INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**Pearl Garments Co. Ltd.**
Address:	**Palash Bari, Nabinagar, Savar Savar Dhaka Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**19 Jun 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:	Pearl Garments Co. Ltd.
Address:	Palash Bari, Nabinagar, Savar Savar Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Savar
Zip Code:	
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	06-23-2014
Final Report Date:	06-30-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 6 buildings in the factory premises out of which two are main production buildings and four are ancillary buildings. The buildings are named as: 1) Five story main production building, 2) Single story accounts production shed, 3) Single story prefab store shed, 4) Single story Wastage shed, 5) Single story security shed, 6) Two story RCC generator & boiler shed.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	Information provided below as per following format: Highest occupied floor level [Height up to roof], Stories above grade, Stories below grade, Occupied level. 1) Five story main production building: 12.00 m or 39.37 ft [15.00 m or 49.2 ft], 5, 0, 5. 2) Single story accounts production shed: 30 cm or 1 ft above grade [3.05 m or 10 ft], 1, 0, 1. 3) Single story prefab store shed: 3.35 m or 11 ft above grade [6.40 m or 21 ft], 1, 0, 1. 4) Single story Wastage shed: 30 cm or 1 ft above grade [3.05 m or 10 ft], 1, 0, 1. 5) Single story security shed: 30 cm or 1 ft above grade [3.05 m or 10 ft], 1, 0, 1. 6) Two story RCC generator & boiler shed: 3.65 m or 12 ft above grade [6.70 m or 22 ft], 2, 0, 2.
Approximate Building Area (SF):	Total area of all buildings in the factory premises: 95340.00 sft. Building wise breakdown as follows: 1) Five story main production building: 73277.00 sft, (Ground floor: 17097.00 sft, 1st floor: 16127.00 sft, 2nd floor: 16127.00 sft, 3rd floor: 16127.00 sft, 4th floor: 7799.00 sft), 2) Single story accounts production shed: 2530.00 sft, 3) Single story prefab store shed: 16995.00 sft, 4) Single story Wastage shed: 520.00 sft, 5) Single story security shed: 100.00 sft, 6) Two story RCC generator & boiler shed: 1918.00 sft, (Ground floor: 1060.00 sft, 1st floor: 858.00 sft).
Date of Building	Factory personnel informed the date of construction as follows: Started in December 1999 and finished in

Construction:	December 2008 (all buildings).
Date of Last Building Renovation/Addition:	No record for date of renovation or addition was found from factory personnel.
Ancillary Structures in Complex:	1) Single story prefab store shed, 2) Single story Wastage shed, 3) Single story security shed, 4) Two story RCC generator & boiler shed.
Approximate Ancillary Structures Area (SF):	1) Single story prefab store shed: 16995.00 sft, 2) Single story Wastage shed: 520.00 sft, 3) Single story security shed: 100.00 sft, 4) Two story RCC generator & boiler shed: 1918.00 sft, (Ground floor: 1060.00 sft, 1st floor: 858.00sft).
Number of Occupants:	Total number of occupants: 1300. 1)Five story main production building: 1240 (Ground floor: 250, 1st floor: 330, 2nd floor: 330, 3rd floor: 220, 4th floor: 110), 2)Single story accounts production shed: 20, 3)Single story prefab store shed: 25, 4)Single story Wastage shed: 1, 5)Single story security shed: 10, 6)Two story RCC generator & boiler shed: 4 (Ground floor: 2, 1st floor: 2).
Number of Ancillary Levels (Stories):	1) Single story prefab store shed: Building height (Highest occupied floor level): 3.35 m or 11 ft above grade [Height up to roof: 6.40 m or 21 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 2) Single story Wastage shed: Building height (Highest occupied floor level): 30 cm or 1 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 security shed: Building height (Highest occupied floor level): 30 cm or 1 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) Two story RCC generator & boiler shed: Building height (Highest occupied floor level): 3.65 m or 12 ft above grade [Height up to roof: 6.70 m or 22 ft], Stories above grade: 2, Stories below grade: 0, Occupied levels: 2.
Occupancy Type:	1)Five story main production building: [Ground floor: G2 (Finishing, Iron Section), 1st floor: G2 (Sewing), F1 (Office), 2nd floor: G2 (Sewing, Sample), 3rd floor: G2 (Sewing), E3 (Dining), 4th floor: G2 (cutting)], 2) Single story accounts production shed: B2 (Child care), E1 (Training Section), F1 (Office), G2 (Embroidery), 3) Single story prefab store shed: H1 (accessories store), H2 (Fabric Store), 4) Single story Wastage shed: H2 (Wastage), 5)Single story security shed: F1 (security Post), 6) Two story RCC generator & boiler shed: [Ground floor: K (Generator), 1st floor: K (Boiler)].
Construction Type:	1) Five story main production building: [Ground floor to 4th floor: Type 1, 3rd floor: partially Non-rated (Only ceiling)], 2) Single story accounts production shed: Non-rated, 3) Single story prefab store shed: Non-rated, 4)Single story Wastage shed: Non-rated, 5)Single story security shed: Non-rated, 6) Two story RCC generator & boiler shed: [Ground floor: Type 1, 1st floor: Non-rated (Only ceiling)].
Height of Highest Occupied Floor Level Above Grade:	1) Five story main production building: 12.00 m or 39.37 ft, 2)Single story accounts production shed: 30 cm or 1 ft above grade, 3)Single story prefab store shed: 3.35 m or 11 ft above grade, 4)Single story Wastage shed: 30 cm or 1 ft above grade, 5. Single story security shed: 30 cm or 1 ft above grade, 6) Two story RCC generator & boiler shed: 3.65 m or 12 ft.

ASSESSMENT FINDINGS

Fire Protection Construction

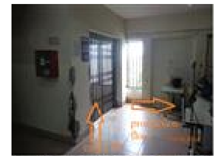
Question:	Certificates of Occupancy for each building have been issued and are on file.
Priority Level:	Low
Non-Compliance Level:	1
Description:	Certificates of Occupancy are not available for any building on the factory premises.
Source of Findings:	Document Review: There were no Certificates of Occupancy for any of the buildings among the documents provided by factory personnel.
Suggested Plan of Action:	Apply to Savar Cantonment, the proper authority, for issuance of Certificates of Occupancy.
Suggested Deadline Date:	30 Aug 2014
Standard:	Are certificates of occupancy provided for each building or ancillary structure?
Question:	Is the fire resistance materials of structural members in good condition and free of damage?
Priority Level:	Medium
Non-Compliance Level:	
Description:	There was no damage found in the fire resistance materials of the structural members in the five story main production building and two story RCC generator & boiler shed (only ceiling non-rated). But the Single story accounts production shed and single story prefab store shed are steel structure without insulation, therefore non-rated. However, structural members of prefab shed seem to be in good condition. The single story masonry constructions with CI roof (Wastage shed and Security shed) are also non-rated. There is no structural member in this shed.
Source of Findings:	Visual Assessment: On visual inspection, no damage or distress was noticed in the structural members of the buildings.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	BNBC Part 3 Chapter 3

Question:	Are openings and penetrations through rated walls and/or assemblies protected?
Priority Level:	High
Non-Compliance Level:	3
Description:	The door of the fabric storage area (on the ground floor) is not protected and it is open towards the opening of daycare. Such unprotected openings are not allowed according to Alliance Standard 3.4.2.1.5. For electrical conduit, an installation slab is penetrated in each floor. Fire doors were installed at all exit enclosures, but no proper test report were found. Similarly, openings are present in the generator and boiler rooms which are located within 10 ft from the fabric storage prefab shed. On the 3rd floor of the five story main production building, there is glass opening in between dining room (E3) and production (G2).
Source of Findings:	Photograph: Openings and penetrations through rated walls are not protected.
Suggested Plan of Action:	Install fire rated doors and windows or fill in unprotected openings with fire resistive rated assemblies.
Suggested Deadline Date:	11 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:	Is each floor separated with a fire-resistive rated construction barrier?
Priority Level:	High
Non-Compliance Level:	
Description:	From physical measurement, slab thickness was found approximately 10 inch with finishing. Fire resistance of 10 inch RCC slab is 5 hour. According to Alliance Standard Section 4.4 or BNBC Table 3.3.1 (pg-10383), slab for a Type 1 building needs to have 3 hour fire rating. From Alliance Standard Section 4.4.1 or BNBC Table 4.1.1 (pg- 10409), fire rating of 10 inch RCC slabs is 5 hour where 10 inch slab may provide 5 hours resistance which is more than the requirements.
Source of Findings:	Visual Assessment: From physical measurement, slab thickness was found approximately 10 inch with finishing.
Suggested Plan of Action:	
Suggested Deadline Date:	
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:	2
Description:	On the ground floor, the pump shed is open to the single story prefab storage shed without any barrier. The utility shed is within 3.1 m from the fabric storage area. The fabric storage area exterior barrier is non-rated, and the top portion of the utility shed's exterior wall is non-rated. No fire separation was found.
Source of Findings:	Photograph: The pump shed is open to the single story prefab storage shed on the ground floor. One-third of the the utility shed's exterior barrier is non-rated, and the door and windows are not fire-rated as well.
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types, following Table 4.4.1 of the Alliance Standard or Table 4.1.1 from BNBC Part 4. Consult a qualified fire protection engineer to design the required rated construction barrier.
Suggested Deadline Date:	03 Jan 2015
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	3
Description:	There are three stairways in the five story main production building. All the walls located in each exit enclosure are constructed with 2 hour fire rated wall. Fire doors were installed at all exits, but no proper test reports for these doors were found. The doors to these stairways need to be fire rated as per the Alliance Standard.
Source of Findings:	Photograph: Fire doors were installed at all exits, but no proper test reports were found at the factory.
Suggested Plan of Action:	Fit fire doors of 1.5 hr rating that swing in the direction of egress, self-closing, non-lockable in all stairwell enclosures. Consult a qualified fire protection engineer to design the required rated construction barriers.
Suggested Deadline Date:	11 Oct 2014
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation



Question:	Are shafts provided with the minimum fire-resistance rating?
Priority Level:	High
Non-Compliance Level:	3
Description:	A cargo lift is available in the five story main production building that is connected to each floor and open to the production floors. Factory personnel were unable to provide any documentation to certify the rating of the lift door. The door to the elevator shaft needs to be fire rated as required in accordance with Alliance Standards.
Source of Findings:	Photograph: The cargo lift is open to the production floors.
Suggested Plan of Action:	The door of the elevator shaft needs to be fire rated, as required in accordance with Alliance Standards 4.5.7.3. The factory should provide documentation to certify the rating of the door or replace the door with fire-rated assembly.
Suggested Deadline Date:	11 Oct 2014
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3
Question:	Fire dampers installed on air-conditioning and ventilation ducts appear to be in good condition and operational.
Priority Level:	Medium
Non-Compliance Level:	
Description:	No air-conditioning and ventilation duct are available in the factory.
Source of Findings:	Visual Assessment: During site tour, no air-conditioning or ventilation duct was found.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations
Question:	If the building contains a vertical opening known as an atrium, have provisions been made to comply with Alliance Standard 3.7?
Priority Level:	Medium
Non-Compliance Level:	
Description:	No atrium is available in any of the building.
Source of Findings:	Visual Assessment: No atrium was found in the factory premises.
Suggested Plan of	

Action:		
Suggested Deadline Date:		
Standard:	Reference Alliance Standards Section 3.7 Atrium	
Fire Protection Systems		
Question:	Is the building protected by an automatic sprinkler system?	
Priority Level:	High	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not installed in the five story main production building . Height of the highest occupied level of the building was 12.00 m (39.37 ft) above finished grade which is less than 23.00 m (75.00 ft) in accordance with the requirements of NFPA 13 as stated in Alliance Standard Section 5.3. So, automatic sprinkler system is not required.	
Source of Findings:	Visual Assessment: During site tour, the height of the buildings were measured and it was realized that sprinkler system is not required in the any of the building.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference Alliance Standards Part 3 Section 3.5.3 Existing Buildings, Part 5 Section 5.3 Automatic Sprinkler Systems and Section 6.13 Travel Distance	
Question:	Design criteria of sprinkler system?	
Priority Level:		
Non-Compliance Level:		
Description:	Automatic sprinkler system is not required for the building, so design criteria of sprinkler system is not applicable.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Provide the criteria used in the design of the sprinkler system.	
Question:	Commodity Class used for the design of the sprinkler system?	
Priority Level:		

Non-Compliance Level:		
Description:	As an automatic sprinkler system is not required for the building, commodity class used for the design of sprinkler system is not applicable.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference NFPA 13 Chapter 5	
Question:	Occupancy Classification used for the design of the sprinkler system?	
Priority Level:		
Non-Compliance Level:		
Description:	As an automatic sprinkler system is not required for the building, occupancy classification used for the design of sprinkler system is not applicable.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference NFPA 13 Chapter 5	
Question:	Are inspection, maintenance, and testing procedures of the sprinkler system documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Sprinkler system is not required for any of the building and no sprinkler system is installed, therefore inspection, maintenance and testing procedure is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference NFPA 25 Chapter 5 Sprinkler Systems Table 5.1.1.2	

Question:	Are identification signs for the sprinkler system installed at the required locations?
Priority Level:	Low
Non-Compliance Level:	
Description:	Sprinkler system is not required for the buildings and sprinkler system is not installed, therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site tour, no identification sign for installed sprinkler system was found.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Reference NFPA 13
Question:	Sprinkler system piping is free of mechanical damage, leakage, and corrosion.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Sprinkler system is not required for the buildings and sprinkler system is not installed, therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	NFPA 25 Chapter 5 Section 5.2.2 Pipe and Fittings
Question:	Sprinkler system piping is not subjected to external loads by materials either resting on the pipe or hung from the pipe?
Priority Level:	Low
Non-Compliance Level:	
Description:	Sprinkler system is not required for the buildings and sprinkler system is not installed, therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.
Suggested Plan of Action:	
Suggested Deadline	

Date:		
Standard:	Reference NFPA 25 Chapter 5 Section 5.2.2.2	
Question:	Are hangers, bracing, and restraints properly installed and supporting the system piping?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Sprinkler system is not required for the buildings and sprinkler system is not installed, therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference NFPA 13 Chapter 9 Hanging, Bracing, and Restraint of System Piping.	
Question:	Sprinklers do not show signs of leakage, are free of corrosion, have not been painted, and are not physically damaged.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Sprinkler system is not required for the buildings and sprinkler system is not installed, therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference NFPA 25 Chapter 5	
Question:	All valves controlling the automatic sprinkler systems are electrically supervised by a listed fire alarm system control unit.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Sprinkler system is not required for the buildings and sprinkler system is not installed, therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	

Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Reference Alliance Standard Part 5 Section 5.3.5 Supervision and Alarms.
Question:	Does the automatic sprinkler system have an approved audible device activated by waterflow equal to the flow of one sprinkler?
Priority Level:	Low
Non-Compliance Level:	
Description:	Sprinkler system is not required for any of the building and sprinkler system is not installed, therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Reference Alliance Standards Part 5 Section 5.3.5.2 Alarms.
Question:	Are sprinklers spaced and installed at the required heights in order to provided required coverage and protection?
Priority Level:	High
Non-Compliance Level:	
Description:	Sprinkler system is not required for any of the building and sprinkler system is not installed, therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Reference NFPA 13
Question:	Are storage racks and shelves compliant based on class of commodity storage?
Priority Level:	High
Non-Compliance Level:	

Description:	Sprinkler system is not required for any of the building and sprinkler system is not installed, therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference NFPA 13 Chapter 13, 14, 15, 16, or 17	
Question:	Aisles in storage areas are free of storage based on design criteria used for the sprinkler system.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Sprinkler system is not required for any of the building and sprinkler system is not installed, therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 5 Section 5.3.6.3	
Question:	All storage is maintained with a 460 mm (18 in.) minimum clearance from the top of storage to the sprinkler deflector.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Sprinkler system is not required for any of the building and sprinkler system is not installed, therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference Alliance Standards Part 5 Section 5.3.6.1 Storage Clearance	

Question:	Does the building have a Standpipe System?
Priority Level:	High
Non-Compliance Level:	3
Description:	The height of the highest occupied floor of the five story main production building is 12.00m (39.37 ft) above grade, which is more than 10 m (33 ft). Therefore, a class III standpipe system needs to be installed throughout the building at required stairwells. A class II standpipe hose connection (40 mm) is installed on each of the floors. A hydraulic design or calculation for the installed system was not available.
Source of Findings:	Visual Assessment: A Class II standpipe hose connection is available in the factory. No documentation was available to evidence a hydraulic design of the standpipe system.
Suggested Plan of Action:	Install a NFPA-14 compliant class-III standpipe system at required locations designed by a qualified fire protection engineer. All standpipe system installations and hydraulic calculations shall be submitted for review by the Alliance prior to commencement of installation. Testing of the installation shall be conducted in accordance with NFPA acceptance testing requirements. Documentation of all testing shall be submitted for review by the Alliance. Final inspection and testing of the installation shall be witnessed by the Alliance.
Suggested Deadline Date:	11 Oct 2014
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2

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:	Inspection, maintenance, and testing procedures of the installed class II standpipe and hose system are not documented and up to date.
Source of Findings:	Document Review: No documentation was found regarding inspection, maintenance, and testing procedure of standpipe and hose system among the documents provided by factory personnel.
Suggested Plan of Action:	Establish an inspection, maintenance, and testing program for the standpipe and hose system. The program must comply with NFPA-25 requirements.
Suggested Deadline Date:	03 Jan 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 available class II standpipe system is not available.	
Source of Findings:	Visual Assessment: No appropriate signage for installed standpipe system was found.	
Suggested Plan of Action:	Install all required identification signs at the noted locations. The system should comply with NFPA-14 requirements.	
Suggested Deadline Date:	30 Aug 2014	
Standard:	Reference NFPA 14 Chapter 6	
Question:	Standpipe system piping is free of mechanical damage, leakage, and corrosion?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Damage, leakage or corrosion was not found in the installed Class II standpipe system piping.	
Source of Findings:	Visual Assessment: Damage, leakage, or corrosion was not found in the installed Class II standpipe system piping.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	NFPA 25 Chapter 6 Standpipe and Hose Systems	
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Fire department (Siamese) inlet connection and outlet connection (pillar hydrant) is provided as per clause 5.5.4. Connections match fire service and civil defense hose thread standard. Connections are clearly identifiable for the fire protection system.	
Source of Findings:	Photograph: During site tour, fire department connection was noticed.	
Suggested Plan of Action:		
Suggested Deadline		

Date:		
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections	
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	A fire pump is available in the factory; however, it does not comply with the requirements of Alliance Standards and NFPA 20. Hydraulic calculations for the installed standpipe systems are also not available.	
Source of Findings:	Photograph: A fire pump was found on the factory premises.	
Suggested Plan of Action:	Bring the current fire pump up to standard or install a pump dedicated for fire protection, following the requirements of NFPA 20. Fire pump installation is to be tested for final acceptance in the presence of the Alliance, and a final inspection of the installation shall be conducted by the Alliance prior to final acceptance. Acceptance testing of the installation shall be in accordance with NFPA testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance.	
Suggested Deadline Date:	11 Oct 2014	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	There was no documentation available regarding inspection, maintenance, and testing procedures of the fire pump.	
Source of Findings:	Document Review: No documentation was found regarding inspection, maintenance, and testing procedures for the fire pump in the documents provided by factory personnel.	
Suggested Plan of Action:	Establish an inspection, maintenance and testing program for the fire pump in accordance to NFPA 25.	
Suggested Deadline Date:	03 Jan 2015	
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps	

Question:	Are portable fire extinguishers installed throughout the building at required locations and mounted at the correct height?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Portable fire extinguishers installed throughout the building at required locations and mounted at the correct height in accordance with Alliance Standard, Part-5, Section-5.6.2.	
Source of Findings:	Photograph: Spacing and height of portable extinguishers were measured on sample basis.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	BNBC Part 4 Section 4.10 and NFPA 10	
Question:	Portable fire extinguishers have been selected based on potential fire class and hazards?	 
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Portable fire extinguishers have been placed according to potential fire class and hazards.	
Source of Findings:	Photograph: The result of visual inspection, extinguishers were found placed based on fire class.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	NFPA 10 Chapter 5	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Extinguishers are inspected monthly by factory personnel. However, no documentation was found to evidence: 1) annual maintenance of fire extinguishers by a servicing agent, and 2) annual testing of the nozzles of CO_2 extinguishers. This testing and maintenance is required as per NFPA 10.	
Source of Findings:	Document Review: Relevant documents do not comply with 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:	03 Jan 2015	
Standard:	NFPA 10 Chapter 7	
Question:	Are there any other fire suppression systems installed within the building?	
Priority Level:		
Non-Compliance Level:		
Description:	No other fire suppression system is available within the buildings.	
Source of Findings:	Visual Assessment: No other fire suppression system was found in the factory premises.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:		
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:	1	
Description:	An automatic fire alarm and detection system is installed in the factory. However, there is currently no monitoring company in Bangladesh. Fire service and civil defense are not capable of monitoring factory fire alarms and detection systems.	
Source of Findings:	Photograph: The fire alarm and detection system is not monitored by a central monitoring service.	
Suggested Plan of Action:	Arrange for the direct connection of the fire alarm system to a central monitoring station or Fire Service and Civil Defense as per Alliance Standard. Until the time that monitoring can be set up, arrange a monitoring system using the factory's own central detection system and personnel. A person shall be assigned to contact the fire department in the event of fire alarm activation. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	

Question:	Trouble or alarm notifications were not indicated on the fire alarm control panel.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Panel power, zone light (to address zone wise), fault light (if anything is disconnected) etc. on fire alarm control panel are functional.	
Source of Findings:	Photograph: Centralized alarm and detection system was found in the factory premises with trouble or alarm indication option.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:		
Description:	Pull stations, smoke detectors, visual and audible devices are installed at required locations.	
Source of Findings:	Photograph: Pull stations available at egress points in all floor and automatic smoke detector also available.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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	

Means of Egress

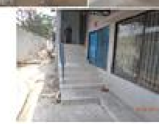
Question:	Occupant loads on each level (floor) do not exceed the capacity of the available means of egress.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Maximum occupant load on both 1st and 2nd floor of the five story main production building is 330 nos at the time of audit. The floor area is 1498.23	

	m2. The area per person computed is 4.54 m2 which is greater than required 2.3 m2 (25 sft) and which is accordance to Alliance Standard Part 6 Section 6.4.2.1. Total width of aisle is sufficient for the highest occupant load. The total unobstructed width of 6 aisles on 1st or 2nd floor is 8.0 m. Total required width of aisles is 1.65 m. Total width of 3 stairs located in each floor of the five stories main production building is 3.66m. Total width requirement for 330 occupants is 330X0.008=2.64m. Total stair width requirement is satisfied as per Alliance Standard. Total width of 3 exit doors located in each floor of the five story main production building is 3.99 m. Total width requirement for 330 occupants is 330X0.004=1.32m. Available exit door widths satisfy the requirement of Alliance Standard Part 6 Section 6.5.4 or BNBC Part 4 Table 4.3.2. A few aisles located on 3rd floor of 5 stories main production building is less than 0.9m (Alliance standard 6.5.1.). The width of stair-1 is 47 inch but the width of landing is 34 inch which is less than 0.9m (Alliance standard 6.5.6.2.2. and 6.9.2.2.). But still total width of aisles and stairs satisfy the requirement of occupant load.	
Source of Findings:	Visual Assessment: Occupant loads and means of egress were measured practically.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.4 Occupant Load	
Question:	Occupied roofs are provided with the minimum number of exits required as a story.	 
Priority Level:	High	
Non-Compliance Level:		
Description:	All the roof of the buildings is unoccupied. Two exits are provided on roof of five story RCC building	
Source of Findings:	Photograph: Two exits were found in roof of the five story main production building.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.6 Number of Means of Egress	
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:		
Description:	Roofs of all the buildings are unoccupied; therefore parapet is not applicable in	

	this case. Parapet is provided.	
Source of Findings:	Photograph: Parapet height is 43 inch in the five story main production building.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 12 Handrails and Guards	
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 are not posted in a conspicuous space near the main exits or exit access doorways as required.	
Source of Findings:	Visual Assessment: Occupant loads are not posted in any of the buildings near the main point of egress.	
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:	16 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of 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:	1	
Description:	A few aisles are found to be obstructed. On the 3rd floor, some aisles are less than 0.9 m wide. Other than these, all aisles are wider than 0.9 m. Total width of aisles is sufficient for the occupant load. The total unobstructed width of 6 aisles on 1st or 2nd floor is 8 m and highest occupant load is 330. Total required width of aisles is 1.65 m.	
Source of Findings:	Photograph: Obstruction was found in few of the aisles and on 3rd floor some of the aisles are less wide than 0.9m.	
Suggested Plan of Action:		
Suggested Deadline Date:	11 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:		
Description:	Total width of aisles is sufficient for the occupant load. The total unobstructed width of 6 aisles on 1st or 2nd floor is 8 m and highest occupant load is 330. Total required width of aisles is 1.65 m. Total width of 3 stairs in the five story main production building is 3.66m. Maximum number of occupant is in 1st or 2nd floor. Total width requirement for 330 occupants is 330X0.008=2.64m. Total stair width requirement is satisfied as per Alliance Standard. Total width of 3 exit doors in the five story main production building is 3.99 m. Maximum number of occupant is in 1st & 2nd floor. Total width requirement for 330 occupants is 330X0.004=1.32m. Available exit door widths satisfy the requirement of Alliance Standard Part 6 Section 6.5.4 or BNBC Part 4 Table 4.3.2.	
Source of Findings:	Visual Assessment: Widths of stairs,aisles and exits were measured on sample basis.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width and BNBC Table 4.3.2	
Question:	Means of egress have a minimum ceiling height of 2.3 m (7 ft 6 in.) with projections from the ceiling not less than 2.03 m (6 ft 8 in.).	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	The minimum ceiling height along the means of egress is 2.79 m (9 ft 2 inch) which is more than 2.3 m (7 ft 6 in.) and the minimum height at projection is 2.08 m (6 ft 10 inch) which is more than 2.03 m (6 ft 8 in.).	
Source of Findings:	Photograph: Ceiling height was measured on sample basis.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.3 Headroom	



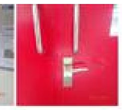
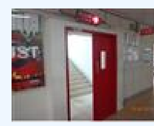


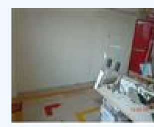
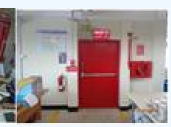
Question:	Exit discharge is directly to the exterior of the building, unless the requirements of 6.17.2 are met, at grade or provides direct access to grade. Exit discharge shall not reenter a building.
Priority Level:	High
Non-Compliance Level:	3
Description:	In the five story RCC building, stair 1 on the southwest side discharges beside the office and reception area doors, which are not separated with a fire resistive construction barrier. The two other stairways' exit discharges are directly to the exterior of the building.
Source of Findings:	Photograph: Some exit discharges do not meet Standard requirements.
Suggested Plan of Action:	Provide rated exit passageways, i.e. a protected path of egress, from the exit enclosure to the public way. The rating of the exit passageway is to be equal to the fire rating requirement of the exit that is being served, and shall not be less than 1 hr fire-resistance rated.
Suggested Deadline Date:	11 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:	
Description:	Among all the floors, the maximum travel distance was found on the 3rd floor. On 3rd floor maximum travel distance was calculated 37.80 m which is less than 45m. Automatic fire detection system, portable fire extinguishers are provided in accordance with Alliance Standard. But standpipe system is not provided in accordance to alliance standard. Yet, travel distance does not 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:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 13 Travel Distance and BNBC Part 4 Section 3.15.1
Question:	Exit access corridors serving an occupant load exceeding 30 are separated by walls having a fire-resistance rating of 1 hr.
Priority Level:	High

Non-Compliance Level:	
Description:	No corridor is available in any of the building.
Source of Findings:	Visual Assessment: During site tour, no such corridor was found.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3 and Part 4 Section 4.5. Does not apply if an automatic sprinkler system is installed throughout the building.
Question:	Interior finishes for means of egress meet the rating requirements for Class A, B and C materials.
Priority Level:	Medium
Non-Compliance Level:	
Description:	The interior finish of the means of egress is of plaster and non-combustible paint.
Source of Findings:	Visual Assessment: During site tour, interior finishes for means of egress are observed.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3.2 Interior Finish
Question:	Exits are limited to Class A and Class B interior materials.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Exits are made of brick walls.
Source of Findings:	Visual Assessment: During site tour, interior materials of exits were observed.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3.2 Interior Finish
Question:	The number of means of egress from any floor or story is not less than 2 except where a single exit is permitted or where a greater number is required.

Priority Level:	High	
Non-Compliance Level:		
Description:	During inspection the highest occupant loads was 330 on each of 1st floor and 2nd floor. Minimum two exits are provided on any floor of five story main production building.	
Source of Findings:	Visual Assessment: Minimum two exit were found in each floor of five story main RCC building.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.6 Number of Means of Egress	
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:		
Description:	There is no floor or story with over 500 occupants in five story main production building.	
Source of Findings:	Visual Assessment: Occupant load and stair width was measured on sample basis.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.6 Number of Means of Egress	
Question:	All paths of egress are provided with compliant means of illumination.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Aisles, exit access corridors and staircases are provided with compliant means of illumination.	
Source of Findings:	Photograph: All path of egress were illuminated by industrial grade energy light.	
Suggested Plan of Action:		

Suggested Deadline Date:		
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:	Means of egress are free from impediments, obstructions, and stored materials.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Some of the aisles located on 2nd and 3rd floor of five story main production building are obstructed. Other then these aisles all other aisles, stairs and exits are free from impediments and obstruction.	
Source of Findings:	Photograph: On 2nd and 3rd floor in the five story RCC building, some of the aisles are found obstructed.	
Suggested Plan of Action:		
Suggested Deadline Date:	19 Jul 2014	
Standard:	Alliance Standard Part 6 Section 6.3.8 Impediments to means of egress and Section 6.3.9 Reliability	
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:	No record of verifying emergency power for means of egress illumination was found as required.	
Source of Findings:	Document Review: No documentation regarding the verification of emergency power for means of egress was found among the documents provided by factory personnel.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures that the operation of all exit signs is verified at least once per year. If battery-operated signs are used, these signs should be tested on a monthly basis. Functional testing of battery powered signs should be provided for a minimum of 90 minutes once per year.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	

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:	Exit doors swing in the direction of egress, but they have locking devices.	
Source of Findings:	Photograph: Locking devices were found on exit doors.	
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at all locations. 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. 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.	
Suggested Deadline Date:	02 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:	There are 3 exit doors on each floor. The widths of those doors are 1.06 m, 1.57 m, and 1.34 m. All widths satisfy the minimum requirements. Fire doors were installed at all exits, but no proper test reports for these doors were found. The doors leading to stairways need to be fire rated as per the Alliance Standard.	
Source of Findings:	Photograph: Door widths were found to be more than 0.8 m, but proper test reports for those doors were not found.	
Suggested Plan of Action:	Provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosures.	
Suggested Deadline Date:	11 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.	

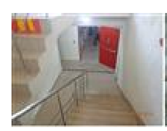
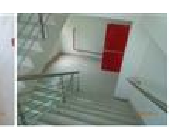
Question:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:		
Description:	All three doors on each floor are side-hinged swinging type. On ground floor there are some swinging steel type doors.	
Source of Findings:	Photograph: Exit door side-hinged swinging type and few steel swinging type doors were installed on ground floor.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:		
Description:	Illuminated exit signs are placed at entrances to exits the path of egress. Additional exit sign or directional signs are provided where there is a change in direction and where the continuation of egress is obvious. This condition to satisfy requirements stated in Alliance Standard Part 6 Section 6.11.	
Source of Findings:	Photograph: Illuminated exit signs Installed at entrance to the exit	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
Question:	Changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in) unless provided with a beveled slope of 1 in 2 that does not exceed 12.7 mm (1/2 in).	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	There is no such elevation difference detected.	
Source of Findings:	Visual Assessment: There is no such elevation difference was found.	
Suggested Plan of		

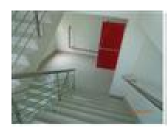
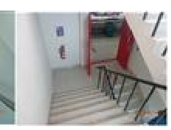
Action:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3.4 Walking Surfaces
Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Illuminated exit signs are provided with generator backup for continuous illumination.
Source of Findings:	Visual Assessment: Exit signs were illuminated with generator backup.
Suggested Plan of Action:	
Suggested Deadline Date:	
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 tests of the emergency battery backup for illumination of exit signs was found.
Source of Findings:	Document Review: No documentation regarding testing of the emergency power for exit signs was found among the documents provided by factory personnel.
Suggested Plan of Action:	Develop a testing and maintenance program that ensures that the emergency power for exit signs is tested at least once per year. If battery operated signs are used, these signs should be tested on a monthly basis. Functional testing of battery powered signs should be provided for a minimum of 90 minutes once per year.
Suggested Deadline Date:	16 Aug 2014
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.

Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Exit signs have appropriate illumination levels and contrasting graphics.	
Source of Findings:	Photograph: Exit signs with illumination level and contrasting graphics.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	

Question:	Walking surfaces along the path of egress are uniformly slip resistant.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Walking surfaces along the path of egress are of homogenous tiles, these tiles are not slippery and will not cause slip during quick evacuation under emergency situation.	
Source of Findings:	Photograph: Walking surfaces along the path of egress are of homogenous tiles.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.6 Slip Resistance	

Question:	Stairs are constructed of noncombustible materials.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	All the Stairs of all buildings are made of concrete.	
Source of Findings:	Photograph: All Stairs are made of concrete.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	

Question:	Stairs have a minimum width of 0.9 m (35 in.).	
Priority Level:	High	
Non-Compliance Level:		
Description:	All the stairs are wider than 0.9m.	
Source of Findings:	Photograph: Width of stairs was measured of sample basis.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width. Applies to existing construction.	
Question:	Stair treads are of nominal uniformity.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Stair treads are of nominal uniformity.	
Source of Findings:	Photograph: Stair treads and risers are of nominal uniformity.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.9 Stairs. Any tread height exceeding more than 50% of the adjacent tread heights or 75 mm (3 in.), whichever is less, shall be modified to be within this tolerance	
Question:	Landings are provided on both sides of doors used along the path of egress. Doors do not swing out over stairs.	 
Priority Level:	High	
Non-Compliance Level:		
Description:	Landings are provided on both sides of doors used along the path of egress and doors do not swing out over stairs in all buildings.	
Source of Findings:	Photograph: Landings are provided on both sides of doors.	
Suggested Plan of Action:		
Suggested Deadline		

Date:		
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Landings are provided with the same width in the direction of egress travel as the stair clear width provided at each level and at intermediate landings. Existing landings that are less than the stair width, shall reduce the overall available capacity of the stair.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Total width of 3 stairs in the five story main production building is 3.66m. Maximum number of occupant is in 1st or 2nd floor. Total width requirement for 330 occupants is 330X0.008=2.64m. Total stair width requirement is satisfied as per Alliance Standard. But the landing of stairway 1 is narrower than the width of the stairs on the floor level. The width of the stairs is 47 inches, and the width of the landing is 34 inches which is less than 0.9m. (Alliance standard 6.5.6.2.2. and 6.9.2.2.).	
Source of Findings:	Visual Assessment: The landing width is less than the stair width.	
Suggested Plan of Action:	Increase the landing width. At least 0.9 m should be provided, following the requirements of Alliance Standards 6.5.6.2.2.	
Suggested Deadline Date:	11 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and Section 6.5	
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:	There are three stairways in the five story main production building. Only two stairways in the building are provided with handrails on one side. The maximum width of the stair is 1.37 m, so, there is no need to provide intermediate handrail.	
Source of Findings:	Photograph: Stair widths and handrail heights were measured on a sample basis.	
Suggested Plan of Action:	Provide handrails on both sides of each stairway. The handrails should be installed at a height between the range of 865 mm (34 in.) and 965 mm (38 in.).	
Suggested Deadline Date:	03 Jan 2015	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	

Question:	Every door in a stair enclosure serving more than 5 stories is provided with re-entry unless it meets the requirements of Alliance Standards Part 6 Section 6.8.3.1.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	The five story main production building has less than 6 stories, therefore re-entry is not required for these buildings.	
Source of Findings:	Visual Assessment: During site tour, no re-entry door was found in the buildings as it is not required.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Exterior exit stairs are separated from the building with the required rating. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure.	
Priority Level:	High	
Non-Compliance Level:		
Description:	No exterior stair is available.	
Source of Findings:	Visual Assessment: No exterior stair was found.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.1.2. Three stories or less 1-hr rating. Four stories of more 2-hr rating	
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:	3	
Description:	On ground floor, stairway 2 on the southwest side terminates beside the office and reception area. It does not terminate at a rated exit passageway. Therefore, that exit discharge may not be considered safe.	
Source of Findings:	Photograph: Stair 2 terminates at a non-rated exit passageway.	

Suggested Plan of Action:	Provide protective opening assemblies of 1.5 hour fire rating in the passage way where interior stair-2 was terminated as per the Alliance Standard 6.15.3.	
Suggested Deadline Date:	11 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.14 Exit Enclosures	
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 mentioned in English but not mentioned in Bangali.	
Source of Findings:	Photograph: Floor level and stair name mentioned mentioned in English.	
Suggested Plan of Action:		
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Question:	Stairwells are not utilized as storage spaces.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Stairwells are free from storage.	
Source of Findings:	Photograph: Stairwells were found free.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 13 Section 13.9 Safety Inspections	
Question:	Ramps used in a means of egress do not reduce the overall means of egress width. The minimum width shall be 1.1 m (44 in.).	
Priority Level:	High	
Non-Compliance Level:		
Description:	No such ramp in the means of egresses was available.	
Source of Findings:	Visual Assessment: During site tour, no ramp was found in the means of	

	egresses.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standards Part 6 Section 10 Ramps
Question:	Ramps do not have a running slope greater than 1 in 8 (12.5 percent) and have handrails on both sides of the ramp.
Priority Level:	Medium
Non-Compliance Level:	
Description:	No ramp was available in the five story RCC production building.
Source of Findings:	Visual Assessment: No ramp was found in the factory premises.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 10 Ramps
Fire Safety Programs	
Question:	A Fire Safety Director position has been filled.
Priority Level:	Low
Non-Compliance Level:	
Description:	A man introduced as fire safety officer was present in the meeting.
Source of Findings:	Document Review: Factory personnel showed us the appointment letter of a fire chief designated fire safety officer.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director

Question:	An emergency evacuation plan has been developed and communicated to all employees.
Priority Level:	Medium
Non-Compliance Level:	2

Description:	Through interviews, it was noted that the factory workers are aware of the evacuation procedure that should take place upon the commencing of the alarm. However, no written procedure defining the evacuation process was available in the factory.	
Source of Findings:	Document Review: An emergency evacuation plan was not found in the documents provided by factory personnel.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes duties and responsibilities of various people or groups, interfacing between groups and the fire brigade, headcount and identification of trapped victims, physically disabled people and their rescue, as well as all components required by the Alliance Standards. Communicate this plan to all employees. The evacuation plan shall include provisions to assist physically disabled persons. A list of all employees with physical disabilities shall be kept by the Fire Service Director.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Emergency egress maps are posted at the entrance to each exit stair or main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Emergency egress maps are posted at the entrance to each exit stair or main point of egress.	
Source of Findings:	Visual Assessment: Emergency egress maps are posted at the entrance to exit stairs in all floor.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 13 Section 13.4 Evacuation Plan	
Question:	Fire Department pre-planning has been completed.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No documentation regarding fire department pre-planning was found.	
Source of Findings:	Document Review: No document regarding fire department pre-planning was found among the documents provided by factory personnel.	
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.	

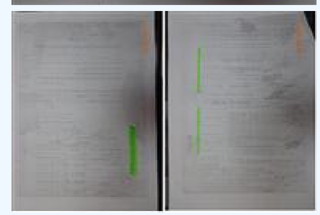
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Fire Drills are conducted at required intervals based on building use type.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Fire drills are conducted monthly in all buildings under the direction of a Fire Safety Director. This meets the requirements of Alliance Standard Part 13 Section 13.2 and BNBC Part 4 Appendix A Page 10457. The date of last fire drill was 15th June 2014.	
Source of Findings:	Document Review: Document shows that the last fire drill conducted on June 2014.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills	
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:	3	
Description:	No documentation or certificate from the appropriate authority was found regarding training on fire fighting.	
Source of Findings:	Visual Assessment: No relevant documentation was found.	
Suggested Plan of Action:	Train and certify at least 325 numbers of workers which is 25 percent of total worker in fire fighting, first aid and rescue by the proper authority.	
Suggested Deadline Date:	03 Jan 2015	
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	A written housekeeping policy is established and enforced.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	A written housekeeping policy was not found. Such a policy is required as per Alliance Standards.	

Source of Findings:	Document Review: No documentation regarding a written housekeeping policy was found among the documents provided by factory personnel.	
Suggested Plan of Action:	Establish written corporate and plant policies on housekeeping to ensure scheduled cleanings for floors, walls, ceilings, and 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:	28 Mar 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:	A hot-work permit program has not been established. It is required as per Alliance Standards. However, hot-work is not going on in the factory right now.	
Source of Findings:	Document Review: No relevant documentation was available.	
Suggested Plan of Action:	Develop a NFPA 51B-compliant hot-work permit program according to Alliance Standards. In general, this program should address the process of request and approval from authorities, the necessary checks prior to approval, standby fire watch and firefighting equipment, the sounding of alarm procedure, duration and expiry of permit and re-approval procedures, etc.	
Suggested Deadline Date:	03 Jan 2015	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	
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 in the cutting section on the 4th floor of the five story RCC building.	
Source of Findings:	Visual Assessment: Fabrics were stored underneath cutting tables.	
Suggested Plan of Action:	Remove all combustibles stored underneath cutting tables at the noted locations.	
Suggested Deadline Date:	16 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 record was found of any training program in accordance with the Alliance Safety Training Curriculum on fire safety.
Source of Findings:	Document Review: Alliance Safety Training Curriculum was not found among the documents provided by factory personnel.
Suggested Plan of Action:	Implement training programs in accordance with the Alliance Safety Training Curriculum, and keep record of trainings with proper documentation.
Suggested Deadline Date:	16 Aug 2014
Standard:	Alliance Standards Part 13

Question:	Smoking is only allowed at designated areas.
Priority Level:	Low
Non-Compliance Level:	
Description:	Smoking is prohibited in the factory premises.
Source of Findings:	Photograph: Smoking is prohibited in the factory premises and there are no designated smoking area in that premises.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standards Part 13 Section 13.5 Smoking

Question:	Are all applicable permits up to date including Fire License & Boiler License.
Priority Level:	Low
Non-Compliance Level:	2
Description:	All permits and licenses are up to date except for the factory's boiler license. The factory has applied for renewal of its boiler license.
Source of Findings:	Document Review: Document review showed that all permits and licenses are

	up to date except for the factory's boiler license. The factory has applied for renewal of its boiler license.	  Bangladesh Energy Regulatory Commission Pearl Garments Company Limited 
Suggested Plan of Action:	Obtain and update all the necessary licenses from the proper issuing authority.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	Are there additional areas of non-compliance to report?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	No other additional areas available.	
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Not Applicable	