INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**RUPA KNITWEAR (PVT) LTD**
Address:	**Kunia, Board Bazar, Gazipur Gazipur Dhaka Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**22 May 2014**

Introduction to the Report

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

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

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

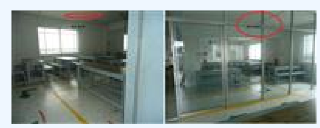
GENERAL INFORMATION

General Information	
Factory Name:	RUPA KNITWEAR (PVT) LTD
Address:	Kunia, Board Bazar, Gazipur Gazipur Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Gazipur
Zip Code:	1704
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05-28-2014
Final Report Date:	06-17-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 7 buildings. 1) Main Production Building; 2) Production Building; 3) Production Building-1; 4) Production Building-2; 5) Utility Building; 6) CI shed-1; 7) CI shed-2.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1) Main Production Building - Building height: 36.58 m (120.0 ft), Highest occupied floor level: 32.92 m (108 ft), Stories above grade: 10, Stories below grade: 1, Occupied levels: 11; 2) Production Building - Building height: 9.14 m (30 ft), Highest occupied floor level: 6.10 m (20 ft), Stories above grade: 3, Stories below grade: 1, Occupied levels: 4; 3) Production Building-1 - Building height: 6.10 m (20 ft), Highest occupied floor level: 3.05 m (10 ft), Stories above grade: 2, Stories below grade: 1, Occupied levels: 3; 4) Production Building-2 - Building height: 3.10 m (20 ft), Highest occupied floor level: 3.05 m (10 ft), Stories above grade: 1, Stories below grade: 1, Occupied levels: 2.
Approximate Building Area (SF):	Total area of all buildings on factory premises: 208,694 SF. Total area of all production buildings: 196,694 SF. 1) Main Production Building: 134,000 SF (Basement through 9th floor: 12,000 SF each, Roof: 2,000 SF); 2) Production Building: 7,200 SF (Basement through 2nd: 1,800 SF each), 3) Production Building-1: 8,700 SF (Basement through 1st: 2,900 SF each); 4) Production Building-2: 46,794 SF (Basement and GF: 22,794 SF each).
Date of Building Construction:	No record for date of building construction was found from factory personnel.
Date of Last Building	No record for date of renovation or addition was found from factory personnel.

Renovation/Addition:	
Ancillary Structures in Complex:	1) Utility Building; 2) CI shed-1; 3) CI shed-2.
Approximate Ancillary Structures Area (SF):	Total area of ancillary buildings: 12,000 SF. 1) Utility Building: 8,000 SF (GF: 7,800 SF, Roof: 200 SF); 2) CI Shed-1: 2,000 SF; 3) CI Shed-2: 2,000 SF
Number of Occupants:	Total occupant load: 2,437. 1) Main Production Building: 1,823 (Basement: 50, GF: 122, 1st: 85, 2nd: 271, 3rd: 225, 4th: 75, 5th: 155, 6th: 165, 7th: 220, 8th: 120, 9th: 325, Roof: 10); 2) Production Building: 45 (Basement: 0, GF: 3, 1st: 2, 2nd: 40); 3) Production Building-1: 34 (Basement: 1, GF: 17, 1st: 16); 4) Production Building-2: 525 (Basement 275, GF: 250); 5) Utility Building: 6; 6) CI Shed-1: 2; 7) CI Shed-2: 2.
Number of Ancillary Levels (Stories):	1) Utility Building - Building height: 7.62 m (25 ft), Highest occupied floor level: 4.57 m (15 ft), Stories above grade: 1, Stories below grade: 0, Occupied levels: 2; 2) CI Shed-1 - Building height: 3.05 m (10 ft), Highest occupied floor level: at grade, Stories above grade: 1, Stories below grade: 0, Occupied levels: 1; 3) CI Shed-2 - Building height: 3.05 m (10 ft), Highest occupied floor level: at grade, Stories above grade: 1, Stories below grade: 0, Occupied levels: 1.
Occupancy Type:	1) Ten story RCC main production building with basement: [Basement: H2 (Yarn Storage area), G2 (Winding section) Ground floor: D1 (Medical), F1 (office), 1st floor: F1 (office), G2 (Jacked Section), 2nd floor: G2 (Sewing, Finishing, Packing), 3rd floor: G2 (Linking), 4th floor: G2 (Linking), 5th floor: G2 (Knitting), 6th floor: G2 (Knitting), 7th floor: G2 (Sewing, cutting, sample room), 8th floor: G2 (Sewing), F1 (Office), H1 (Accessories store), G2 (spot removing room), 9th floor: G2 (Sewing), F1 (Office), Roof: E3 (Dining)], 2) Three story RCC production building with basement: [Basement: H2 (Finished goods store), G2 (Jacked section), Ground floor: J2 (Chemical), G2 (Dyeing), 1st floor: H2 (Storage area), 2nd floor: H2 (Finished goods store)], 3) Two story RCC production building-1 with basement: [Basement: H2 (Fabric store), Ground floor: G2 (Knitting), 1st floor: G2 (Knitting)], and see the description.
Construction Type:	1) Main Production Building: Type 1; 2) Production Building: Type 1; 3) Production Building-1: Type 1; 4) Production Building-2: Type 1; 5) Utility Building: Type 1; 6) CI Shed-1: Non-rated; 7) CI Shed-2: Non-rated.
Height of Highest Occupied Floor Level Above Grade:	1) Main Production Building: 32.92 m (108 ft); 2) Production Building: 6.10 m (20 ft); 3) Production Building-1: 3.05 m (10 ft); 4) Production Building-2: 3.05 m (10 ft); 5) Utility Building: 4.57 m (15 ft); 6) CI Shed-1: at grade; 7) CI Shed-2: at grade.

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:	2	
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 Gazipur City Corporation or proper approval authority in an expeditious manner for issuance of the Certificates of Occupancy for each building and ancillary structure according to building use.	
Suggested Deadline Date:	27 Sep 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 RCC buildings and the roof of last occupied floor (Dining E3) of the main building is type-1 construction.The single story masonry construction with tin roof is 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:	Doors & window in generator room & boiler room are not protected.
Source of Findings:	Visual Assessment: Exit doors are not fire rated.
Suggested Plan of Action:	Provide fire-resistive rated opening protection for rated walls and assemblies in accordance with Alliance Standard Section 4.6. Consult a qualified fire protection engineer to design the required opening protection. If these openings are not required, enclose them with appropriate fire rated construction.
Suggested Deadline Date:	25 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:	3
Description:	There are electrical conduits penetrating the floor slabs. The penetrations are not sealed or protected.
Source of Findings:	Visual Assessment: During the site tour, slab thickness was measured. Penetration through slab was noticed.
Suggested Plan of Action:	Provide fire-resistive rated penetration protection for rated assemblies in accordance with Alliance Standard Section 4.7. Consult a qualified fire protection engineer to design the required penetration systems.
Suggested Deadline Date:	25 Oct 2014
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation

Question:	Are separations between hazards provided with fire-resistive rated construction barriers.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	The fire-resistive rated construction barriers required between generator, boiler room, and chemical room are not in accordance with Alliance Standards. Spot removing rooms with glass and aluminum partitions are not fire rated.
Source of Findings:	Visual Assessment: On visual inspection, it was noticed that barriers required

	between generator and boiler room and chemical room were not provided properly. Spot removing rooms with glass and aluminum partitions are not fire rated.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types in accordance with Alliance Standard Sections 3.4 and 4.5. Consult a qualified fire protection engineer to design the required rated construction barrier.	
Suggested Deadline Date:	06 Dec 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:	There are 3 stairways in the 10 story main production building. Not all of the stairs are provided with fire-resistive construction. Buildings 2, 3, and 4 do not have the required fire rated doors installed.	
Source of Findings:	Visual Assessment: No fire doors were installed at required exit enclosures.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers and associated opening protection for exit enclosures in accordance with Alliance Standard Sections 4.5 and 4.6. Consult a qualified fire protection engineer to design the required rated construction barrier.	
Suggested Deadline Date:	25 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:		
Description:	No shaft except stair enclosure and elevator is available in the buildings. Elevator landing is at stair landing.	
Source of Findings:	Visual Assessment: Elevator is available 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:	
Description:	No atrium is available in the buildings.
Source of Findings:	Visual Assessment: During site tour, no atrium was found.
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:	3
Description:	Height of the highest occupied level of the Main Production Building is 32.92 m (108 ft). Since the occupied floor height for this building is greater than 23 m (75 ft) above the finished grade, the entire building needs to be protected by automatic sprinkler system.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found.
Suggested Plan of Action:	Install an automatic sprinkler system throughout the building designed by a qualified fire protection engineer. The hydraulic design of the sprinkler system shall be submitted for approval by the CoE of the Alliance prior to the start of

	work. All installation and design requirements outlined in BNBC Part 4 Chapter 4 shall be replaced by the requirements of NFPA 13. Pipe schedules shall not be used to size pipe. All systems shall be hydraulically calculated to meet the required NFPA 13 design requirements. New automatic sprinkler system installation requires shop drawings and hydraulic calculations to be prepared as outlined in NFPA 13. Start Design: 13-Sep-2014; Design Complete: 06-Dec-2014; Begin Construction: 28-Feb-2014.	
Suggested Deadline Date:	13 Sep 2014	
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:	2	
Description:	Automatic sprinkler system is not designed and installed in the 10 story main production building-1.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	Get the automatic sprinkler system designed from a qualified fire protection engineer. Design criteria is to be mentioned in the design drawing.	
Suggested Deadline Date:	06 Dec 2014	
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:	1	
Description:	Automatic sprinkler system is not installed in the Main Production Building.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	New automatic sprinkler system shall be designed by a qualified fire protection engineer. Commodity class is to be detailed in the design drawing.	
Suggested Deadline Date:	06 Dec 2014	
Standard:	Reference NFPA 13 Chapter 5	
Question:	Occupancy Classification used for the design of the sprinkler system?	
Priority Level:		
Non-Compliance Level:	3	

Description:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	New automatic sprinkler system shall be designed by a qualified fire protection engineer. Occupancy classification is to be detailed in the design drawing.
Suggested Deadline Date:	06 Dec 2014
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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:	Automatic sprinkler system is not installed in the Main Production Building.
Source of Findings:	
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.

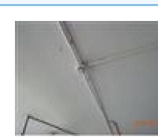
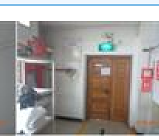
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not installed in the Main Production Building.	
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Reference Alliance Standards Part 5 Section 5.3.6.1 Storage Clearance	
Question:	Does the building have a Standpipe System?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Height of the highest occupied floor of the Main Production Building is 32.92 m (108 ft). Automatic sprinkler system following NFPA 13 is not provided. Therefore, Class I standpipe system along with sprinkler system needs to be installed throughout the building. Currently, only Class II stand pipe system is installed in the Main Production Building. Four Class II standpipe hose connections (40 mm) are installed on each floor. There is no hydraulic design for the installed system. Hose pressure at the roof was negligible. Hose diameter and water capacity are not sufficient.	
Source of Findings:	Visual Assessment: During site tour, no class I standpipe system was noticed in the building.	
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:	25 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	

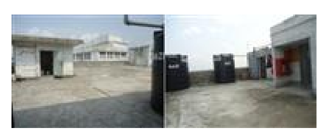
Non-Compliance Level:	1
Description:	NFPA-compliant standpipe system is not installed in the Main Production Building. Inspection, maintenance, and testing procedures of the installed Class II standpipe and hose is not documented and up to date.
Source of Findings:	Document Review: No document regarding inspection, maintenance and testing procedure of standpipe and hose system was found among the documents shown by the factory personnel.
Suggested Plan of Action:	Install Class I 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:	06 Dec 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:	1
Description:	Signage for the standpipe system is not installed.
Source of Findings:	Visual Assessment: During site on signage was noticed for available standpipe systems.
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:	25 Oct 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:	Mechanical damage, leakage or corrosion was not found in the installed Class II standpipe system.
Source of Findings:	
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: Fire department connection.	
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:	3	
Description:	Fire pump is available, however it does not comply with the requirements of Alliance Standards and NFPA 20. Hydraulic calculation for required standpipe and sprinkler systems are also not available. Therefore, required capacity of fire pump is not known. Capacity of the installed pump is 500 gpm.	
Source of Findings:	Photograph: Installed Fire Pump.	
Suggested Plan of Action:	Install a dedicated fire pump for the facility in accordance with NFPA 20 to supply the demands of the connected fire protection systems along with a stored source of water sufficient to meet the demands in accordance with NFPA 22. 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 25 testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance. The pump is to be connected to an alternative power source such as a generator. The generator is to be configured with an ATS (auto starter).	
Suggested Deadline	06 Dec 2014	

Date:		
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:	Installed fire pump does not comply with the requirements of Alliance Standards and NFPA 20. Inspection, maintenance, and testing procedures of the installed pump are not documented and up to date.	
Source of Findings:	Document Review: No document regarding inspection, maintenance and testing procedure of fire pump was found in the documents shown by the factory personnel.	
Suggested Plan of Action:	Provide a compliant fire pump and establish an inspection, maintenance, and testing program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline Date:	06 Dec 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 extinguishers are installed within 100 ft travel distance and at 5 ft or 3.5 ft maximum height above floor.	
Source of Findings:	Visual Assessment: Spacing and height of portable extinguishers are 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:	Visual Assessment: 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, but no document was found in support of annual maintenance of extinguishers by a servicing agent, annual testing of nozzle, or internal inspection of extinguishers at 5 year interval.	
Source of Findings:	Document Review: No document regarding inspection, maintenance and testing procedure of fire extinguisher was found in the documents shown by the factory personnel.	
Suggested Plan of Action:	Establish an inspection, testing, and maintenance program for all fire extinguishers and prepare proper documentation. Program must comply with NFPA 10.	
Suggested Deadline Date:	06 Dec 2014	
Standard:	NFPA 10 Chapter 7	
Question:	Are there any other fire suppression systems installed within the building?	
Priority Level:		
Non-Compliance Level:	2	
Description:	There is no other fire suppression system in the building.	
Source of Findings:	Visual Assessment: No other fire suppression system is available within the buildings.	
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:	2	
Description:	An automatic fire alarm and detection system is available in the factory. Since there are no services available for monitoring of the fire alarm and detection system, the factory should have an arrangement of monitoring the system with its own personnel. No such arrangement is evident.	
Source of Findings:	Photograph: Available central control panel., Visual Assessment: Fire alarm and detection system monitored centrally.	
Suggested Plan of Action:	Arrange for direct connection of the fire alarm and detection system to a central station monitoring service or the Fire Service and Civil Defence as per Alliance Standard Section 5.7.5. Until that time, a person trained to contact the Fire Service and Civil Defence in the event of fire alarm activation shall be provided. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.	
Suggested Deadline Date:	25 Oct 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:	Visual Assessment: On visual inspection, centralized alarm and detection system was found in the factory premise.	
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 at egress points in all floor & automatic smoke detector are installed.	
Source of Findings:	Visual Assessment: During site tour, pull station, smoke detector, audible alarm, visual alarm were found as required.	
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:	At 9th floor of Main building, occupant load is 325, which is maximum of all floors. The floor area is 1115.24 m2, so space per occupant is 3.431 m2, which is more than required 2.3 m2 (25 sft) according to Alliance Standard Part 6 Section 6.4.2.1. Available means of egress meet the requirement of this occupant load. Required total width of aisles, exit doors and stairs are sufficient.	
Source of Findings:	Visual Assessment: No. of occupants was counted and obtained from register. Widths of aisles, exit doors and stairs of the concerned floor were measured.	
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:	3 nos of exit provided in the roof.	
Source of Findings:	Photograph: Occupied roofs are provided with the minimum number of exits required as a story.	
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:	1	
Description:	Parapet height is 27 inches in the Main Production Building.	
Source of Findings:	Visual Assessment: Height of parapet on occupied roof was measured.	
Suggested Plan of Action:	Provide parapets or guards for all occupied roofs of a minimum height of 1067 mm (42 in.) as required by Alliance Standard Section 6.12.2.4.	
Suggested Deadline Date:	06 Dec 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 on any assembly or production floor area.	
Source of Findings:	Visual Assessment: During the site tour, no signage for occupants load was noticed.	
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:	27 Sep 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:	3	
Description:	Aisle widths found on the 3rd through 6th floors were 0.81 m, which is not in accordance with the Alliance Standard.	

Source of Findings:	Photograph: Aisle width at the 6th floor, the 5th floor, the 4th floor, and the 3rd floor, is 0.81m.	
Suggested Plan of Action:	Provide proper aisles marking (clear width minimum 36 in.) and keep aisles free of storage. Relocate the machines if necessary to provide proper width. The path of egress travel along a means of egress shall not be interrupted by any obstruction. The capacity of the means of egress shall not be reduced along the path of travel.	
Suggested Deadline Date:	25 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:	2	
Description:	Aisles on the 3rd through 6th floors, the ground floor, and the basement of the Main Production Building are partially blocked by some removable items reducing the unobstructed aisle width to 0.7 m.	
Source of Findings:	Visual Assessment: Widths of aisles, exit doors and stairs are measured on sample basis.	
Suggested Plan of Action:	Remove aisle marking and mark aisles again so that these are not blocked by any permanent element like column. Remove movable things blocking aisles. Satisfy total width requirement for aisles/corridor/ramp, stairway and exit door as per BNBC Part 4 Table 4.3.2 or Alliance Standard Part 6 Section 6.5.4.	
Suggested Deadline Date:	25 Oct 2014	
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:	Ceiling Height is 2.15m. Means of egress of all the buildings high enough to meet minimum ceiling height requirement of 2.3m.	
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:		
Description:	At ground floor level, there are 3 exits. 02 nos of the exits are leading to discharge point passing through a passageway.	
Source of Findings:	Visual Assessment: On visual inspection, it was observed that exit discharge meets the exterior of the building.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:	Maximum travel distance to reach an exit is 19m which is in accordance with the alliance standard.	
Source of Findings:	Visual Assessment: Travel distances were 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:	3	
Description:	There are three exits at the ground floor of the Main Production Building passing through a non-rated corridor. Unprotected openings to the production unit & storage are also found.	

Source of Findings:	Photograph: Exit access corridors are not protected., Visual Assessment: The wall separating the corridor was measured for thickness and investigated for unprotected openings.	
Suggested Plan of Action:	Provide fire-resistive rated assemblies at the required exit access corridors. The rated assembly should be designed and/or approved by a qualified fire protection engineer. Exit access corridors serving an occupant load exceeding 30 are to be separated by walls having a fire resistance rating of 1 hr in accordance with Alliance Standard Section 4.5 unless provided with automatic sprinkler protection throughout the building. Openings are to be fitted with rated barriers.	
Suggested Deadline Date:	25 Oct 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 finishes for means of egress are of brick, tiles on floor, plaster and non-combustible paint on wall. However, no document proving the class of interior finishes as per NFPA 101 is available.	
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 of brick walls with plaster and water based paints.	

Source of Findings:	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 nos. stairs are available at each floor.	
Source of Findings:	Visual Assessment: During site tour, number of emergency exit doors were counted.	
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 at 4th floor (325 Occupant) of main building. 3 stairs are enough.	
Source of Findings:	Visual Assessment: The number of means of egress is available in accordance with occupant load.	
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:	All paths of egress are provided with compliant means of illumination. All emergency lights are industrial grade.	
Source of Findings:	Visual Assessment: Paths of egress are available with compliant means of illumination.	
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:		
Description:	Means of egress are free from impediments, obstructions.	
Source of Findings:	Visual Assessment: Aisles, corridors, exit doors and stairways are free from any sort of obstacles.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:	Available documents of periodical testing of emergency power for means of egress were found but are not complying with Alliance Standard.	
Source of Findings:	Document Review: Relevant document was not found.	

Suggested Plan of Action:	Develop a testing and maintenance program that ensures the operation of all egress lighting is verified at least once per year. If battery-operated lights are used, these lights shall be tested on a monthly basis. Functional testing of battery powered lights shall be provided for a minimum 90 min once per year.	
Suggested Deadline Date:	25 Oct 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:	There are fire rated doors & wooden doors with locking arrangement at each egress location.	
Source of Findings:	Visual Assessment: During site tour, locking devices were noticed at exit doors.	
Suggested Plan of Action:	Remove all locking devices from all egress doors and means of egress components in accordance with Alliance Standard Section 6.8. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	
Suggested Deadline Date:	27 Sep 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Door widths are more than 0.8 m. Some doors along the path of egress (i.e., doors leading to staircase) in building-1 are fire rated doors. No test report available. Wooden doors and collapsible doors also found.	
Source of Findings:	Visual Assessment: Doors along the path of egress are not fire doors.	
Suggested Plan of Action:	Replace non-compliant doors and frames in the means of egress with side-swinging doors. Replacement doors shall be a minimum width of 0.8 m (32 in), and are listed, approved, self-closing, fire rated door assemblies (door and frame) with latching panic hardware.	
Suggested Deadline Date:	29 Nov 2014	

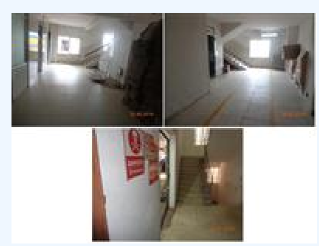
Standard:	Alliance Standard Part 6 Section 6.5.6 Minimum Widths. Increased occupant loads will require a door width greater than 0.8 m.	
Question:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Some of the doors in the means of egress are collapsible, sliding and rolling shutter type and some are open (no door provided).	
Source of Findings:	Photograph: Exit door not side-hinged swinging type	
Suggested Plan of Action:	Replace non-compliant doors and frames in the means of egress with side-swinging doors. Replacement doors shall be a minimum width of 0.8 m (32 in), and are listed, approved, self-closing, fire rated door assemblies (door and frame) with latching panic hardware.	
Suggested Deadline Date:	29 Nov 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:		
Description:	Illuminated exit signs are placed at entrances to exits and along the path of egress.	
Source of Findings:	Visual Assessment: Illuminated exit signs are placed along the path of egress anywhere the continuation of egress is not obvious.	
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: During site tour no changes in elevation of walking surfaces were noticed.
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:	Visual Assessment: Exit signs are provided with battery 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:	Plan or record was found for conducting periodic testing of the emergency battery backup of exit sign illumination, but not fully complying with the requirements of Alliance Standard Section 10.12.1.4.
Source of Findings:	Visual Assessment: Relevant document complying with the requirements of Alliance Standard Section 10.12.1.4 was not found.
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 to be tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.
Suggested Deadline Date:	27 Sep 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 level and contrasting graphics as demanded in section 10.12.1.2 of Alliance Standard.
Source of Findings:	Visual Assessment: Exit signs have appropriate illumination levels and contrasting graphics.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs

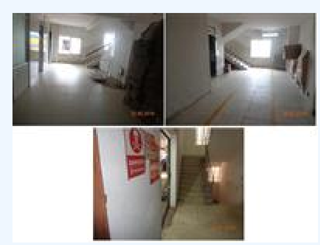
Question:	Walking surfaces along the path of egress are uniformly slip resistant.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Walking surfaces along the path of egress are of homogenous tiles and net cement finishing, these tiles are not slippery and will not cause slip during quick evacuation under emergency situation.
Source of Findings:	Visual Assessment: During site tour walking surfaces along the path of egress were observed.
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:	Stairs are constructed of Reinforced Cement Concrete.
Source of Findings:	Visual Assessment: Stairs are constructed of noncombustible materials.
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:	Visual Assessment: Stairs have a minimum width of 0.9 m (35 in.)	
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 and risers are of nominal uniformity.	
Source of Findings:	Visual Assessment: Stair treads 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: 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:		
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: Landings are provided with the same width in the direction of egress travel.	
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:	Handrails are provided only on one side of each stair.	
Source of Findings:	Photograph: Hand rail not provided on both sides.	
Suggested Plan of Action:	Provide handrails on both side of each stairway. Provide intermediate handrail when the stair width exceeds 2.2 m (87 inches). Provide handrail height between the range of 865 mm (34 in.) and 965 mm (38 in.).	
Suggested Deadline Date:	06 Dec 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:	3	
Description:	The main building has a basement and 10 stories, but doors are not provided with re-entry. The buildings other than the main building have less than 6 stories, therefore re-entry is not required for those buildings.	
Source of Findings:	Visual Assessment: Re-entry doors not available in the main building at required locations.	
Suggested Plan of Action:	Provide re-entry to floor levels from the stairwells in accordance with Alliance Standard Section 6.8.3.	
Suggested Deadline Date:	27 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 exit stair available.	
Source of Findings:	Visual Assessment: No exterior exit stair available.	
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:	The exit passageway re-enters another production area instead of terminating at an exit discharge or public way.	
Source of Findings:	Visual Assessment: Interior exit stairway terminating at non-rated exit passageway.	
Suggested Plan of Action:	Route exits directly to the exterior or provide an exit passageway in accordance with Alliance Standard Section 6.15 for non-compliant arrangements. Consult a qualified fire protection engineer to design and/or approve the required exit passageway or egress court.	

Suggested Deadline Date:	29 Nov 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:	2	
Description:	Signs are posted away from the floor and both Bangla and English are not used.	
Source of Findings:	Photograph: Floor level mentioned at some floor in English but stair name not mentioned.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level in English and Bengali at the noted locations.	
Suggested Deadline Date:	27 Sep 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 combustible or others materials.	
Source of Findings:	Visual Assessment: Stairwells are free from storage.	
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 ramps are available in the building.	
Source of Findings:	Visual Assessment: During site tour no ramps were found.	

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 ramps are available in the building.
Source of Findings:	Visual Assessment: No such ramp available.
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:	2
Description:	No viable documentation or physical presence of Fire Safety Director was noted.
Source of Findings:	Document Review: No record of filling the position of fire safety director has been 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.
Suggested Deadline Date:	06 Dec 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:	2

Description:	Through the interview it was noted that the workers are aware of the evacuation procedure upon alarm activation. However, no procedure defining evacuation process was available.	
Source of Findings:	Document Review: No record of developing and communicating any emergency evacuation plan has been found.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes duties and responsibilities of various people/groups, interfacing between groups and fire brigade, headcount and identification of trapped victims, physically disabled people and their rescue, etc. and all components required by the Alliance Standards and communicate the plan to all employees. The evacuation plan shall include provisions to assist physically disabled persons. A list of all employees with physical disabilities shall be kept by the Fire Service Director.	
Suggested Deadline Date:	27 Sep 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:	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	27 Sep 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 and date of last fire drill was 19th May, 2014.	
Source of Findings:	Uploaded Document: Fire drill records.	
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:	Document or certificate by appropriate authority for training on fire fighting is not available.	
Source of Findings:	Document Review: No document regarding fire training has been found among the documents shown by factory personnel.	
Suggested Plan of Action:	Get at least 25 percent of workers trained and certified in fire fighting, first aid, and rescue training by the proper authority.	
Suggested Deadline Date:	06 Dec 2014	
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:	Written housekeeping policy was not found.	
Source of Findings:	Document Review: No document regarding housekeeping policy has been found among the documents shown by factory personnel.	
Suggested Plan of	Establish written corporate and plant policies on housekeeping to ensure	

Action:	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.	
Suggested Deadline Date:	28 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:	Document Review: No hot work permit program could be presented by the factory personnel	
Suggested Plan of Action:	Develop a hot work permit program. The program must comply with the requirements of NFPA 51B.	
Suggested Deadline Date:	06 Dec 2014	
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:	Storage areas underneath the cutting table are not clear from combustibles.	
Source of Findings:	Photograph: Combustibles underneath cutting table.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	27 Sep 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 of training program 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:	Implement training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.	
Suggested Deadline Date:	27 Sep 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:	Visual Assessment: 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:	BERC & Electrician license are not available. BERC license available only for 464 KVA capacity (one generator), Valid up to 05 November 2014. BERC license for another generator of capacity 1.064 MW validity expired. Electrician license is only for GA category.	
Source of Findings:	Document Review: All applicable permits are up to date including Fire License & Boiler License.	
Suggested Plan of Action:	Apply to BERC for 1.064 MW power generation license. Apply to Biddyut Paridaptor for electrician license.	
Suggested Deadline Date:	27 Sep 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 remarkable non-compliance issues other than those presented before was found.	
Source of Findings:	Visual Assessment: During site tour no other non-compliance issues were observed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Not Applicable	