls at exits are made of MS grill and no door is provided on the ground floor at the half landing of the south east side stair enclosure with the generator room. The doors on these stairs need to be 1.5 hour rated as per clause 4.5 and 4.6 of Alliance Standard. The single storied ancillary buildings and sheds do not have any stair.	
Source of Findings:	Visual Assessment: Collapsible type doors are installed at exit.	
Suggested Plan of Action:	Provide 2 hr fire-resistive rated construction barriers at exit enclosures. Fit doors that open in the direction of egress, side-swinging, self-closing, non-lockable fire doors of 1.5 hr rating in all stairwell enclosures. Consult a qualified fire protection engineer to design the required rated construction barriers.	

Suggested Deadline Date:	10 Oct 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	   
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Occupancy separations are not fire rated and the opening protectives are not fire rated as well between the generator room & the south-east side staircase on the ground floor, the accessories store & iron section on 2nd floor, the dining & fabric store on 3rd floor, and the dining & carton store on the 3rd floor of the main production building are not separated by fire-resistive rated construction barriers. Generator room & fire hydrant room, generator room & chemical store at generator shed, diesel stored in oil store room & generator room on ground floor are not separated by fire-resistive rated construction barriers (fire doors not used at exits). Chemical store is (J2) located in single story generator shed is separated from generator (K) by non-rated door, where no opening is allowed at the separation wall as per Table 3.2.1 of BNBC.	
Source of Findings:	Visual Assessment: Non-rated fire separations were observed at above mentioned locations.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 4.4.1 of Alliance Standard. Consult a qualified fire protection engineer to design the required rated construction barrier.	
Suggested Deadline Date:	30 Dec 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Certificates of Occupancy for each building have been issued and are on file.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No occupancy certificate available for any building in the factory premises.	
Source of Findings:	Document Review: There was no occupancy certificate for any of the buildings among the documents shown by the factory concerned people.	
Suggested Plan of Action:	Apply to Chittagong Development Authority (CDA) for issuance of occupancy certificate and pursue the matter to expedite.	
Suggested Deadline Date:	25 Jul 2014	

Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Fire Protection Systems		
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:	2	
Description:	Smoke detectors are insufficient in number in Building-02 (Single story HRD & childcare shed). Also, smoke detectors are insufficient in number on the 1st and 2nd floors of the main building.	
Source of Findings:	Visual Assessment: Smoke detectors are insufficient in number on the 1st and 2nd floors of the main building.	
Suggested Plan of Action:	Initiating devices shall include either smoke or fire detection devices spaced in accordance with NFPA 72 requirements. Automatic alarm evacuation shall be provided upon initiation of any of the following: manual alarm box, water flow alarm, or two or more automatic smoke or fire detection devices. Notification shall be provided throughout the building for total evacuation. An automatic fire alarm shall be provided throughout all new and existing occupancies.	
Suggested Deadline Date:	10 Oct 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:	2	
Description:	Fire department (Siamese) inlet connection is provided as per the requirement. Connection is clearly identifiable for the fire protection system. An outlet connection is not provided in the factory premises, which violates the Standard.	
Source of Findings:	Visual Assessment: Fire department inlet connection was found in the factory premises.	
Suggested Plan of Action:	Install fire department connections where required and in compliance with the Standard. Fire department outlet connections shall be provided to allow fire department pumper vehicles to draw water from ground-level or underground water storage tanks. Connections shall match the Fire Service and Civil Defense hose thread standard.	
Suggested Deadline Date:	21 Dec 2014	

Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections	
Question:	Portable fire extinguishers have been selected based on potential fire class and hazards?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Foam, carbon dioxide and dry chemical extinguishers are installed throughout the buildings based on fire class and hazard. No fire extinguisher is installed in oil storage room where flammable liquid like diesel is stored in drums.	
Source of Findings:	Visual Assessment: No fire extinguisher is installed in oil storage room.	
Suggested Plan of Action:	Select fire extinguishers based on potential fire class and hazards as per NFPA 10 requirements. Timber, bamboo, coal, paints and similar combustible materials shall be kept separated from each other. A minimum of two dry chemical powder (DCP) type fire extinguishers shall be provided at both open and covered locations where combustible and flammable materials are stored as the Alliance Standard. In stores of flammable or fire-sensitive materials, a 5 kg dry powder fire extinguisher that conforms to Alliance Standards shall be kept in an easily accessible position.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	NFPA 10 Chapter 5	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Fire extinguishers are inspected, tested and maintained every month but not in accordance with NFPA 10 requirements.	
Source of Findings:	Document Review: Document regarding inspection, maintenance and testing procedure of fire extinguisher was found in the documents shown by the factory personnel, but not as per NFPA 10 requirements.	
Suggested Plan of Action:	Fire extinguishers are to be inspected, tested, and maintained in accordance with NFPA 10 requirements.	
Suggested Deadline Date:	28 Dec 2014	
Standard:	NFPA 10 Chapter 7	
Question:	Are inspection, maintenance, and testing procedures of the standpipe and hose system documented and up to date? Including inspection and testing of hoses if provided.	
Priority Level:	Low	

Non-Compliance Level:	1
Description:	There is no test and maintenance plan and record for testing and maintaining of stand pipe system as per requirement of NFPA 25 Chapter 6 Table 6.1.1.2.
Source of Findings:	Document Review: No document regarding inspection, maintenance and testing procedure of standpipe and hose system was found among the documents shown by the factory personnel.
Suggested Plan of Action:	Establish an inspection, maintenance, and testing program for the standpipe and hose system. Program must comply with the requirements of NFPA 25 Chapter 6 Table 6.1.1.2.
Suggested Deadline Date:	28 Jul 2015
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2

Question:	Is signage for the standpipe system installed at required locations and on required components?
Priority Level:	Low
Non-Compliance Level:	1
Description:	Signage for the standpipe system is not installed at required locations of stand pipe system as per requirement of NFPA 14 Chapter 6.
Source of Findings:	Visual Assessment: No signage was found for the installed standpipe system.
Suggested Plan of Action:	Install required identification signs for the installed standpipe system. Signage must comply with NFPA 14.
Suggested Deadline Date:	24 Mar 2015
Standard:	Reference NFPA 14 Chapter 6

Means of Egress

Question:	Occupant loads on each level (floor) do not exceed the capacity of the available means of egress.
Priority Level:	High
Non-Compliance Level:	3
Description:	On 1st floor of Main building, 558 people were working at the time of audit and the floor area is 1773 m2, so space per occupant is 3.18 m2, which is greater than required 2.3 m2 (25 sft) according to Alliance Standard Part 6 Section 6.4.2.1. Total width of 2 stairways in the main building is 2.18m. The total width requirement for 558 occupants on the 1st floor is 558X0.008=4.46m. Available stair width does not satisfy the requirement of Alliance Standard. Also as the occupant is 558, needs to provide at least three stairs. Total unobstructed width of 12 aisles on 1st floor is 11.78m and occupant load is 558. Total required width of aisles is 2.23m which satisfy the requirement. Total width of 2

	exit doors in 1st floor is 3.5m. Total width requirement for 558 occupants on 1st floor is 558X0.004=2.23m. Available exit door width satisfies the requirement, but as the occupant is 558, needs to provide at least three exits.	
Source of Findings:	Visual Assessment: Number of occupants was obtained from register. Widths of exit doors and stairs of the concerned floor were measured.	
Suggested Plan of Action:	Reduce the number of occupant from 1st floor to satisfy the stair and exit width and number requirement. Or, considering the occupant load 558, provide at least 3 stairs and 3 exits as per Alliance Standard. For stair per occupant width requirement is 8 mm.	
Suggested Deadline Date:	24 Feb 2015	
Standard:	Alliance Standard Part 6 Section 6.4 Occupant Load	
Question:	Aisles are provided with the minimum unobstructed clear width of 0.9 m (36 in) based on occupant loads.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Aisle width in the cutting section (ground floor) is 0.8m, and in the finishing section (1st floor) & accessories store (2nd floor) it is 0.84 m, both of which violate the Alliance Standard.	
Source of Findings:	Visual Assessment: Aisle width was found to be less than 0.9 m at above mentioned locations.	
Suggested Plan of Action:	Remove existing aisle markings and draw new markings to fulfill the minimum aisle width requirement. Relocate the machines accordingly if necessary.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
Question:	The path of egress along the means of egress is not reduced at any point along the path of travel and is sufficient for the occupant load.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	The total width of 2 stairways in the main building is 2.18m. The total width requirement for 558 occupants on the 1st floor is 558X0.008=4.46m. Available stair width does not satisfy the requirement of Alliance Standard. Total width of aisles is sufficient for the occupant load. The total unobstructed width of 12 aisles on 1st floor is 11.78m and occupant load is 558. Total required width of aisles is 2.23m. Total width of 2 exit doors in the main building is 3.5m. Total width requirement for 558 occupants on 1st floor is 558X0.004=2.23m. Available exit door width satisfies the requirement, but as the occupant is more than 500, needs to provide at least three exits.	

Source of Findings:	Visual Assessment: Widths of aisles, exit doors, and stairs were measured on a sample basis.	
Suggested Plan of Action:	Immediately reduce the number of occupant from 1st and 2nd floor to satisfy the stair and exit width and number. Considering the occupant load 558 and 550 on 1st and 2nd floor, need to provide at least 3 stairs and 3 exits as per Alliance Standard. Also for stair per occupant width requirement is 8 mm.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width and BNBC Table 4.3.2	
Question:	The number of means of egress from any floor or story is not less than 3 when the occupant load exceeds 500 per story and not less than 4 when the occupant load exceeds 1000 per story.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	On the 1st and 2nd floor of the main building, the occupant load is 558 and 550, respectively, and there are only 2 exits. This violates the Alliance Standard.	
Source of Findings:	Visual Assessment: The number of emergency exit doors were counted and occupant load was checked.	
Suggested Plan of Action:	Immediately reduce the number of occupant to less than 500 on 1st and 2nd floor. Provide an additional exit on the 1st & 2nd floors and an external stair to meet the requirement of Alliance Standards.	
Suggested Deadline Date:	25 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.6 Number of Means of Egress	
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:	3	
Description:	There are collapsible doors and steel leaf doors with locking arrangement at each egress locations. This violates Alliance Standard Part 6 Section 6.8.2.	
Source of Findings:	Visual Assessment: During the site tour, locking devices were noticed at exit doors.	
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at the noted locations. According to section 6.8.2.2 doors may be locked where the latch and lock are disengaged with one motion where the occupant load does not exceed 49 persons. Turning a door handle and disengaging a lock is considered two motions. According to section 6.8.2.2 doors may be provided	

	with locking hardware from the ingress side provided that a panic bar is installed on any door with an occupant load exceeding 49 persons. The re-entry provisions of section 6.8.3 must be met.	
Suggested Deadline Date:	05 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:	Door widths are more than 0.8m, but doors along the path of egress (i.e. doors leading to staircases) do not have rating of 1.5 hour as required.	
Source of Findings:	Visual Assessment: Doors without proper rating installed at exits.	
Suggested Plan of Action:	Provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosures. Exits connecting four or more stories shall be enclosed with a minimum 2-hr fire-resistance rating. Exits shall be enclosed with the same fire-resistance rating as the floor penetrated but will not need to exceed 2 hr.	
Suggested Deadline Date:	10 Oct 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:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Among 2 exit doors, only doors at one exit are side-hinged swinging type and doors at another exit are collapsible type. This violates the Alliance Standard.	
Source of Findings:	Visual Assessment: Collapsible type doors were found at exits.	
Suggested Plan of Action:	Replace all collapsible, sliding, roll-down gates and shutters in means of egresses with side-hinged swinging type doors of proper width and rating.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	

Question:	Exit discharge is directly to the exterior of the building, unless the requirements of 6.17.2 are met, at grade or provides direct access to grade. Exit discharge shall not reenter a building.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Northeast side stairway terminates at a non-rated exit passageway. Cutting section and embroidery section with unprotected openings are located in that passageway, which does not comply with the Alliance Standard. Other exit stairway discharge directly to the exterior of the building.	
Source of Findings:	Visual Assessment: Northeast side stair terminates at a non-rated exit passageway.	
Suggested Plan of Action:	Provide rated exit passageway i.e. protected path of egress from the exit enclosure to the public way. The rating of the exit passageway is to be equal to fire rating requirement of the exit that is being served and shall not be less than 1 hr fire-resistance rated.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.17 Exit Discharge. See Section 16.7.2 and 16.7.3 for exceptions.	
Question:	Travel distance to reach an exit does not exceed the maximum distance allowed by Occupancy Type.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Maximum travel distance for one exit is 48.77m. Type-II standpipe system is installed in the building which does not satisfy the Alliance Standard. Portable fire extinguisher and automatic fire detection system is installed in accordance with Alliance Standard at main building. Travel distance exceed the allowable limit 45m set by Alliance Standard Part 6 Section 13 and BNBC Part 4 Section 3.15.1.	
Source of Findings:	Visual Assessment: Travel distances are measured on sample basis.	
Suggested Plan of Action:	Install automatic fire detection system, portable fire extinguisher and standpipe system in accordance with Alliance Standard. Otherwise, provide another exit to satisfy maximum travel distance requirement, i.e. keep it within 45 m.	
Suggested Deadline Date:	05 May 2015	
Standard:	Alliance Standard Part 6 Section 13 Travel Distance and BNBC Part 4 Section 3.15.1	

Question:	Interior exit stairways and ramps terminate at an exit discharge except where terminating at a rated exit passageway.
Priority Level:	High
Non-Compliance Level:	2
Description:	Northeast side stairway terminates at a non-rated exit passageway. Cutting section and embroidery section with unprotected openings are located in that passageway, which violates the requirement of Clause 6.14.2 of Alliance Standard. Other exit stairway terminates directly outside the building.
Source of Findings:	Visual Assessment: Northeast side stair terminates at a non-rated exit passageway.
Suggested Plan of Action:	Provide rated exit passageway i.e. protected path of egress from the exit enclosure to the public way. The rating of the exit passageway is to be equal to fire rating requirement of the exit that is being served and shall not be less than 1 hr fire-resistance rated.
Suggested Deadline Date:	10 Oct 2014
Standard:	Alliance Standard Part 6 Section 6.14 Exit Enclosures

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:	Occupant loads were not posted in any assembly or production floor as required.
Source of Findings:	Visual Assessment: Occupant loads were not posted in any assembly or production floor.
Suggested Plan of Action:	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.
Suggested Deadline Date:	28 Sep 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 paths of egress are not provided with compliant means of illumination. Ordinary CFL bulbs are used as emergency lights, which do not provide sufficient illumination as required in accordance with the Alliance Standard.

Source of Findings:	Visual Assessment: Aisles were found insufficiently illuminated.	
Suggested Plan of Action:	Install appropriate means of illumination at the noted locations. The means of egress paths shall be illuminated at all times the building is occupied. Illumination shall be a minimum of 10 lux for all corridors, exit doors, and stairways. Aisles shall be provided with a minimum 2.5 lux.	
Suggested Deadline Date:	28 Dec 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:	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:	2	
Description:	Record of verifying emergency power for means of egress illumination was not found as per Alliance Standards.	
Source of Findings:	Visual Assessment: No document regarding verification of emergency power for means of egress was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the operation of all emergency lights are verified at least once per year. If battery-operated lights are used, these lights shall be tested on a monthly basis. Functional testing of battery powered lights shall be provided for a minimum of 90 min once per year.	
Suggested Deadline Date:	30 Aug 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	
Question:	Illuminated exit signs are placed at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Illuminated exit signs are placed at entrances to exits and some exit signs are placed along the path of egress but additional exit signs or directional signs are not provided where there is a change in direction and where the continuation of egress is not obvious. This condition fails to satisfy the requirements stated in the Alliance Standards.	
Source of Findings:	Visual Assessment: Exit signs are not placed at all required locations.	

Suggested Plan of Action:	Install illuminated exit signs at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.	
Suggested Deadline Date:	28 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	The backup used does not provide sufficient illumination (50 lux at surface of exit sign) as required per the Alliance Standard.	
Source of Findings:	Visual Assessment: The backup used for exit signs was found not to provide sufficient illumination during site visit.	
Suggested Plan of Action:	Provide an emergency power source, either by battery back up or by connecting to the emergency power system, for compliantly illuminated exit signs.	
Suggested Deadline Date:	28 Dec 2014	
Standard:	Alliance Standards Part 6 Section 6.11 Exit Signs and Part 10 Section 10.12 Illumination of Exit Signs and Means of Escape	
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:	2	
Description:	No plan or record of conducting periodic testing of the emergency battery backup for illumination of exit signs was found as required.	
Source of Findings:	Document Review: No document regarding testing of emergency power for exit signs was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	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 signs 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:	20 Aug 2014	
Standard:	Alliance Standard 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:	Both stairways have a handrail on only one side, which violates the requirement. The handrails are mounted at 36 inches height above the floor (i.e. greater than 30 inch), which meets the requirement.	
Source of Findings:	Visual Assessment: Handrails were found on only one side of the stairways.	
Suggested Plan of Action:	Provide handrails on both side of each stairway. Provide intermediate handrail when the stair width exceeds 2.2m (87 inch)	
Suggested Deadline Date:	28 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	

Question:	All occupied roofs are provided with parapets or guards with a minimum height of 1067 mm (42 in.).	 
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Roof of the main building is not occupied. But the 3rd floor is partially occupied and rest of the area of 3rd floor is open terrace. Parapet height is this open terrace is 36 inches which does not meet the requirements of Alliance Standards.	
Source of Findings:	Visual Assessment: Parapet height was found to be 36 inches on 3rd floor open terrace.	
Suggested Plan of Action:	Provide parapets or guards for open terrace in 3rd floor of a minimum height of 1067 mm (42 in.) as per Alliance Standards.	
Suggested Deadline Date:	28 Dec 2014	
Standard:	Alliance Standard Part 6 Section 12 Handrails and Guards	

Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Some exit signs do not have appropriate illumination levels and contrasting graphics as required by the Alliance Standards.	
Source of Findings:	Photograph: Some exit signs do not have appropriate illumination levels and contrasting graphics.	

Suggested Plan of Action:	Make sure all required exit signs are illuminated continuously at all times. Exit signs may be illuminated either by lamps external to the sign or by lamps contained within the sign. 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.	
Suggested Deadline Date:	28 Dec 2014	
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	
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:	Floor level and stair name or designation are not posted at floor entrances.	
Source of Findings:	Visual Assessment: Floor level or stair designation signs are not mentioned at required locations.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level at the noted locations.	
Suggested Deadline Date:	25 Aug 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Fire Safety Programs		
Question:	Are the required number of people trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Only 40 people are trained and certified in fire fighting, first aid and rescue as of 6.2.2014.	
Source of Findings:	Document Review: Document on fire safety training program was found, but only 40 people have participated in the training program out of 1541 workers.	
Suggested Plan of Action:	Train and certify at least 25 percent of workers (386 of 1541 workers) in fire fighting, first aid and rescue by the proper authority.	
Suggested Deadline Date:	21 Dec 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	

Question:	An emergency evacuation plan has been developed and communicated to all employees.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Workers are aware of the evacuation procedure upon commencing of the alarm. However, no procedure defining evacuation process was available.	
Source of Findings:	Visual Assessment: Among the documents shown by the factory personnel, no proper emergency evacuation plan was found.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes all components required by the Alliance Standards and communicate the plan to all employees. The evacuation plan shall include provisions to assist physically disabled persons, duties and responsibilities of various people/groups, interfacing between groups and fire brigade, headcount and identification of trapped victims. A list of all employees with physical disabilities shall be kept by the Fire Service Director.	
Suggested Deadline Date:	20 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Fire Drills are conducted at required intervals based on building use type.	 
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Fire drills are conducted monthly in all buildings, but not under the direction of a Fire Safety Director. This does not meet the requirements of Alliance Standard or BNBC requirements.	
Source of Findings:	Document Review: Fire drills were conducted monthly in all buildings, but not under the direction of Fire Safety Director.	
Suggested Plan of Action:	Fire drills shall be conducted under the direction of a Fire Safety Director. All other requirements for fire drills shall be conducted in accordance with BNBC requirements.	
Suggested Deadline Date:	10 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills	
Question:	Storage areas underneath the cutting tables are clear of combustibles.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Fabrics are stored underneath the cutting tables of cutting section on ground floor.	

Source of Findings:	Visual Assessment: Fabrics were found underneath the cutting tables on ground floor.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	05 Aug 2014	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	No document of any training program in accordance with the Alliance Safety Training Curriculum was found.	
Source of Findings:	Document Review: Alliance safety training curriculum was not found among the documents shown by factory personnel.	
Suggested Plan of Action:	Impart training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.	
Suggested Deadline Date:	30 Jul 2014	
Standard:	Alliance Standards Part 13	
Question:	Are all applicable permits up to date including Fire License & Boiler License.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	BERC waiver certificate for 576KW capacity generators are available, but total capacity of Generator is 716 KW. Electrician license is not available. Acid license is not available. Fire License is available for 60135sft area, but total constructed useable area is 63142sft. Factory license, trade license, boiler license, boiler operator license and fire licenses are up-to-date.	
Source of Findings:	Document Review: Some documents were not found to be up to date and available.	
Suggested Plan of Action:	Get all the licenses and permits from the proper issuing authority from the proper issuing authority. Apply to Biddyut Paridaptor for electrician license.	
Suggested Deadline Date:	11 Aug 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	

Question:	A Fire Safety Director position has been filled.
Priority Level:	Low
Non-Compliance Level:	2
Description:	No viable documentation nor physical presence of Fire Safety Director was noted. However, factory informed that they have a designated person for this.
Source of Findings:	Document Review: No viable documentation regarding appointment of Fire Safety Director was found.
Suggested Plan of Action:	Create a Fire Safety Director position and fill the position with an individual that has had sufficient training to be able to carry the required duties. The duties of the Fire Safety Director shall include the following: (1) Establish internal and external rally points and communicate to all employees in the building. (2) Fire department pre-planning. (3) Conduct safety inspections as outlined in Alliance Standard. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance Standard.
Suggested Deadline Date:	28 Dec 2014
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director
Question:	Fire Department pre-planning has been completed.
Priority Level:	Low
Non-Compliance Level:	1
Description:	Fire department pre-planning was not found.
Source of Findings:	Document Review: No document regarding fire department pre-planning was found among the documents shown by factory personnel.
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.
Suggested Deadline Date:	28 Aug 2014
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director
Question:	A written housekeeping policy is established and enforced.
Priority Level:	Low
Non-Compliance Level:	1
Description:	A written housekeeping policy was not found, which is required as per Alliance Standards.
Source of Findings:	Document Review: No relevant document on written housekeeping policy was found.

Suggested Plan of Action:	Establish written corporate and plant policies on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings. Provide a documented line of authority for authorizing a cleaning delay and rescheduling. 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.).
Suggested Deadline Date:	20 Feb 2015
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping

Question:	A hot-work permit program has been established.
Priority Level:	Low
Non-Compliance Level:	1
Description:	Not hot-work permit program is in place. Hot-work is not going on in the factory, but a hot-work permit program needs to be established. It is required as per the Alliance Standards.
Source of Findings:	Document Review: No hot-work permit could be presented by the factory personnel.
Suggested Plan of Action:	Develop a NFPA 51B-compliant hot-work permit program. In general, this program should address the process of request and approval of authorities, necessary checks prior approval, standby fire watch and fire fighting equipment, sounding of alarm procedure, duration and expiry of permit and reapproval procedure, etc.
Suggested Deadline Date:	28 Nov 2014
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B