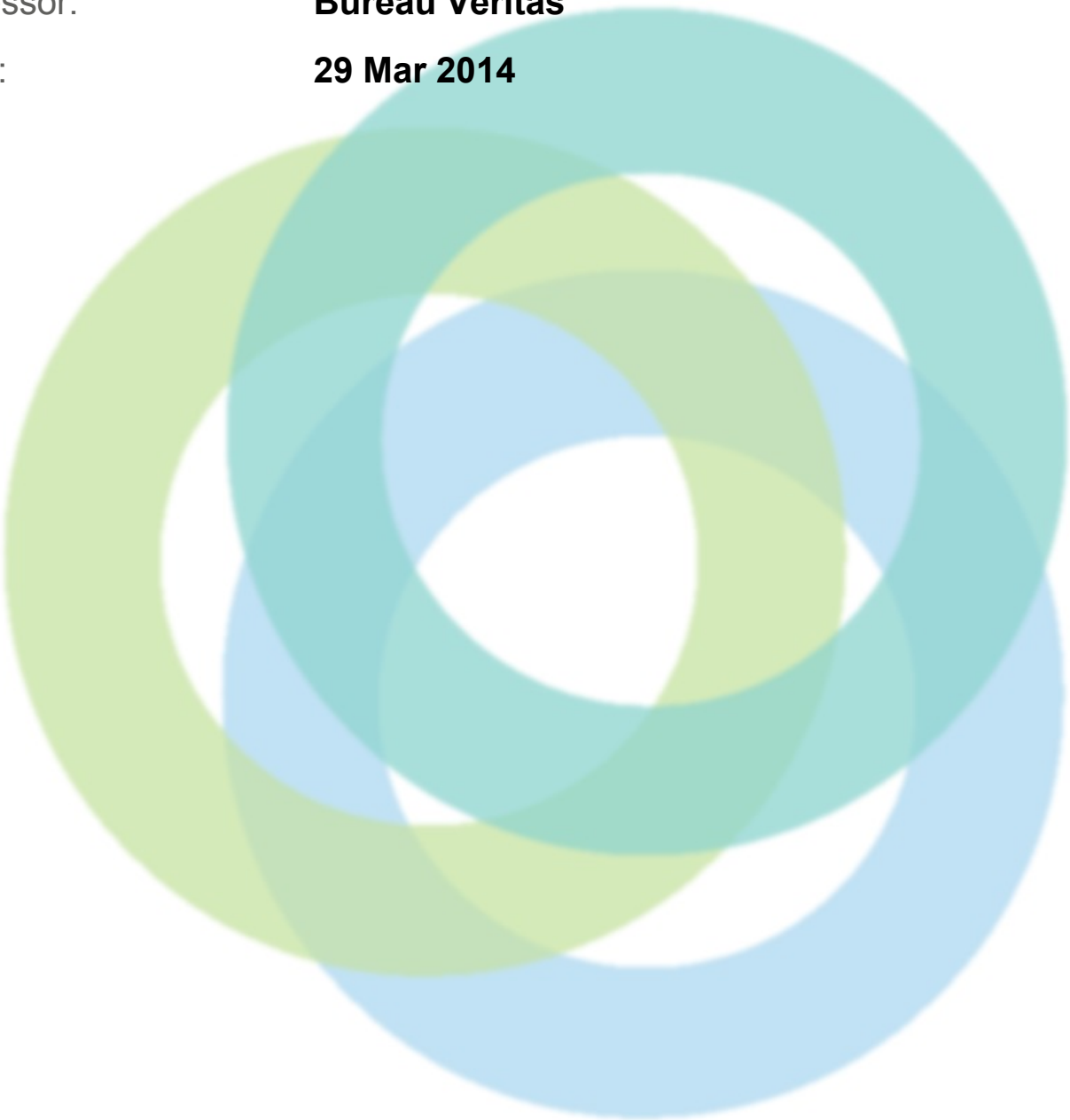


INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name: **Gramtech Knitting & Dyeing**
Address: **Dahorgaon, Rupgonj, Narayanganj. Narayanganj**
Narayanganj Dhaka Bangladesh
Assessor: **Bureau Veritas**
Date: **29 Mar 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:	Gramtech Knitting & Dyeing
Address:	Dahorgaon, Rupgonj, Narayanganj. Narayanganj Narayanganj Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Narayanganj
Zip Code:	
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	04-07- 2014
Final Report Date:	05-12- 2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 8 buildings in the factory premises out of which two are main production buildings and six are ancillary buildings. The buildings are named as: 1) Six story main production building (Three story RCC and three story prefab shed), 2) Single story prefab dyeing shed, 3) Single story waiting shed, 4) Single story compressor shed, 5) Single story boiler shed-01, 6) Single story boiler shed-02, 7) Single story generator shed, 8) Two story RCC ETP Building.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1) Six story main production building: Building height (Highest occupied floor level): 20.09 m or 65.9 ft [Height up to roof: 22.40 m or 73.51 ft], Stories above grade: 6, Stories below grade: 0, Occupied levels: 6, 2) Single story prefab dyeing shed: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 8.15 m or 26.75 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 3) Single story waiting shed: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 2.44 m or 8 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 4) Single story compressor 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, and see the description.
Approximate Building Area (SF):	Total area of all buildings in the factory premises: 168585 sft. Building wise breakdown as follows: 1) Six story main production building: 121788 sft (Ground floor: 20298 sft, 1st floor: 20298 sft, 2nd floor: 20298 sft, 3rd floor: 20298 sft, 4th floor: 20298 sft, 5th floor: 20298 sft), 2) Single story prefab dyeing shed: 39204 sft (Ground floor: 34147 sft, Mezzanine floor: 5075 sft), 3) Single story waiting shed: 100 sft, 4) Single story compressor shed: 613 sft, 5) Single story boiler shed-01: 1620 sft, 6) Single story boiler shed-02: 420 sft, 7) Single story generator shed: 2040 sft, 8) Two story RCC ETP building: 2800 sft (Ground floor: 1400 sft, 1st



	floor: 1400 sft).
Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Six story main production building (Ground floor to 2nd floor): Started in 2006 and finished in 2007.
Date of Last Building Renovation/Addition:	Factory personnel informed the date of last building renovation as follows: 1) Six story main production building (Vertical extension from 3rd floor to 5th floor): Started in 2011 and finished in 2012.
Ancillary Structures in Complex:	1) Single story waiting shed, 2) Single story compressor shed, 3) Single story boiler shed-01, 4) Single story boiler shed-02, 5) Single story generator shed, 6) Two story RCC ETP Building.
Approximate Ancillary Structures Area (SF):	1) Single story waiting shed: 100 sft, 2) Single story compressor shed: 613 sft, 3) Single story boiler shed-01: 1620 sft, 4) Single story boiler shed-02: 420 sft, 5) Single story generator shed: 2040 sft, 6) Two story RCC ETP building: 2800 sft (Ground floor: 1400 sft, 1st floor: 1400 sft).
Number of Occupants:	Total number of occupants: 1738. 1) Six story main production building: 1480 (Ground floor: 40, 1st floor: 250, 2nd floor: 450, 3rd floor: 450, 4th floor: 250, 5th floor: 40), 2) Single story prefab dyeing shed: 250, 3) Single story waiting shed: 0, 4) Single story compressor shed: 1, 5) Single story boiler shed-01: 1, 6) Single story boiler shed-02: 1, 7) Single story generator shed: 3, 8) Two story RCC ETP building: 2.
Number of Ancillary Levels (Stories):	1) Single story waiting shed: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 2.44 m or 8 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 2) Single story compressor 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 boiler shed-01: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 6.09 m or 20 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 4) Single story boiler shed-02: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 6.09 m or 20 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1 and see the description.



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:	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 building approval authority or proper authority for issuance of occupancy certificate and pursue the matter to expedite.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Question:	Occupancy Type	
Priority Level:		
Non-Compliance Level:		
Description:	1) Six story main production building: [Ground floor: G2 (Knitting, finishing), H2 (Fabric store), B2 (Childcare), 1st floor: G2 (Finished store, carton store), F1 (Office), 2nd floor: G2 (Sewing), H2 (Store), 3rd floor: G2 (Sewing), H2 (Store), 4th floor: G2 (Cutting), E4 (Dining), H2 (Fabric store), 5th floor: F1 (Office), H1 (Ideal machine store)], 2) Single story prefab dyeing shed: G2 (Dyeing), 3) Single story waiting shed: F1 (office), 4) Single story compressor shed: K1 (Compressor), 5) Single story boiler shed-01: K1 (Boiler), 6) Single story boiler shed-02: K1 (Boiler), 7) Single story generator shed: K1 (Generator), 8) Two story RCC ETP building: K1 (Pump, ETP accessories).	
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Provide Occupancy Type for each building and structure. Reference Alliance Standards Part 3 Use and Occupancy	
Question:	Construction Type	
Priority Level:		



Non-Compliance Level:	
Description:	1) Six story main production building (Three story RCC and three story prefab shed): (Ground floor to 2nd floor: Type 1, 3rd to 5th floor: Non-rated), 2) Single story prefab dyeing shed: Non-rated, 3) Single story waiting shed: Non-rated, 4) Single story compressor shed: Non-rated, 5) Single story boiler shed-01: Non-rated, 6) Single story boiler shed-02: Non-rated, 7) Single story generator shed: Non-rated, 8) Two story RCC ETP building: Type 1.
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Provide construction type for each building and ancillary structure. Reference Alliance Standards Table 3.3.1
Question:	Height of Highest Occupied Floor Level Above Grade
Priority Level:	
Non-Compliance Level:	
Description:	1) Six story main production building: 20.09 m or 65.9 ft, 2) Single story prefab dyeing shed: 30 cm or 1 ft above grade, 3) Single story waiting shed: 30 cm or 1 ft above grade, 4) Single story compressor shed: 30 cm or 1 ft above grade, 5) Single story boiler shed-01: 30 cm or 1 ft above grade, 6) Single story boiler shed-02: 30 cm or 1 ft above grade, 7) Single story generator shed: 30 cm or 1 ft above grade, 8) Two story RCC ETP building: 3.05 m or 10 ft.
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Provide maximum height of highest occupied floor level above grade for each type of building and ancillary structure.
Question:	Is the fire resistance materials of structural members in good condition and free of damage?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Main factory building is 6 stories where ground level to 2nd floor is R.C.C. building and 3rd to 5th floor is prefabricated steel building shed. Therefore, the fire resistance materials of structural members not in good condition.





Source of Findings:	Photograph: Photograph shows that, main building GF to 2nd floor RCC and 3rd floor to 5th floor prefab shed which is non rated. Other structures are shed that non rated.
Suggested Plan of Action:	Only type 1 and type 2 constructions are permitted for existing high-rise type (G) occupancies. Insulate the steel structure with fire resistive material. Or, replace the steel structure with required rated RCC structure.
Suggested Deadline Date:	26 Nov 2014
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:	Sample section and office in 5th floor; prayer room, dining at 4th floor; Office and finishing section at 1st floor; Childcare and finished good store at ground floor; boiler rooms, generator room are not separated with a fire-resistive rated construction barrier.
Source of Findings:	Photograph: Photograph shows that, boiler room and accessories store are not fire separated.
Suggested Plan of Action:	Close all openings in the wall. Provide 1.5 hr rated door. Also make boiler room fire rated.
Suggested Deadline Date:	03 Sep 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:	3
Description:	The main building from ground floor to 2nd floor is RCC construction, but from 3rd floor to 5th floor is prefab shed which is non rated and does not provide fire resistance rated barrier.
Source of Findings:	Photograph: Photograph shows main building from ground floor to 2nd floor is RCC construction, but from 3rd floor to 5th floor is prefab shed which is non rated.
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between floors in accordance with Alliance Standard, Part-4, Section-4.4.1 and BNBC, Part-4, Table-4.1.1. Consult a qualified fire protection engineer to design the rated construction barriers.





Suggested Deadline Date:	03 Sep 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:	At main building 3rd floor there is no proper fire separation in accessory store. At 4th floor no proper fire separation between dining and cutting section. At boiler room no proper fire separation. At generator room no proper fire separation. At dyeing shed mezzanine floor no proper fire separation in fabric store.
Source of Findings:	Photograph: Photograph shows that at main building Photo-1 no proper fire separation in accessory store. Photo-2 no proper fire separation between dining and cutting section. Photo-3 no proper fire separation in boiler room. Photo-4 no proper fire separation in generator room. Photo-5 no proper fire separation in fabric store in mezzanine in dyeing shed.
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 4.4.1 of 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:	26 Nov 2014
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:	All enclosures leading to staircase are not provided with fire-resistive rated construction barriers (Fire door and fire rated barrier).
Source of Findings:	Photograph: Photograph shows that, exit enclosures not provided with fire-resistive rated barriers.





Suggested Plan of Action:	Provide 2 hr fire-resistive rated construction barriers at exit enclosures. Fit outward opening, 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:	03 Sep 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:		
Description:	On visual inspection, we did not identify any shaft in the buildings.	
Source of Findings:	Visual Assessment: There is no shaft in the buildings.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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 or ventilation duct available for which fire damper is required.	
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:	3
Description:	Two atrium of size 13.25 ft x 20 ft each that connect 5th and 4th floor does not comply with the Alliance Standard 3.7.
Source of Findings:	Photograph: Photograph shows that, atrium that connects 5th to 4th floor does not comply with the Alliance Standard.
Suggested Plan of Action:	Provide 1 hr fire barrier to separate the atrium from the adjacent space. Otherwise, use glass walls and inoperable windows and follow the requirements of Alliance Standard 3.7.4.
Suggested Deadline Date:	26 Nov 2014
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:	Height of the highest occupied level of the main building is 20.09 m or 65.9 ft, which is less than 23 m. Other buildings and sheds are shorter than the main building. So automatic sprinkler system is not required according to Alliance Standards Part 5, Section 5.3.
Source of Findings:	Photograph: Photograph shows the main building elevation., Visual Assessment: During site tour, the height of the buildings were measured and it was realized that sprinkler system is not required in the buildings.
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:	Sprinkler system is not required for the buildings and no sprinkler system is installed, therefore design criteria 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:	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:	Sprinkler system is not required for the buildings and no sprinkler system is installed, therefore commodity class 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 5	
Question:	Occupancy Classification used for the design of the sprinkler system?	
Priority Level:		
Non-Compliance Level:		
Description:	Sprinkler system is not required for the buildings and no sprinkler system is installed, therefore occupancy classification 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 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 the buildings 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 no sprinkler system is installed, therefore identification signs are 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:	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 no sprinkler system is 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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	
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:	Not applicable because an automatic sprinkler system is not required for the building.	



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:	There is no stand pipe system in the main and ancillary buildings meeting the requirement of NFPA 14, 20, 22 and 25. There are 2 Class-II type standpipe hose connections (25 mm) per floor installed from ground to 5th floor (Main building), 40 mm hose in dyeing shed. There a Class-II type standpipe hose connection (40 mm) in one stairwells from ground to 2nd floor. But there is no Class-I type standpipe hose connection (65 mm) in stairwells including occupied roof. At roof hose pressure was negligible(3.63 psi).	
Source of Findings:	Photograph: Photograph shows that, Standpipe System not meeting the Alliance requirement.	
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer. The system is to be compliant with the requirements of NFPA 14. The hydraulic calculations should be reviewed by Alliance and review to be completed prior to start of work. All standpipe system installations shall be submitted for review by the Alliance for review prior to commencement of installation according to 5.4.3.2. Testing of the installation shall be conducted in accordance with NFPA 14 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 as per clause 5.4.3.3.	
Suggested Deadline Date:	03 Sep 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:	2	
Description:	Class III standpipe system is not installed in the main building. Inspection, maintenance, and testing procedures of the installed class II standpipe is not documented and up to date. Inspection, maintenance, and testing record of the hose system documented and up to date, but not as per NFPA 25.	



Source of Findings:	Photograph: Inspection, maintenance, and testing record of the hose system documented and up to date.	
Suggested Plan of Action:	Install class III standpipe system at required locations designed by a qualified fire protection engineer. The system is to be compliant with the requirements of NFPA 14. Then 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:	26 Nov 2014	
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:	2	
Description:	Class III standpipe system is not installed in the building. Signage for the available class II standpipe system is not installed.	
Source of Findings:	Photograph: Photograph shows that, Signage for the standpipe system is not installed.	
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer. The system is to be compliant with the requirements of NFPA 14. Install required identification signs at the noted locations. Signage must comply with NFPA 14 Chapter 6.	
Suggested Deadline Date:	23 Jul 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:	2	
Description:	Complete Standpipe system is not installed throughout the building. 2 no. Class-II hose connection in floor and concern standpipe is free of mechanical damage, leakage, and corrosion.	
Source of Findings:	Visual Assessment: Mechanical damage, leakage or corrosion was not found in the installed standpipe system.	
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer. The system is to be compliant with the requirements of NFPA 14.	
Suggested Deadline	26 Nov 2014	



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:	3	
Description:	Fire department (Siamese) inlet connection and outlet connection (pillar hydrant) is not provided as per clause 5.5.4.	
Source of Findings:	Visual Assessment: During site tour, no fire department connection was noticed.	
Suggested Plan of Action:	Install fire department connections where required and in compliance with the standard as per Alliance Standard Part 5 Section 5.5.4 which states that According to Alliance Standard, Part-5, Section-5.5.4, fire department (Siamese) inlet connections shall be provided to allow fire department pumper equipment to supplement the fire protection systems. 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 Defence hose thread standard.	
Suggested Deadline Date:	26 Nov 2014	
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:	3	
Description:	There is no fire pump in the factory premises to supply water in case of fire incidence.	
Source of Findings:	Visual Assessment: During site tour, no dedicated fire pump was noticed in the factory premise or anywhere nearby.	
Suggested Plan of Action:	Install a pump dedicated for fire fighting or fire protection following the requirements of NFPA 20 as mentioned in Alliance Standard Section 5.5.1. Fire pump installation is to be tested for final acceptance in presence of Alliance and a final inspection of the installation shall be conducted by the Alliance prior to final acceptance of the installation by the Alliance as per clause 5.5.5. Acceptance testing of the installation shall be in accordance with NFPA 20, 22, and 24 testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance. This pump is to be connected to alternative power source like generator. And the generator is to be connected with ATS (auto starter).	
Suggested Deadline Date:	26 Nov 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 is no fire pump in the factory premises to supply water in case of fire incidence.	
Source of Findings:	Document Review: No inspection, maintenance, and testing document for fire pump available.	
Suggested Plan of Action:	Install a pump dedicated for fire fighting or fire protection following the requirements of NFPA 20 as mentioned in Alliance Standard Section 5.5.1. Then establish an inspection, maintenance, and testing program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline Date:	26 Nov 2014	
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: Photograph shows that, fire extinguisher are at required location and at correct height.	
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 are used according to potential fire class and hazards
Source of Findings:	Photograph: Photograph shows that, portable fire extinguishers are used according to potential fire class and hazards.
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's concerned people. But no document was found in support of i) annual maintenance of extinguishers by a servicing agent and ii) annual testing of nozzle of CO2 extinguisher. These are required as per NFPA 10.
Source of Findings:	Photograph: Photograph shows that, fire extinguishers are inspected, tested, and maintained.
Suggested Plan of Action:	Fire extinguishers are to be inspected, tested, and maintained in accordance with NFPA 10 Chapter 7 as demanded in Alliance Standard Part 13 Section 13.10.3.
Suggested Deadline Date:	
Standard:	NFPA 10 Chapter 7
Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Centralized alarm and detection system is not available. Since there are no services available for monitoring of the fire alarm and detection system, factory should have an arrangement of monitoring the system with its own personnel. No such arrangement is evident.





Source of Findings:	Visual Assessment: No centralized fire alarm and detection system available in the buildings.
Suggested Plan of Action:	Provide an automatic fire alarm and detection system per NFPA 72 as required by the Alliance Standard and arrange for direct connection of the system to a central station monitoring service or the Fire Service and Civil Defence as per Alliance Standard Part 5 Section 5.7.5 Monitoring. Until that time that a central station monitoring service or direct connection to the Fire Service and Civil Defence can be set up, 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:	09 Jul 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:	2
Description:	Centralized automatic fire alarm, smoke and heat detection system with control panel is not available. Only stand alone detectors are available.
Source of Findings:	Photograph: Photograph shows the use of stand alone detectors., Visual Assessment: On visual inspection, no centralized alarm and detection system was found in the factory premises.
Suggested Plan of Action:	Install a centralized automatic fire alarm and smoke / heat detection system with control panel following the requirement of NFPA 72 throughout all new and existing buildings and structures.
Suggested Deadline Date:	09 Jul 2014
Standard:	Alliance Standard Part 13 Section 13.10 Maintenance of Fire Protection Equipment
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?
Priority Level:	High
Non-Compliance Level:	3
Description:	Notification and initiation devices for the fire alarm system are installed at required locations based on occupancy type. While existing devices may be placed properly, they are not connected to a centralized automatic fire alarm and detection system in accordance with the Alliance Standard.
Source of Findings:	Visual Assessment: No centralized automatic fire alarm and detection system.





Suggested Plan of Action:	Provide an automatic fire alarm and detection system per the Alliance Standard. Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices must be spaced appropriately and directly connected to the fire alarm system for automatic activation based on occupancy type in accordance with NFPA 72.	
Suggested Deadline Date:	09 Jul 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 there any other fire suppression systems installed within the building?	
Priority Level:		
Non-Compliance Level:	1	
Description:	No other fire suppression system is available within the buildings.	
Source of Findings:	Visual Assessment: During site tour, no other fire suppression system in the buildings was found.	
Suggested Plan of Action:	Provide proper fire suppression system in the building that comply Alliance standard.	
Suggested Deadline Date:		
Standard:		
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:	In the 2nd floor of main building, there are 450 workers working at the time of audit. The area per person computed is 4.19 sqm which is greater than Alliance standard.	
Source of Findings:	Document Review: Documents review shows that, maximum occupant at 2nd floor are 450 no.	
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:	6th floor is prefab shed and partially open. 3 exits are provided all through the building.	
Source of Findings:	Visual Assessment: Visual assessment shows that roof is prefab shed and partially open.	
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:	3	
Description:	No Parapets provided in occupied roof of the main building.	
Source of Findings:	Photograph: No Parapets provided in occupied roof (6th floor).	
Suggested Plan of Action:	Provided parapets or guards for all occupied roofs of a minimum height of 1067 mm (42 in.) as demanded in Alliance Standard Part 6 Section 6.12.2.4.	
Suggested Deadline Date:	26 Nov 2014	
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:	1	
Description:	Occupant loads are not posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Source of Findings:	Photograph: Photograph shows that, occupant loads are not posted.	
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	09 Jul 2014	



Date:		
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:		
Description:	All the aisles width are more than 0.9m.	
Source of Findings:	Photograph: Photograph shows the aisles of the floor.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:	The path of egress along the means of egress was not reduced at any point along the path of travel and was sufficient for the occupant load.	
Source of Findings:	Visual Assessment: Widths of aisles, exit doors and stairs 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:	Means of egress of all the buildings high enough to meet minimum ceiling height requirement of 2.3 m.	
Source of Findings:	Visual Assessment: 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:	2
Description:	The stair-01 (south-east) ends at Ground Floor, but the exit path passes through a corridor beside the store, finished goods area, childcare, and medical room. Exit is not fire separated i.e. fire rated egress court not provided.
Source of Findings:	Photograph: Photograph shows that, exit-01 discharge is not directly to the exterior of the building.
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:	03 Sep 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:	Travel distance to reach an exit does not exceed the maximum distance allowed by occupancy type in accordance with Alliance Standard, Part-6, Section-6.13.
Source of Findings:	Visual Assessment: Visual assessment shows that, travel distance was comply with Alliance standard.
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:	2	
Description:	The stair-01 (south-east) ends at Ground Floor, but the exit path passes through a corridor beside the store, finished goods area, childcare, and medical room. Exit is not fire separated i.e. fire rated egress court not provided.	
Source of Findings:	Visual Assessment: Visual assessment shows that, at ground floor corridor not fire protected.	
Suggested Plan of Action:	Provide fire-resistive rated assemblies at the required exit access corridors. The rated assembly should be approved and/or designed by a qualified fire protection engineer in accordance with Alliance Standard, Part-6, Section-6.3.1.1	
Suggested Deadline Date:	03 Sep 2014	
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 brick, tiles, plaster and non-combustible paint.	
Source of Findings:	Photograph: Photograph shows the interior finishes materials.	
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, glass door and collapsible door.	
Source of Findings:	Photograph: Photograph shows the finishes materials of exit., Visual Assessment: During site tour, interior materials of exits are 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:	There are 3 no. stair in the building. 3 no. exit at every floor.	
Source of Findings:	Visual Assessment: Visual assessment shows that, 3 exit at every floor.	
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:	Highest occupant load is 450 nos at 2nd floor of the main building.	
Source of Findings:	Document Review: Highest occupant load is 450 nos at 2nd floor of the main building.	
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:	2	
Description:	Illuminated exit sign is provided at three exit stairs, but emergency light for illumination provided is insufficient in all floor.	
Source of Findings:	Photograph: Emergency light for illumination provided is insufficient in all floor.	
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:	26 Nov 2014	
Standard:	Alliance Standards Part 6 Section 6.7 Egress Illumination and Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape	
Question:	Means of egress are free from impediments, obstructions, and stored materials.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Means of egress are not free from obstructions and stored materials. Aisles are partially blocked on 4th and 2nd floors.	
Source of Findings:	Visual Assessment: Aisle is partially blocked on 2nd floor.	
Suggested Plan of Action:	Keep means of egress continuously free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency.	
Suggested Deadline Date:	02 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:	1	
Description:	There were no documents of periodical testing of emergency power for means	



	of egress
Source of Findings:	Document Review: 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 exist signs is verified at least once per year. If battery-operated signs are used, these lights shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum 90 min once per year.
Suggested Deadline Date:	09 Jul 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:	2
Description:	There are hasps, locks, and slides at the exit doors but not locked during working hour.
Source of Findings:	Photograph: Photograph shows the exit door.
Suggested Plan of Action:	Remove all hasps, locks and slide bolts from exit doors in compliance with the Alliance Standard.
Suggested Deadline Date:	25 Jun 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:	2
Description:	Door width more than 0.8m but not required rating.
Source of Findings:	Photograph: Door width more than 0.8m but not required rating.
Suggested Plan of Action:	Provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosure and door width more than 0.8m.
Suggested Deadline Date:	03 Sep 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:	Doors in a means of egress are collapsible gate in all floor.	
Source of Findings:	Photograph: Photograph shows the collapsible gate in all floor.	
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:	03 Sep 2014	
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:	2	
Description:	Illuminated exit signs are placed at entrances to exits, but not placed the continuation of egress.	
Source of Findings:	Photograph: Illuminated exit signs are not placed sufficiently along the path of egress.	
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:	26 Nov 2014	
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:	Changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in).	
Source of Findings:	Visual Assessment: Visual assessment shows that, changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in).	



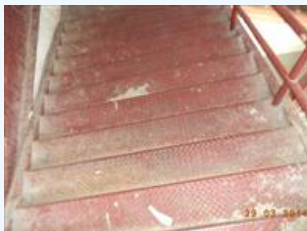
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.4 Walking Surfaces	
Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Exit signs are provided with battery backup and are continuously illuminated.	
Source of Findings:	Photograph: Exit signs are provided with battery backup and are continuously illuminated.	
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:	1	
Description:	No plan or record of conducting periodic test for the emergency battery back up of illumination of exit sign was found as demanded in section 10.12.1.4 of Alliance Standard.	
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 lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.	
Suggested Deadline Date:	09 Jul 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 in accordance with Alliance Standard, Part-10,Section-10.12.
Source of Findings:	Photograph: Photograph shows the exit sign.
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:	1
Description:	Tiles used in walking surfaces along the path of egress are not uniformly slip resistant.
Source of Findings:	Photograph: Tiles used in walking surfaces along the path of egress.
Suggested Plan of Action:	Replace glossy tiles with non-slippery homogenous tiles from the walking surface along the path of egress (aisles and staircase). Or, rub the glossy tiles in aisles and staircase to make those slip-resistant.
Suggested Deadline Date:	26 Nov 2014
Standard:	Alliance Standard Part 6 Section 6.3.6 Slip Resistance
Question:	Compliant guards are provided on the open sides of egress components where the elevation exceeds 760 mm (30 in) above the ground or floor below.
Priority Level:	Medium
Non-Compliance Level:	
Description:	The exit paths are free of this kind of elevation.
Source of Findings:	Visual Assessment: The exit paths are free of this kind of elevation.
Suggested Plan of Action:	
Suggested Deadline Date:	





Standard:	Alliance Standard Part 6 Section 6.3.7 Guards	
Question:	Stairs are constructed of noncombustible materials.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	In main building ground floor to 2nd floor stair is constructed by RCC and 3rd floor to 5th floor stair is constructed checked plate.	
Source of Findings:	Photograph: Photograph shows the steel stair.	
Suggested Plan of Action:	Insulate or coat the steel stair to provide required fire resistance. The stair of the 6 storied main building is to be 2 hr fire rated as per Alliance standard part4 section 4.6.	
Suggested Deadline Date:	18 Feb 2015	
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 stair have width more than 0.9m.	
Source of Findings:	Visual Assessment: Visual assessment shows that, all the stair have width more than 0.9m.	
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:	Visual Assessment: Visual assessment shows that, landing is provided on both side of door.	
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:		
Description:	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.	
Source of Findings:	Visual Assessment: Visual assessment shows the stair with same width landing.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:	Handrail are provided in one side only, but not both side of the stairs. Handrails are mounted 39 in.(Minimum) and 47 in.(maximum)in stair 02 & 03 respectively.
Source of Findings:	Photograph: Handrails are not provided on both sides of each stairway.
Suggested Plan of Action:	Provide handrails on both side of each stairway. Provide handrail of height between the range 865 mm (34 inch) and 965 mm (38 inch).
Suggested Deadline Date:	26 Nov 2014
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:	1
Description:	The main building is 6 storied, but no re-entry door provided. ETP building is 2 storied. Other ancillary buildings is of single storied.
Source of Findings:	Photograph: The main building is 6 storied, but no re-entry door provided.
Suggested Plan of Action:	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets the following requirements. Stair doors may be permitted to be locked from the stair (ingress) side that prevents re-entry to the floor provided at least two floors allowing re-entry to access another exit are provided, there are not more than 4 stories intervening between re-entry floors, re-entry is allowed on the top or next to top level, reentry doors are identified as such on the stair side, and locked doors shall be identified as to the nearest re-entry floors. When the discharge floor is determined to be a required re-entry floor using the above requirements, re-entry does not have to be provided back into the building on this level.
Suggested Deadline Date:	03 Sep 2014
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 available in the building.
Source of Findings:	Visual Assessment: During site tour no exterior stair was noticed in the buildings.
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:	2
Description:	The stair-01 (south-east) ends at Ground Floor, but the exit path pass through a corridor besides which store, finished goods area, childcare, medical room exist is not fire separated i.e. fire rated egress court not provided.
Source of Findings:	Visual Assessment: During site tour interior exit stairway was found passes through the corridor at ground floor of main building.
Suggested Plan of Action:	Provide protective opening assemblies of required rating as per Alliance standard clause no. 4.6 and 6.15.
Suggested Deadline Date:	03 Sep 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 are not provided at each floor entrance from the stair to the floor in English and Bengali.
Source of Findings:	Photograph: Floor level and stair name are not provided at each floor entrance
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:	09 Jul 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 not utilized as storage spaces in all factory buildings.	
Source of Findings:	Visual Assessment: Stairwells are not utilized as storage spaces.	
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 available.	
Source of Findings:	Visual Assessment: No ramps used in a means of egress.	
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 such ramp available.	
Source of Findings:	Visual Assessment: No ramps are used in a means of egress.	
Suggested Plan of Action:		
Suggested Deadline Date:		



Standard:	Alliance Standard Part 6 Section 10 Ramps	
Fire Safety Programs		
Question:	Are there additional areas of non-compliance to report?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Housekeeping is not good in the factory premises. In store area materials are not stored in good manner.	
Source of Findings:	Visual Assessment: Housekeeping is not good in the factory premises. In store area materials are not stored in good manner.	
Suggested Plan of Action:	Make proper housekeeping. In store materials stored should follow the Alliance standard.	
Suggested Deadline Date:	31 Aug 2014	
Standard:	Not Applicable	
Question:	A Fire Safety Director position has been filled.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	No viable documentation and physical presence of Fire Safety Director was noted. However factory has informed that they have a designated person for this.	
Source of Findings:	Document Review: No relevant document 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 13.9. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance standard 13.10.	
Suggested Deadline Date:	26 Oct 2014	
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:	
Description:	emergency evacuation plan has been developed and communicated to all employees
Source of Findings:	Photograph: Photograph shows the emergency evacuation plan.
Suggested Plan of Action:	
Suggested Deadline Date:	
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:	Photograph: Photograph shows the emergency egress map.
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:	2
Description:	Fire department pre-planning was not found.
Source of Findings:	Document Review: No document regarding fire department pre-planning has been 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 Defence.
Suggested Deadline	09 Jul 2014





Date:		
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 at required intervals based on building use type.	
Source of Findings:	Photograph: Photograph shows the fire drill record.	
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:		
Description:	50 people are trained and certified in fire fighting, first aid and rescue training by Bangladesh Fire Service & Civil Defence and certificate also issued.	
Source of Findings:	Photograph: Certificate of fire training.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	A written housekeeping policy is established and enforced.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	A written housekeeping policy is not established and enforced yet.	
Source of Findings:	Document Review: No document regarding housekeeping policy has been found among the documents shown by factory personnel.	
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:	18 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:	Hot work permit program is not established yet. It is required as per Alliance Standards Part 13 Section 13.4. However, hot-work is not going on in the factory right now.	
Source of Findings:	Visual Assessment: Visual assessment shows no hot work activity.	
Suggested Plan of Action:	Develop a hot work permit program. The program must comply with the requirements of NFPA 51B. In general this program should include a process of request and approval from a local authority, an inspection prior to approval, a standby fire watch and fire fighting equipment, a review of the alarm procedures, and a limitation of permit time and reapproval procedure.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	
Question:	Chemicals and other flammable materials are stored within approved enclosures.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Chemicals and other flammable materials are not stored within approved enclosures. Chemical stores (3 nos store in dyeing shed) have glassed window, exhaust and MS sliding door which are not fire rated.	
Source of Findings:	Visual Assessment: Chemicals are not stored within approved enclosures.	
Suggested Plan of Action:	Store chemicals and all flammable materials in approved enclosure in a safe manner.	
Suggested Deadline Date:	09 Jul 2014	
Standard:		



Question:	Storage areas underneath the cutting tables are clear of combustibles.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Storage (combustibles) found under cutting table in 5th, 4th, 3rd, 2nd, 1st floor of the main building.
Source of Findings:	Photograph: Storage (combustibles) found under cutting table in 4th floor.
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.
Suggested Deadline Date:	
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 of training program was available 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 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:	09 Jul 2014
Standard:	Alliance Standards Part 13
Question:	Smoking is only allowed at designated areas.
Priority Level:	Low
Non-Compliance Level:	
Description:	Smoking is strictly prohibited in the factory premises.
Source of Findings:	Visual Assessment: Visual assessment shows that, Smoking is strictly prohibited in the factory 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:	Acid license, Boiler-2 and Electrician license are not available. Fire license, Factory and trade license are up to date. Fire license available for 130000 sft but total constructed area is 168,603 sft. BERC license available for 770 KW and up to date, but total capacity of generators is 1828 KW. Boiler-1 license expired on 27.2.14 and applied for renew. Also the layout plan of the building approved by chairman, Golakandail union parisorid in 05.11.2006, but not from proper approving authority.	
Source of Findings:	Photograph: Applicable permits.	
Suggested Plan of Action:	Get all the licenses and permits required from the proper issuing authority / updated from the proper issuing authority.	
Suggested Deadline Date:	09 Jul 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	Are there additional areas of non-compliance to report?	
Priority Level:		
Non-Compliance Level:	2	
Description:	Housekeeping is not good in the factory premises. In store area materials are not stored in good manner.	
Source of Findings:	Visual Assessment: Housekeeping is not good in the factory premises. In store area materials are not stored in good manner.	
Suggested Plan of Action:	Make proper housekeeping. In store materials stored should follow the Alliance standard.	
Suggested Deadline Date:	31 Aug 2014	
Standard:		