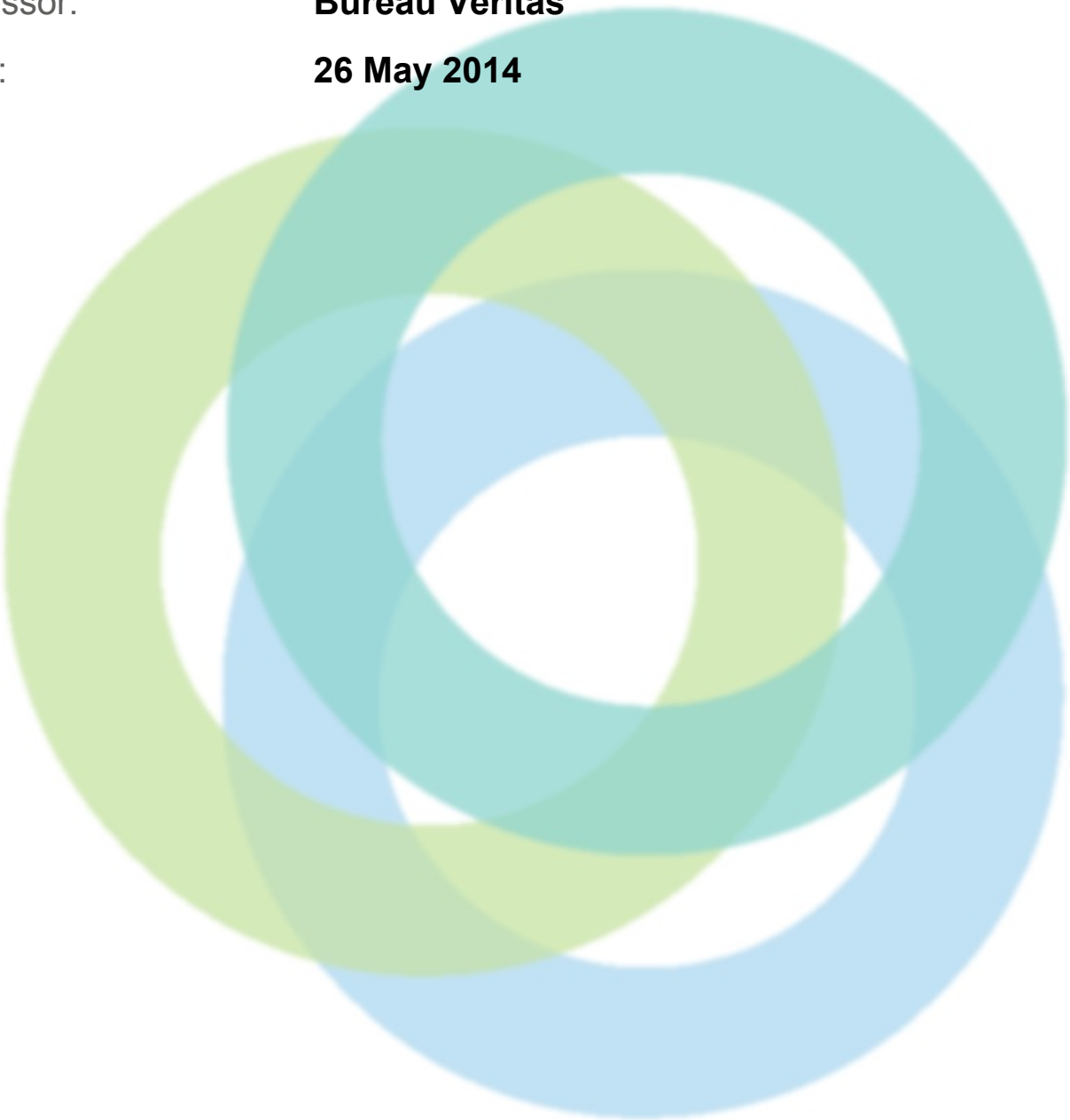


INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name: **REGENCY THREE LTD**
Address: **PLOT 13-18, SECTOR-8, CEPZ, Chittagong**
Chittagong Chittagong Bangladesh
Assessor: **Bureau Veritas**
Date: **26 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:	REGENCY THREE LTD
Address:	PLOT 13-18, SECTOR-8, CEPZ, Chittagong Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	4223
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05-29-2014
Final Report Date:	06-28-2014
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) Five story main production building, 2) Two story prefab production shed, 3) Single story generator building, 4) Single story security building-1, 5) Single story security shed-2, 6) Single story pump building, 7) Single story wastage shed, 8) Single story parking shed.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	Information provided below as per following format: Highest occupied floor level [Height up to roof], Stories above grade, Stories below grade, Occupied level. 1) Five story main production building: 17.67 m or 58.00 ft [20.47 m or 67.17 ft], 5, 0, 5. 2) Two story prefab production shed: 4.16 m or 13.67 ft [9.6 m or 31.5 ft], 2, 0, 2. 3) Single story generator building: At finished grade [3.65 m or 12 ft], 1, 0, 1. 4) Single story security building-1: At finished grade [2.43 m or 8.00 ft], 1, 0, 1. 5) Single story security shed-2: At finished grade [2.13 m or 7 ft], 1, 0, 1. 6) Single story pump building: At finished grade [3.05 m or 10 ft], 1, 0, 1. 7) Single story wastage shed: At finished grade [3.35 m or 11 ft], 1, 0, 1. 8) Single story parking shed: At finished grade [3.05 m or 10 ft], 1, 0, 1.
Approximate Building Area (SF):	Total area of all buildings in the factory premises: 271513 sft. Building wise breakdown as follows: 1) Five story main production building: 135034 sft (Ground floor: 32063 sft, 1st floor: 32063 sft, 2nd floor: 28954 sft, 3rd floor: 28954 sft, 4th floor: 13000 sft), 2) Two story prefab production shed: 132898 sft (Ground floor: 66600 sft, 1st floor: 66298 sft), 3) Single story generator building: 1125 sft, 4) Single story security building-1: 288 sft, 5) Single story security shed-2: 88 sft, 6) Single story pump building: 140 sft, 7) Single story wastage shed: 740 sft, 8) Single story parking shed: 1200 sft.



Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Five story main production building: Started in 2005 and finished in 2006, 2) Two story prefab production shed: Started in 2005 and finished in 2006, 3) Single story generator building: No information of construction date was found, 4) Single story security building-1: No information of construction date was found, 5) Single story security shed-2: No information of construction date was found, 6) Single story pump building: No information of construction date was found, 7) Single story wastage shed: No information of construction date was found, 8) Single story parking shed: No information of construction date was found.
Date of Last Building Renovation/Addition:	Factory personnel informed the date of addition as follows: Construction of a new building started in 2014 and construction on going.
Ancillary Structures in Complex:	1) Single story generator building, 2) Single story security building-1, 3) Single story security shed-2, 4) Single story pump building, 5) Single story wastage shed, 6) Single story parking shed.
Approximate Ancillary Structures Area (SF):	1) Single story generator building: 1125 sft. 2) Single story security building-1: 288 sft. 3) Single story security shed-2: 88 sft. 4) Single story pump building: 140 sft. 5) Single story wastage shed: 740 sft. 6) Single story parking shed: 1200 sft.
Number of Occupants:	Total number of occupants: 1921. 1) Five story main production building: 447 (Ground floor: 57, 1st floor: 95, 2nd floor: 150, 3rd floor: 140, 4th floor-05), 2) Two story prefab production shed: 1450 (Ground floor: 750, 1st floor: 700), 3) Single story generator building: 1, 4) Single story security building-1: 4, 5) Single story security shed-2: 4, 6) Single story pump building: 1, 7) Single story wastage shed: 9, 8) Single story parking shed: 6.
Number of Ancillary Levels (Stories):	Information provided below as per following format: Highest occupied floor level [Height up to roof], Stories above grade, Stories below grade, Occupied level. 1) Single story generator building: At finished grade [3.65 m or 12 ft], 1, 0, 1. 2) Single story security building-1: At finished grade [2.43 m or 8.00 ft], 1, 0, 1. 3) Single story security shed-2: At finished grade [2.13 m or 7 ft], 1, 0, 1. 4) Single story pump building: At finished grade [3.05 m or 10 ft], 1, 0, 1. 5) Single story wastage shed: At finished grade [3.35 m or 11 ft], 1, 0, 1. 6) Single story parking shed: At finished grade [3.05 m or 10 ft], 1, 0, 1.
Occupancy Type:	1) Five story main production building: [Ground floor: H2 (Fabric store), F1 (Office), G2 (Inspection area), 1st floor: H2 (Accessories store), F1 (Office), E4 (Auditorium), G2 (Sample room), 2nd floor: G2 (Cutting), 3rd floor: G2 (Cutting), F1 (Office), 4th floor: E4 (Dining), D1 (Doctor room), E4 (Prayer room)], 2) Two story prefab production shed: [Ground floor: F1 (Office), H2 (Finished goods store), H2 (Raw material store), K1 (Generator), K1 (Boiler), J1 (Kitchen), K1 (Oil filled transformer), K1 (Compressor), E4 (Prayer room), K1 (Chiller room), E3 (Dining), 1st floor: G2 (Sewing), D1 (Medical centre), H2 (Finished goods store), G2 (Finishing), K1 (Maintenance workshop)], 3) Single story generator building: K1 (Generator), K1 (Chiller), 4) Single story security building-1: F1 (Security station), F1 (Driver waiting). 5) Single story security shed-2: K1 (Security station) and see the description.
Construction Type:	1) Five story main production building: [Ground floor and 1st floor: Type 1, 2nd and 3rd floor: Non-rated (RCC column with steel beam), 4th floor: Non-rated (Only ceiling)], 2) Two story prefab production shed: [Ground floor: Type 1, 1st floor: Non-rated (only ceiling)], 3) Single story generator building: Non-rated, 4) Single story security building-1: Type 1, 5) Single story security shed-2: Non-rated, 6) Single story pump building: Type 1, 7) Single story wastage shed: Non-rated, 8) Single story parking shed: Non-rated.
Height of Highest Occupied Floor Level Above Grade:	1) Five story main production building: 17.67 m or 58.00 ft, 2) Two story prefab production shed: 4.16 m or 13.67 ft, 3) Single story generator building: At finished grade, 4) Single story security building-1: At finished grade, 5) Single story security shed-2: At finished grade, 6) Single story pump building: At finished grade, 7) Single story wastage shed: At finished grade, 8) Single story parking shed: At finished grade.



ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are openings and penetrations through rated walls and/or assemblies protected?	 
Priority Level:	High	
Non-Compliance Level:	2	
Description:	The walls at 4th floor level of southeast & southwest stairs are not up to the ceiling in the five story main building. Doors & windows of office on 3rd floor, accessories store at 1st floor, fabric store at ground floor of five story main building, finished goods store at 1st floor, raw material store, finished goods store, generator room, oil filled transformer room, boiler room, and kitchen at ground floor of two story production shed are not protected.	
Source of Findings:	Photograph: Occupancy separations were found not fire rated and the opening protective were found not fire rated as well at noted locations.	
Suggested Plan of Action:	Install fire rated doors and windows or fill in unprotected openings with fire resistive rated assemblies.	
Suggested Deadline Date:	13 Oct 2014	
Standard:	Includes doors, windows, ducts, piping, etc. Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations	
Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	There are 3 staircases in the five story main building. Fire doors are not installed at all floors of southeast and southwest stair. At northwest stair, fire doors are installed at all floors except ground floor. Visually these doors seem to be fire door but no label marking on doors nor no credible certificate were found. The doors on these stairs need to be 1.5 hour rated as per the Standard. There are 8 stairs from the ground to 1st floor in the two story production building. On the 1st floor, there is a moderate hazard industrial occupancy (sewing, finishing) and a moderate fire risk storage occupancy (finished goods store). But only northeast stair is found with fire door on 1st floor. Visually these doors seem to be fire doors but no label markings are on doors and no credible certificate was found. Therefore, exit enclosures are required for other stairs based on travel distance, occupant load and minimum width requirement per occupant.	
Source of Findings:	Photograph: A non-rated exit enclosure was found.	
Suggested Plan of Action:	Provide 2 hr fire-resistive rated construction barriers at exit enclosures of five story main building and provide 1 hr fire-resistive rated construction barriers at	



	exit enclosures of two story production building . Fit swing in the direction of egress, side-swinging, self-closing, non-lockable fire doors of 1.5 hr rating in all stairwell enclosures of five story main building and fit outward opening(swing in the direction of egress), side-swinging, self-closing, non-lockable fire doors of 1 hr rating in all stairwell enclosures of two story production building. Consult a qualified fire protection engineer to design the required rated construction barriers.	
Suggested Deadline Date:	13 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:	2	
Description:	There is one cargo lift in five story main building and one cargo lift in the two story production building. Both the cargo lifts are open to production floors and the doors are not fire rated as required.	
Source of Findings:	Photograph: Two cargo lifts were found.	
Suggested Plan of Action:	Provide a shaft enclosure of required rating by constructing the enclosure with rated material of required thickness. Protect the openings of shaft enclosures by providing rated opening protectives.	
Suggested Deadline Date:	13 Oct 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	The walls of 4th floor level of southeast & southwest stair are not up to the ceiling in the five story main building. Doors & windows of office on 3rd floor, accessories store on 1st floor, fabric store on ground floor of five story main building, finished goods store on 1st floor, raw material store, finished goods store, generator room, oil filled transformer room, boiler room, and kitchen on ground floor of two story production shed are not protected. Occupancy separations are not fire rated and the opening protectives are not fire rated as well. Finished goods store & finishing section on ground floor of two story production building are not separated by fire-resistive rated construction barriers. The wall separating these two occupancies is partly made by glass and partly by brick wall.	
Source of Findings:	Photograph: Occupancy separations were not found at noted locations.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 4.4.1 of Alliance Standard. Consult a qualified fire protection	



	engineer to design the required rated construction barrier.	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Certificates of Occupancy for each building have been issued and are on file.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No occupancy certificate is 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 BEPZA for issuance of occupancy certificate and pursue the matter to expedite.	
Suggested Deadline Date:	01 Sep 2014	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Fire Protection Systems		
Question:	Is the building protected by an automatic sprinkler system?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	In the 5 story main production building 2nd, 3rd & 4th floor is non-rated & area of 2nd, 3rd & 4th floors are 28954 sft, 28954 sft & 13000 sft. So, as per Alliance standard 3.5.3.1 sprinkler system is required in the factory premises as the building is more than two stories & individual floor area is more than 22000 sft.	
Source of Findings:	Visual Assessment: Measurement indicated the building is more than two stories & floor area is more than 22000 sft.	
Suggested Plan of Action:	Install an automatic sprinkler system throughout the building as per alliance standard 3.5.3.1 & designed by a qualified fire protection engineer. The hydraulic design of the sprinkler system must be pre-approved by COE of Alliance. 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. Installation of new automatic sprinkler systems shall be required to provide shop drawings and hydraulic calculations as per NFPA 13. The test and performance report of the installed system must be submitted to Alliance for review	
Suggested Deadline	15 Feb 2015	



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:	Does the building have a Standpipe System?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	The height of the highest occupied floor of the five story main building is 17.67 m (58 ft) above grade. Therefore a Class III standpipe system needs to be installed throughout the building where the highest occupied floor is more than 10 m (33 ft) above grade as per the Alliance Standard. There is a standpipe system in the main building but there is no hydraulic design for the system. Three hose connections (25 mm) are installed per floor from ground to 4th floors. There is no class-I (65 mm) standpipe hose connection in required stairs including occupied roof and no class-II (40 mm) standpipe hose connection in required floors. Hose pressure was not sufficient as per the Alliance Standard. The height of the highest occupied floor of the two story production building is 4.16 m or 13.67 ft, which is less than 10 m (33 ft). Therefore, a standpipe system is not required for this building. Eight hose connections (25 mm) are installed per floor in ground and 1st floor. Height of the highest occupied floor of other buildings are less than two stories.	
Source of Findings:	Photograph: Standpipe system was found with 25 mm hose connection.	
Suggested Plan of Action:	Install a NFPA 14-compliant Class III standpipe system at required locations designed by a qualified fire protection engineer. All standpipe system installations and hydraulic calculations shall be submitted to the Alliance for review prior to commencement of installation. System design should also account for the two additional stories currently under construction. 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.	
Suggested Deadline Date:	13 Oct 2014	
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2	
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	A fire pump is available, however it does not comply with the requirements of Alliance Standards and NFPA 20. Hydraulic calculation for installed standpipe is not available. Fire pump with jockey pump is available and capacity of these pumps are 19 HP and 3 HP, respectively. The hose pressure is insufficient. The pump is connect with an alternative power source and there is no ATS system available.	



Source of Findings:	Photograph: Centrifugal pump and jockey pump were found but no alternative power source and ATS found.	
Suggested Plan of Action:	Install a pump dedicated for firefighting or fire protection compliant with NFPA 20 as mentioned in Alliance Standard Section 5.5.1 or obtain a hydraulic calculation for the existing system to ensure that the installed fire pump is capable to comply the requirement of NFPA 20 for water based fire protection system.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Smoke detectors are inadequate in number in sample room, accessories store and component team room on 1st floor of five story main building. All other areas in the factory are sufficiently installed with notification and initiation devices for the fire alarm system based on occupancy type.	
Source of Findings:	Photograph: Smoke detectors were found inadequate in number on 1st floor of five story main building.	
Suggested Plan of Action:	Provide adequate number of detectors based on coverage of a detector specified by manufacturer. Maximum possible coverage of a detector is 900 sft (if not confined by bays) as per NFPA 72. Each zone indicated in control panel shall cover 22500 sft area or less.	
Suggested Deadline Date:	13 Oct 2014	
Standard:	Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices spaced appropriately based on occupancy type. Reference NFPA 72	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Fire extinguishers are inspected, tested and maintained every month but not in accordance with NFPA 10 requirements.	
Source of Findings:	Document Review: Document regarding inspection, maintenance procedure of fire extinguisher was found in the documents shown by the factory personnel, but not as per NFPA 10 requirements. Also annual maintenance & testing of extinguishers record was found.	
Suggested Plan of	Inspect, test, and maintain fire extinguishers in accordance with NFPA 10	



Action:	requirements.	
Suggested Deadline Date:	05 Jan 2015	
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:	1	
Description:	An automatic fire alarm and detection system is available in the factory, but currently there is no monitoring company in Bangladesh. Fire service and civil defense is not capable of monitoring fire alarm and detection systems of the factories.	
Source of Findings:	Photograph: The fire alarm and detection system is not monitored centrally.	
Suggested Plan of Action:	Arrange for direct connection of the fire alarm system to a central monitoring station or Fire Service and Civil Defense. Until that time that monitoring can be set up, arrange a monitoring system using factory's own central detection system and personnel. A person shall be assigned to contact the fire department in the event of fire alarm activation. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.	
Suggested Deadline Date:	18 Aug 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
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:	3	
Description:	Inspection, maintenance, and testing procedures of the installed 25 mm 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:	Establish required inspection, maintenance, and testing program for the standpipe and hose system.	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2	



Question:	Is signage for the standpipe system installed at required locations and on required components?
Priority Level:	Low
Non-Compliance Level:	3
Description:	Signage for the installed 25 mm standpipe and hose is not available.
Source of Findings:	Visual Assessment: No signage for the standpipe system is found.
Suggested Plan of Action:	Install required identification signs at the noted locations.
Suggested Deadline Date:	01 Sep 2014
Standard:	Reference NFPA 14 Chapter 6
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?
Priority Level:	Low
Non-Compliance Level:	2
Description:	Inspection, maintenance, and testing procedures of the fire 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 as per NFPA 25.
Suggested Plan of Action:	Establish a NFPA 25-compliant inspection, maintenance, and testing program for the fire pump.
Suggested Deadline Date:	05 Jan 2015
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps

Means of Egress

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:	Exit discharges of five story main building are directly to the exterior of the building and do not reenter a building except the exit of south-east stair at ground floor, which terminate beside an non rated egress court. There are window openings (central store and production floor) of main building and the egress court is less than 10 ft width. Exit discharges from west, west-north and





	west-south of two storey main building are directly to the exterior of the building and do not reenter a building. But exit discharges from east, east-north and east-south of two story main building are terminates at an non rated egress court. There are unprotected openings (doors and windows of ground floor) of production floor along the egress court and the width of the egress court is less than 10 feet.	
Source of Findings:	Photograph: During site tour, noted exit were found discharges at non rated egress court.	
Suggested Plan of Action:	Provide rated egress court i.e. protected path of egress from the south-east exit enclosure to the public way for five storey building. Also provide rated egress court from east, east-north and east-south side exit to the public way for two storey building. The rating of the egress court 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:	13 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.17 Exit Discharge. See Section 16.7.2 and 16.7.3 for exceptions.	
Question:	Travel distance to reach an exit does not exceed the maximum distance allowed by Occupancy Type.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Maximum travel distance for one exit is 48.76 m (i.e. below 60 m but above 45 m) on 2nd floor of five story main building. An automatic fire detection system and portable fire extinguisher are provided but standpipe system is not provided in accordance with Alliance Standard. Maximum travel distance for one exit is 39.62 m (i.e. below 45 m) on 1st floor of two story production building. An automatic fire detection system and portable fire extinguisher are provided but standpipe system is not provided in accordance with Alliance Standard. Yet, travel distance does not exceed the allowable limit 45m set by Alliance Standard.	
Source of Findings:	Visual Assessment: Travel distances were measured on sample basis.	
Suggested Plan of Action:	Install an automatic fire detection system in sample room, accessories store and component team room on 1st floor of five storey main building and standpipe system all over the five storey building in accordance with Alliance Standard to satisfy the maximum travel distance up to 60m mentioned in Alliance 6.13.1.1. Otherwise, provide another exit to satisfy maximum travel distance within 45m.	
Suggested Deadline Date:	13 Oct 2014	
Standard:	Alliance Standard Part 6 Section 13 Travel Distance and BNBC Part 4 Section 3.15.1	



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 steel swing doors at southwest stair and steel sliding doors at southeast stair in all floors with locking arrangements in the five story main building. There are steel swing doors at east, southeast, west & southwest stairs and glass doors at northwest stair with locking arrangements in the two story production building. Therefore, locking arrangements need to be removed from the doors required for exit.
Source of Findings:	Photograph: Locking devices were noticed at exit doors.
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at the noted locations. Doors may be locked where the latch and lock are disengaged with one motion where the occupant load does not exceed 49 persons. Turning a door handle and disengaging a lock is considered two motions. Doors may be provided with locking hardware from the ingress side provided that a panic bar is installed on any door with an occupant load exceeding 49 persons. The re-entry provisions of section 6.8.3 must be met.
Suggested Deadline Date:	04 Aug 2014
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates
Question:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.
Priority Level:	High
Non-Compliance Level:	2
Description:	Door widths are more than 0.8m, but fire doors are installed only in northwest and northeast stairs of five story main building on each floor of two story production building. Remaining doors are steel swing, steel sliding and glass doors. Therefore, fire rated doors need to be installed in five story main building and in two story production building based on travel distance, occupant load and minimum width requirement per occupant.
Source of Findings:	Photograph: Door widths were found more than 0.8 m, but without required ratings.
Suggested Plan of Action:	Provide 1 hr fire protective opening assemblies in 1 hr rated exit enclosure. Provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosure. Exits connecting three or fewer stories shall be enclosed with a minimum 1-hr fire-resistance rating. Exits connecting four or more stories shall be enclosed with a minimum 2-hr fire-resistance rating. Exits shall be enclosed with the same fire-resistance rating as the floor penetrated but will not need to exceed 2 hr. Provide fire rated door of required rating to access the corridor.
Suggested Deadline Date:	13 Oct 2014





Standard:	Alliance Standard Part 6 Section 6.5.6 Minimum Widths. Increased occupant loads will require a door width greater than 0.8 m.	
Question:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	There are steel sliding doors which are not side-hinged swinging type at each egress locations of southeast stair of five story main building.	
Source of Findings:	Visual Assessment: Sliding type exit door was found.	
Suggested Plan of Action:	Replace all sliding means of egresses with side-hinged swinging type doors of proper width and fire rating that open in the direction of egress.	
Suggested Deadline Date:	13 Oct 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:	2	
Description:	All the stairs of two story production building are exterior stairs. The exterior wall has an opening within 10 ft beyond the end of the exterior stair. Therefore, stairs need to be separated with required rating based on travel distance, occupant load and minimum width requirement per occupant.	
Source of Findings:	Visual Assessment: Exterior exit stairs were found at two story production building.	
Suggested Plan of Action:	Close all openings across the span of the stair and 10 feet on each side from the ground level to roof or 10 ft above the topmost landing.	
Suggested Deadline Date:	13 Oct 2014	
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:	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:	3	
Description:	Occupant loads are not posted in every assembly or production floor as	



	required.
Source of Findings:	Visual Assessment: Occupant loads found not posted in any assembly or production floor.
Suggested Plan of Action:	Posted 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:	18 Aug 2014
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load
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:	3
Description:	Record of verifying emergency power for means of egress illumination was not found as required.
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 signs shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum of 90 min once per year.
Suggested Deadline Date:	18 Aug 2014
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting
Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.
Priority Level:	Medium
Non-Compliance Level:	3
Description:	The backup used does not provide sufficient illumination (50 lux at surface of exit sign) as required. Also emergency power is not provided for sufficient number of bulbs. Therefore, in case of power failure, all the paths of egress will not be illuminated as required in accordance with Alliance Standard.
Source of Findings:	Visual Assessment: Battery backup power was found only for illuminated signs.



Suggested Plan of Action:	Provide an emergency power source, either by battery backup or by connecting to the emergency power system, for compliantly illuminated exit signs.
Suggested Deadline Date:	05 Jan 2015
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:	3
Description:	No plan or record of conducting periodic tests of the emergency battery backup for illumination of exit signs was found as required.
Source of Findings:	Visual Assessment: No document regarding exit sign backup power was 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 tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.
Suggested Deadline Date:	18 Aug 2014
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.
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:	2
Description:	The 4th floor of five story main building is partially occupied by a prefab shed (used for prayer and dining) with three exits. The remaining portion of this floor is open to the sky. Parapet height of this portion is 36.5in which does not satisfy the requirement.
Source of Findings:	Photograph: The parapet height was found to be 36.5 inches on 4th floor of five story main building.
Suggested Plan of Action:	Provided parapets or guards for all occupiable roofs of a minimum height of 1067 mm (42 in.) as required.
Suggested Deadline Date:	05 Jan 2015





Standard:	Alliance Standard Part 6 Section 12 Handrails and Guards	
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 along the path of egress additional exit signs or directional signs are not provided where there is a change in direction and where the continuation of egress is not obvious. This condition fails to satisfy the requirements stated in Alliance Standards.	
Source of Findings:	Visual Assessment: Illuminated exit sign locations were observed.	
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:	05 Jan 2015	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
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:	At two story production building, all stairs have handrails on both sides except the southwest stair. In the five story main building, northwest and southwest stairs have handrails on only one side. Southeast stair has handrails on both sides except on 1st floor. Handrail height of northwest stair is 34 inches, and southwest & southeast handrails of main building is 36 inches. Handrail height of all stairs of the two story production building is 36 inches.	
Source of Findings:	Visual Assessment: Somewhere one side handrails of stair were found and handrail heights for stairs were measured on sample basis.	
Suggested Plan of Action:	Provide handrails on both side of each stairway. Provide intermediate handrail when the stair width exceeds 2.2m (87 inch). Provide handrail of height between the range 865 mm (34 in.) and 965 mm (38 in.).	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	
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:	3	
Description:	Floor level and stair name or designation is not posted. Floor level is not mentioned in Bangla as well.	
Source of Findings:	Visual Assessment: Stair name and floor level was not found.	
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:	18 Aug 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	All exit signs do not have appropriate illumination levels and contrasting graphics as required.	
Source of Findings:	Photograph: No exit signs were observed with appropriate illumination levels and contrasting graphics.	
Suggested Plan of Action:	Make sure all required exit signs are illuminated continuously at all times. Exit signs may be illuminated either by lamps external to the sign or by lamps contained within the sign. The source of illumination shall provide not less than 50 lux at the illuminated surface with a contrast of not less than 0.5. Approved self-luminous signs which provide evenly illuminated letters having a minimum luminance of 0.2cd/m2 may also be used."	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	
Fire Safety Programs		
Question:	Are the required number of people trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Document or certificate by appropriate authority for training on fire fighting, first aid and rescue 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:	Train and certify at least 25 percent of total workers (481 numbers of workers out of 1921) in firefighting, first aid and rescue training by the proper authority.	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	An emergency evacuation plan has been developed and communicated to all employees.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Workers are aware of the evacuation procedure upon sounding of the alarm. However, no procedure defining evacuation process was available.	
Source of Findings:	Document Review: No document regarding emergency evacuation plan was found.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes all components required by the Alliance Standards and communicate the plan to all employees. The evacuation plan shall include provisions to assist physically disabled persons. A list of all employees with physical disabilities shall be kept by the Fire Service Director.	
Suggested Deadline Date:	18 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	No document of any training program in accordance with the Alliance Safety Training Curriculum found.	
Source of Findings:	Document Review: No document of any training program was found.	
Suggested Plan of Action:	Impart training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.	
Suggested Deadline Date:	18 Aug 2014	
Standard:	Alliance Standards Part 13	



Question:	Fire Drills are conducted at required intervals based on building use type.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Fire drills are conducted monthly in all buildings but not under the direction of a Fire Safety Director. This does not meet the requirements of Alliance Standards.
Source of Findings:	Document Review: A drill record was found but drills were not conducted under a Fire Safety Director.
Suggested Plan of Action:	Conduct fire drills on a quarterly basis as outlined in BNBC Part 4 Appendix A for all garment facilities. Fire drills shall be conducted under the direction of a Fire Safety Director. All other requirements for fire drills shall be conducted in accordance with BNBC requirements.
Suggested Deadline Date:	18 Aug 2014
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills
Question:	Storage areas underneath the cutting tables are clear of combustibles.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Fabrics are stored underneath the cutting tables of cutting section at 3rd floor and 2nd floor of five story main building.
Source of Findings:	Photograph: Fabric was found under cutting table on 3rd floor and 2nd floor of five story main building.
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.
Suggested Deadline Date:	18 Aug 2014
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.
Question:	A Fire Safety Director position has been filled.
Priority Level:	Low
Non-Compliance Level:	3
Description:	No viable documentation or physical presence of a 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 of Fire Safety Director was found.
Suggested Plan of	Create a Fire Safety Director position and fill the position with an individual that





Action:	has had sufficient training to be able to carry the required duties. The duties of the Fire Safety Director shall include the following: (1) Establish internal and external rally points and communicate to all employees in the building. (2) Fire department pre-planning. (3) Conduct safety inspections as outlined in Alliance Standard. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance Standard.	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Fire Department pre-planning has been completed.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	Fire department pre-planning was not found.	
Source of Findings:	Document Review: No fire department pre-planning was found.	
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.	
Suggested Deadline Date:	18 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	A written housekeeping policy is established and enforced.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	A written housekeeping policy was not found, which is required as per Alliance Standards.	
Source of Findings:	Document Review: A written housekeeping policy was not found.	
Suggested Plan of Action:	Establish written corporate and plant policies on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings. Provide a documented line of authority for authorizing a cleaning delay and rescheduling. As a general rule the maximum tolerable deposit thickness for loose fluffy lint is 13 mm (½ in.) over a maximum of 46.5 m2 (500 ft2). Limit dense deposits to 6 mm (¼ in.) and oil saturated deposits to 3.2 mm (⅛ in.).	
Suggested Deadline Date:	30 Mar 2015	
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping	
Question:	A hot-work permit program has been established.	



Priority Level:	Low	
Non-Compliance Level:	3	
Description:	A hot-work permit program not found, which is required as per Alliance Standards.	
Source of Findings:	Document Review: No hot-work permit was shown by the factory personnel.	
Suggested Plan of Action:	Develop a NFPA 51B-compliant hot-work permit program. In general, this program should address the process of request and approval of authorities, necessary checks prior to approval, standby fire watch and fire fighting equipment, sounding of alarm procedure, duration and expiry of permit and reapproval procedure, etc.	
Suggested Deadline Date:	05 Jan 2015	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	  
Question:	Are all applicable permits up to date including Fire License & Boiler License.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	BERC license for total 1808 KW (352 KW, 352 KW, 304, 400 KW & 400 KW) capacity generators is not available. Electrician license is not available. Factory license, trade license, fire license and boiler license were found up to date.	
Source of Findings:	Visual Assessment: BERC license and electrician license was not found.	
Suggested Plan of Action:	Apply to Bangladesh Energy Regulatory Commission for BERC license. Apply to Biddiyut Paridaptor for electrician license.	
Suggested Deadline Date:	10 Nov 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	