INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**Youngone (CEPZ) Limited**
Address:	**Plot # 11-16 & 3-6, Sector # 2 Chittagong Export Processing Zone Chittagong Chittagong Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**19 Apr 2014**

Introduction to the Report

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

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

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

GENERAL INFORMATION

General Information	
Factory Name:	Youngone (CEPZ) Limited
Address:	Plot # 11-16 & 3-6, Sector # 2 Chittagong Export Processing Zone Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	
Audit Duration:	2 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05-22-2014
Final Report Date:	06-11-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 21 nos. buildings in the factory premises out of which 5 are main buildings and rest of them are ancillary buildings: 1. YCL-1, 2. YCL Ltd, 3. YCL-3, 4. YCL Annex, 5. Office Building, 6. Kitchen and store shed, 7. Auto work-shop and chemical store, 8. Car parking shed 1, 9. Car parking shed 2, 10. Carpenter shed and garbage store, 11. Diesel storage, 12. Generator building, 13. Sub-station room, 14. WWRC room, 15. Burn lube-oil store, 16. Sub-station and generator room, 17. Security post-1, 18. Security post-2, 19. Security post-3, 20. Security post-4, 21. Security post-5.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	see the description
Approximate Building Area (SF):	Total area of all the buildings in the factory premises: 646257 sft. Building wise breakdown as follows: 1. YCL-1, Production building: 233591.5 sft, 2. YCL ltd. Production building: 159532 sft, 3. YCL-3, Production building: 145394.82 sft, 4. YCL Annex, Production building: 40725 sft, 5. Office building: 37885 sft, 6. Kitchen and store (beside the YCL Annex): 14482 sft, 7. Auto work-shop & chemical store: 528 sft, 8. Car parking shed 1: 4800 sft, 9. Car parking shed 2: 486 sft, 10. Carpenter shed and garbage store: 1456 sft, 11. Diesel store: 312 sft, 12. Generator room: 418 sft, 13. Sub-station building: 2808 sft, 14. WWRC room: 286 sft, 15. Burn lube-oil store: 77 sft, 16. Sub-station & generator room: 1940 sft, 17. Security post-1: 70 sft, 18. Security post-2: 510 sft, 19. Security post-3: 340 sft, 20. Security post-4: 520 sft, 21. Security post-5: 100 sft (Tin-shed).
Date of Building Construction:	1. YCL-1 (Main building-1) - from 1994 to 1995. 2. YCL (Main building) - from 1985 to 1986. 3. YCL-3 (Main building) - from 2013 to 2014. 4. Office building - from 2011 to 2012.

Date of Last Building Renovation/Addition:	No record of last building renovation/addition was found from the factory personnel.
Ancillary Structures in Complex:	1. Kitchen and store shed, 2. Auto work-shop and chemical store, 3. Car parking shed 1, 4. Car parking shed 2, 5. Carpenter shed and garbage store, 6. Diesel storage, 7. Generator building, 8. Sub-station room, 9. WWRC room, 10. Burn lube-oil store, 11. Sub-station and generator room, 12. Security post-1, 13. Security post-2, 14. Security post-3, 15. Security post-4, 16. Security post-5.
Approximate Ancillary Structures Area (SF):	1. Kitchen and store (beside the YCL Annex): 14482 sft, 2. Auto work-shop & chemical store: 528 sft, 3. Car parking shed 1: 4800 sft, 4. Car prking shed 2: 486 sft, 5. Carpenter shed and garbage store: 1456 sft, 6. Diesel store: 312 sft, 7. Generator room: 418 sft, 8. Sub-station building: 2808 sft. (Ground floor: 1404 sft, 1st floor: 1404 sft), 9. WWRC room: 286 sft, 10. Burn lub-oil store: 77 sft, 11. Sub-station & generator room: 1940 sft, 12. Security post-1: 70 sft, 13. Security post-2: 510 sft, 14. Security post-3: 340 sft, 15. Security post-4: 520 sft, 16. Security post-5: 100 sft (Tin-shed).
Number of Occupants:	Total number of occupants: 9382; 1. YCL-1, Production building: 4546 (Ground floor: 910, 1st floor: 910,2nd floor: 910,3rd floor: 910,4th floor: 906), 2. YCL Ltd, Production Building: 271(Ground floor: 2210, Mezzanine floor: 500), 3. YCL-3, Production Building: 1819(Ground floor: 114,1st floor: 50, 2nd floor: N/A, 3rd floor: 580,4th floor: 570,5th floor: 550), 4. YCL Annex, Production Building: 65 (Ground floor: 40, Mezzanine floor: 5,1st floor: 20), 5. Office building: 200(Ground floor: 40,1st floor: 40,2nd floor: 40,3rd floor: 40,4th floor: 40,6. Kitchen and store (beside the YCL Annex): 10, 7. Auto work-shop & chemical store: 03 no, 8. Car parking shed 1: 02, 9. Car parking shed 2: 02, 10. Carpenter shed & garbage store: 05,11. Diesel store: 0, 12. Generator room: 01, 13. Sub-station building: 03(Ground floor: 02,1st floor: 01), 14. WWRC room: 0, 15. Burn lube-oil store: 0, 16. Sub-station and generator room: 02,17. Security post-1: 03, 18. Security post-2: 02,
Number of Ancillary Levels (Stories):	See the Descriptions:
Occupancy Type:	See the Descriptions:
Construction Type:	See the Descriptions:
Height of Highest Occupied Floor Level Above Grade:	Highest occupied floor level was found at YCL-3 (Main building -3): height: 79 ft.

ASSESSMENT FINDINGS

Fire Protection Construction	
Question:	Certificates of Occupancy for each building have been issued and are on file.
Priority Level:	Low
Non-Compliance Level:	1
Description:	No occupancy certificate was available for any of the building in the factory premises.
Source of Findings:	Document Review: Occupancy certificate was not found.
Suggested Plan of Action:	Collect Occupancy Certificate from BEPZA.
Suggested Deadline Date:	21 Jun 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:	All the fire resistance materials of the structural members of Type-1 construction (YCL-1, YCL-3 and Office building)were found in good condition. However rest of the buildings are non-rated structures.
Source of Findings:	Visual Assessment: Apparently all the structural members of Type-1 constructions were damage free.
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:	All the existing doors, openings, penetrations and ducts along the required fire rated barriers or assemblies in the assessed buildings were found non-rated. Some major locations are mentioned below: 1)In YCL-1 building at each floor, wooden doors were available at all the the fire rated separation and barriers. 2) In YCL building(Ground floor), openings and doors through the separation wall between production floor, dining, utility and storage were found non-rated. 3) In the Office Building and YCL Annex Building, all the openings and doors along the existing or required fire rated separations, corridors and at exits were found non-rated. 4) In the YCL-3 Building in each floor, all the openings and penetrations through the existing separations.firewall were found non-rated. All the doors at the exit were also found non-rated.
Source of Findings:	Photograph: Photo-1: Wooden dooor at YCL-1 (3rd Floor). Photo-2: Wooden door at YCl-1 (Compressor room). Photo-3: Opening and duct at YCL(Ground Floor). Photo-4: Penetration through Fire rated wall for electrical wiring. Photo-5: Openings at electrical station. Photo-6: Opening at chemical store YCL-Annex(GF). Photo-7: High window (glass) at fabric store in YCL-Annex(GF). Photo-8: Penetration through wall for electrical wiring-2 Photo-9: Non rated opening exposed to adjacent factory-building. Photo-10: Opening and penetration at YCL-3 (Ground floor) adjacent to the substation and generator room. , Visual Assessment: All the existing doors, openings and penetrations along the required fire rated barriers at all the assessed buildings were found non-rated. Some of the observations are given below: 1)Wooden door at YCL-1 (3rd Floor) 2) Wooden door at YC-1 (Compressor room). 3) Opening and duct at YCL (Ground Floor). 4) Penetration through fire rated wall for electrical wiring. 5) Openings at electrical station. 6) Opening at chemical store YCL-Annex(GF). 7) High window (glass) at fabric store in YCL-Annex(GF). 8) Penetration through wall for electrical wiring-2 9) Non rated opening exposed to adjacent factory-building. 10) Opening and penetration at YCL-3 (Ground Floor) adjacent to the substation and generator room. Visual Assessment: All the existing doors, openings and penetrations along the required fire rated barriers at all the assessed buildings were found non-rated. Some of the observations are given below: 1) Wood door at YCL-1 (3rd Floor) 2) Wood door at YCL-1 (Compressor Room) 3) Opening and duct at YCL (Ground Floor) 4) Penetration through fire rated wall for electrical wiring. 5) Openings at electrical station. 6) Opening at chemical store YCL-Annex(GF) 7) High window (glass) at fabric store in YCL-Annex(GF) 8) Penetration through wall for electrical wiring-2 9) Non rated opening exposed to adjacent factory-building. 10) Opening and penetration at YCL-3 (Ground Floor) adjacent to the substation and generator room.
Suggested Plan of Action:	Close all windows and other openings on all the fire rated wall across the entire premise and protect the penetrations of fire restrictive rated assemblies with a listed through penetration fire-stop system tested in accordance with ASTM E81. Consult a qualified fire protection engineer for required solutions.
Suggested Deadline Date:	02 Aug 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:	Internal stairways at YCL-1 and YCL buildings exposed to each floor without any fire protective enclosure. Some penetration also found for electrical wiring.	
Source of Findings:	Photograph: Photo-1: Penetration through floor slab for wiring at YCL3(4th	

	floor). Photo-2: Internal Stairway without any fire protective enclosure and exposed to each floor of the YCL-1 building. Photo-3: Internal Stairway without any fire protective enclosure and exposed to each floor of the YCL building.	
Suggested Plan of Action:	Provide required fire rated enclosure to each internal stairway and protect the penetrations of fire restrictive rated assemblies with a listed through penetration fire-stop system tested in accordance with ASTM E814.	
Suggested Deadline Date:	02 Aug 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Some of the findings are mentioned below: YCL Annex: 1) On ground floor the occupancy separation between office and raw material store, kitchen, store, WTP were not available, 2) On 2nd floor fire separations for storage area are required; YCL Ltd. Building: 1) On ground floor, fire separations among dining, storage, and utility were not available, 2) On 1st(mezzanine floor), fire separations between office and sewing section was not available; YCL-3 Building: 1) Fire separation is required among the Cutting, storage and office on 1st floor, 2) Fire separation is required for the accessory store on 5th, 4th and 3rd floor, 3) Fire separation is required between dining and accessory machinery store; Auto-workshop and Chemical store: Chemical store was found without any proper enclosure, Car parking: Car parking areas in front of YCL Ltd. and YCL-3 building were found without any proper protective enclosure, Diesel Storage: Diesel storage adjacent to the sub-division building was found without any protective enclosure.	 
Source of Findings:	Visual Assessment: 1) No fire rated separation, YCL1(GF); 2) No fire separation at chemical room YCL1_4th floor; 3) No fire rated separaito at store_ YCL(Mezzan.); 4) Sub-station & generator room; 5) Compressor room adjacent to YCL3_G.Floor; 6) Mixed occupancy are not fire separated_YCL1_4thFLR; 7) Mixed occupancy are not fire separated_YCL3_1stFLR; 8) Kitchen facilities at extension of YCL_ANNEX_GF; 9) Compressor,kitchen,water treatment at GF_YCL_ANNX; 10) Compressor and other equipment adjacent to YCL_GF; 11) Mixed occupancies are not fire separated_YCL_MEZZN; 12) Compressor, kitchen at YCL_ANNEX_Extension_GF; 13) Car parking and Auto work shop; 14) Chemical store and Auto workshop without fire separation; 15) Open Car-parking at factory premise.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 3.2.1 from BNBC Part 3, Table 3.1.1 from BNBC Part 4 and Section 3.3 from Alliance Standard, Table 4.4.1 of Alliance Standard, Table 4.1.1 from BNBC Part 4. 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 exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	3
Description:	1.Internal exit enclosure at YCL-1 Building were found exposed to each floor. Wooden doors were found at the other exit enclosures; 2.Exit enclosure at YCL Building were found without fire rated barrier; All the doors at the existing enclosures were found non-rated.
Source of Findings:	Visual Assessment: 1.Internal exit enclosure at YCL-1 Building were found exposed to each floor; 2.Exit enclosure at YCL Building were found without fire rated barrier; All the doors at the existing exit enclosures were found fire rated.
Suggested Plan of Action:	Provide 1hr/2hr fire-resistive rated construction barriers at exit enclosures. Fit outward opening, side-swinging, self-closing, non-lockable fire doors of 1 hr/1.5 hr rating in all stairwell enclosures. Consult a qualified fire protection engineer to design the required rated construction barriers.
Suggested Deadline Date:	25 Aug 2014
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation

Question:	Are shafts provided with the minimum fire-resistance rating?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	1) Shafts for cargo lift were found without any protective openings and exposed to each floor at the YCL-1 Building; 2) Lift core at the Office building was found non-rated; 3) No fire rated doors were provided to the lifts, open to each of the production floor at YCL-1 building.	
Source of Findings:	Visual Assessment: 1) Shafts for cargo lift were found without any protective openings and exposed to each floor at the YCL-1 Building; 2) Lift core at the Office building was found non-rated; 3) No fire rated doors were provided to the lifts, open to each of the production floor at YCL-1 building.	
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 enclosure by providing rated opening protectives.	
Suggested Deadline Date:	25 Aug 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3	
Question:	Fire dampers installed on air-conditioning and ventilation ducts appear to be in good condition and operational.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Ducts were found without any fire dampers.	
Source of Findings:	Visual Assessment: No ducts were found without fire dampers.	
Suggested Plan of Action:	Install fire damper in air-conditioning and ventilation ducts.	
Suggested Deadline Date:	17 Nov 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations	
Question:	If the building contains a vertical opening known as an atrium, have provisions been made to comply with Alliance Standard 3.7?	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Atrium connecting the ground and 1st(mezzanine) floor at the YCL Ltd. building without any fire	
Source of Findings:	Visual Assessment: No atrium was found in the existing buildings.	

Suggested Plan of Action:	Provide 1 hr fire barrier to separate the atrium from the adjacent space. Otherwise, use glass walls and inoperable windows and follow the requirements of Alliance Standard 3.7.4.
Suggested Deadline Date:	04 Dec 2014
Standard:	Reference Alliance Standards Section 3.7 Atrium

Fire Protection Systems

Question:	Is the building protected by an automatic sprinkler system?
Priority Level:	High
Non-Compliance Level:	3
Description:	An automatic sprinkler systems is required throughout the YCL-3 buildings where highest occupied floor level height (79 ft) is greater than 75 ft above the finished grade in accordance with the requirements of NFPA 13 as stated in Alliance Standard Section 5.3.
Source of Findings:	Visual Assessment: No Automatic Sprinkler System was available in the existing YCL-3 building where height of the highest occupied floor level was found 79 ft.
Suggested Plan of Action:	Install an automatic sprinkler system throughout the building designed by a qualified fire protection engineer. Installation of new automatic sprinkler systems shall be required to provide shop drawings and hydraulic calculations as outlined in NFPA 13. The hydraulic design of the sprinkler system has to be approved by CoE of Alliance. The test and performance report of the installed system has to be submitted to Alliance for review. Final inspection and testing shall be witnessed by Alliance according to clause 5.3.
Suggested Deadline Date:	09 Feb 2015
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:	3
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.
Source of Findings:	Visual Assessment: Automatic sprinkler system is not designed and installed in the YCL-3 building.
Suggested Plan of Action:	
Suggested Deadline	17 Nov 2014

Date:		
Standard:	Provide the criteria used in the design of the sprinkler system.	
Question:	Commodity Class used for the design of the sprinkler system?	
Priority Level:		
Non-Compliance Level:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	17 Nov 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:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: Automatic sprinkler system is not yet installed in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	17 Nov 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:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.	

Suggested Plan of Action:		
Suggested Deadline Date:	04 May 2015	
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:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	10 Feb 2015	
Standard:	Reference NFPA 13	
Question:	Sprinkler system piping is free of mechanical damage, leakage, and corrosion.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	10 Feb 2015	
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:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	

Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.
Suggested Plan of Action:	
Suggested Deadline Date:	10 Feb 2015
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:	3
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.
Suggested Plan of Action:	
Suggested Deadline Date:	10 Feb 2015
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:	
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:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	10 Feb 2015	
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:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	10 Feb 2015	
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:	3	
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.	
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.	
Suggested Plan of Action:		
Suggested Deadline Date:	10 Feb 2015	
Standard:	Reference NFPA 13	
Question:	Are storage racks and shelves compliant based on class of commodity	

	storage?
Priority Level:	High
Non-Compliance Level:	3
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.
Suggested Plan of Action:	
Suggested Deadline Date:	24 Mar 2015
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:	3
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.
Suggested Plan of Action:	
Suggested Deadline Date:	10 Feb 2015
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:	3
Description:	An automatic sprinkler system is not designed and installed in the YCL-3 building.
Source of Findings:	Visual Assessment: No sprinkler system was found in the YCL-3 building.
Suggested Plan of Action:	
Suggested Deadline Date:	10 Feb 2015

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:	Standpipe system is not required in YCL Ltd. and YCL Annex building since the highest occupied floor levels are less than 10 m. However, stand pipe hose connection for 65mm dia is not available at any stairwell at rest of the assessed buildings. No water supply connection was available at the existing stand pipe (class II) system of the YCL-3 (newly constructed) building; Hydraulic and plumbing design records without approval from Alliance authority were found and the standpipe system of the existing buildings were not compliant to Alliance Standard 5.4.2 and NFPA 14.
Source of Findings:	Visual Assessment: The existing standpipe system is not compliant to Alliance Standard 5.4.2 and NFPA 14.
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.
Suggested Deadline Date:	25 Aug 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:	3
Description:	Inspection, maintenance, and testing procedures of the standpipe and hose system is not documented and up to dated.
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 standpipe system compliant to NFPA 14 and establish an inspection, maintenance, and testing program for the standpipe and hose system comply with the requirements of NFPA 25 Chapter 6 Table 6.1.1.2.
Suggested Deadline Date:	17 Nov 2014
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2

Question:	Is signage for the standpipe system installed at required locations and on required components?	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	The available standpipe system in the existing buildings is not compliant to the Alliance standard 5.4 and NFPA 14. Also no signage was available in the existing standpipe system.	
Source of Findings:	Visual Assessment: No signage was available in the existing standpipe system.	
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer. The system is to be compliant with the requirements of NFPA 14. Install required identification signs at the noted locations. Signage must comply with NFPA 14 Chapter 6.	
Suggested Deadline Date:	14 Jul 2014	
Standard:	Reference NFPA 14 Chapter 6	
Question:	Standpipe system piping is free of mechanical damage, leakage, and corrosion?	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	The available standpipe system in the existing buildings is not compliant to the Alliance standard clause 5.4 and NFPA 14. However no damage or leakage was found in the existing standpipe system.	
Source of Findings:	Visual Assessment: Though no damage or leakage was found but the existing standpipe system is not compliant to Alliance standard clause 5.4 and NFPA 14.	
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 and the repair and replacement of the damaged piping must comply with NFPA 14 and NFPA 25 (Chapter 6).	
Suggested Deadline Date:	17 Dec 2014	
Standard:	NFPA 25 Chapter 6 Standpipe and Hose Systems	
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:	3	

Description:	Fire department (Siamese) inlet connection and outlet connections are not available for fire protection systems as per clause 5.5.4.	
Source of Findings:	Visual Assessment: No fire department connection was available.	
Suggested Plan of Action:	Install fire department connections where required and in compliance with the Standard. According to Alliance Standard 5.5.4, fire department inlet connections (Siamese connection) and outlet connections shall be provided to allow fire department pumper vehicles to draw water from ground-level or underground water storage tanks. Connections shall match the Fire Service and Civil Defense hose thread standard.	
Suggested Deadline Date:	17 Nov 2014	
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections	
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	No dedicated pump for fire was found but there was a stand by pump for Industrial water supply system.	
Source of Findings:	Visual Assessment: No dedicated pump for fire was found but there was a stand by pump for Industrial water supply system.	
Suggested Plan of Action:	Install a pump dedicated for fire fighting or fire protection following the requirements of NFPA 20 as mentioned in Alliance Standard Section 5.5.1.	
Suggested Deadline Date:	17 Nov 2014	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	No dedicated fire pump is available in the factory but an additional pump for industrial supply is available.	
Source of Findings:	Visual Assessment: No dedicated fire pump and maintenance record is available.	
Suggested Plan of Action:	Install a pump dedicated for fire fighting or fire protection following the requirements of NFPA 20 as mentioned in Alliance Standard Section 5.5.1. Then establish an inspection, maintenance, and testing program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline	17 Nov 2014	

Date:		
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:	1	
Description:	Portable extinguishers were insufficient on the 2nd floor of the YCL Annex building. Portable fire extinguishers were found within 100 ft travel distance (at required locations) and also mounted at correct height all through the existing buildings.	
Source of Findings:	Visual Assessment: Portable fire extinguishers were found in required locations and mounted at correct height.	
Suggested Plan of Action:	Keep portable fire extinguishers according to hazard class type and within 1oo ft travel distance at required place.	
Suggested Deadline Date:	24 Sep 2014	
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:	Foam, Carbon dioxide and Dry chemical extinguishers were found installed throughout the buildings based on fire class and hazard.	
Source of Findings:	Visual Assessment: On visual inspection, extinguishers were found placed based on fire class.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	NFPA 10 Chapter 5	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Documents and records of the periodic inspection,testing maintenance and refill of the fire extinguishers were found.	

Source of Findings:	Document Review: Documents and records of the periodic inspection, testing and maintenance were available.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	NFPA 10 Chapter 7	
Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?	 
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	1. No fire detection system was available in the chemical store of the YCL Annex building; 2.Fire alarm and detection system installation was under processing in YCL-3 building; 2.An automatic fire alarm and detection system was available at other buildings. However, currently there is no monitoring agency available in Bangladesh. Fire service and civil defense is not also capable of monitoring fire alarm and detection systems of the factories.	
Source of Findings:	Visual Assessment: There is an automatic fire alarm and detection system available in the existing building except the YCL-3 building and no fire detection system was available in the chemical store of the YCL Annex building.	
Suggested Plan of Action:	Arrange for direct connection of the fire alarm system to a central monitoring station or Fire Service and Civil Defense as per Alliance Standard Part 5 Section 5.7.5 Monitoring. Until that time that monitoring can be set up, arrange a monitoring system using 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:	30 Jun 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
Question:	Trouble or alarm notifications were not indicated on the fire alarm control panel.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Fire alarm and detection system installation was under processing during the assessment in YCL-3 building. However, the fire alarm control panel for the existing buildings was enable to indicate trouble or alarm notifications.	
Source of Findings:	Visual Assessment: Fire alarm and detection system installation was under processing during the assessment in YCL-3 building.	

Suggested Plan of Action:	Install a centralized automatic fire alarm and smoke/heat detection system with control panel following the requirement of NFPA 72 throughout all new and existing buildings and structures.
Suggested Deadline Date:	30 Jun 2014
Standard:	Alliance Standard Part 13 Section 13.10 Maintenance of Fire Protection Equipment
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?
Priority Level:	High
Non-Compliance Level:	2
Description:	1) Call point was not available on the 1st(mezzanine) floor and no detection system available at the ground floor of the YCL Annex building, 2)Fire alarm and detection system installation was under processing in YCL-3 building; However, at rest of the buildings notification and initiation devices were found at required locations according to the occupancy type.
Source of Findings:	Visual Assessment: 1) Call point was not available on the 1st(mezzanine) floor and no detection system available at the ground floor of the YCL Annex building, 2)Fire alarm and detection system installation was under processing in YCL-3 building;
Suggested Plan of Action:	Initiating devices shall include either smoke or fire detection devices spaced in accordance with NFPA 72. When complete sprinkler protection is provided throughout a floor with water flow devices designed to initiate the alarm notification, smoke and fire detection devices can be eliminated throughout that floor as per Alliance Standard Part 5 Section 5.7.3.1.
Suggested Deadline Date:	25 Aug 2014
Standard:	Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices spaced appropriately based on occupancy type. Reference NFPA 72
Question:	Are there additional areas of non-compliance related to the Fire Protection Systems?
Priority Level:	Medium
Non-Compliance Level:	
Description:	
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline	

Date:	
Standard:	Not Applicable

Means of Egress

Question:	Are there additional areas of non-compliance related to the Means of Egress?
Priority Level:	Medium
Non-Compliance Level:	
Description:	
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Not Applicable
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:	The floor area ratio considering the maximum occupant load at each of the building was found more than 2.3 sqm. and compliant according to the Alliance standard 6.4.2.1.
Source of Findings:	Visual Assessment: In all the existing buildings the occupant load on each floor level do not exceed the available capacity of the means of egress.
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:	There are 5 exits provided in the occupied roof (4th floor) of the YCL-1 building to serve an occupant load of 906 no which comply with the requirements of the Alliance Standard 6.6.3 and 6.6.4. However, no occupied floor is available in

	rest of the buildings.	
Source of Findings:	Visual Assessment: Occupied roofs at YCL-1 building was provided with sufficient number of exits.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.6 Number of Means of Egress	
Question:	All occupied roofs are provided with parapets or guards with a minimum height of 1067 mm (42 in.).	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	The height of the parapet guard at the occupied roof of the YCL-1 building was found more than 42 in. and comply with the requirements of Alliance Standard section 6.12.2. However, no occupied roof was found at rest of the buildings.	
Source of Findings:	Visual Assessment: The parapet guard at YCL-1 building was found compliant with the requirements of Alliance Standard 6.12.2.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 12 Handrails and Guards	
Question:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Occupant load was not posted in any assembly and production floor as demanded in Alliance Standard Part 6 Section 6.4.4.	
Source of Findings:	Visual Assessment: Occupant load was not posted.	
Suggested Plan of Action:	Post the occupant load for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	
Suggested Deadline Date:	30 Jun 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:	1)At the 1st (mezzanine) floor of the YCL Annex building a aisle was found with 30 in. width. 2) At some area of the ground floor and 3rd floor of the YCL-1 building and ground floor of the YCl-3 building aislse marking was not found towards the paths of exit. However, aisles with sufficient clear width were available at rest of the floors of all the buildings. 3) Aisles were found obstructed in the sewing section of the YCL Ltd. building.	
Source of Findings:	Visual Assessment: At 1st floor (mezzanine) of the YCl Annex building a aisle was found with 30 in. width. Aisles marking was not found in some areas of the Ground floor and 3rd floor of the YCL-1 building and also at the ground floor of the YCL-3 building (path towards the North-West exit).	
Suggested Plan of Action:	Provide proper aisles marking with a minimum clear width of 0.9m where aisle marking is not available and keep free of obstruction.	
Suggested Deadline Date:	25 Sep 2014	
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
Question:	The path of egress along the means of egress is not reduced at any point along the path of travel and is sufficient for the occupant load.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	At the 4th floor of the YCL-1 building, out of 6 stairs 5 stairs are connected to this floor but the North-west stair was not connected to this floor. The total width of these stairs(5) is 6.223 m and been serving as a means of egress to this floor. However, the required width of the stairs serving an occupant load of 906 is to be at least 7.248 m as per Alliance Standard 6.5	
Source of Findings:	Visual Assessment: At the 4th floor of the YCL-1 building, the available total stair width serving an occupant load of 906 that does not comply with the requirements of the safe means of egress as per Alliance Standard section 6.5.	
Suggested Plan of Action:	Reduce the number of occupants in this floor to available capacity in respect of stair width and space per person. Or, provide additional stair to meet the requirement of total stair width. Otherwise, provide sprinkler system in the building so that required stair width per person becomes 5 mm.	
Suggested Deadline Date:	25 Aug 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:	All through the existing buildings the minimum ceiling height along the means of egress was found more than 2.3 m (7 ft 6 in.) and the minimum height at projection was found more than 2.03 m (6 ft 8 in.).	
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:	The exit discharge from the south-west exit of the YCL-3 building was found obstructed by stored materials, the width of the path was found less than 3.05m/ 10 ft and there were a surface drain and a compressor unit beside the egress path.	
Source of Findings:	Visual Assessment: Exit discharge from the South-west exit was not compliant.	
Suggested Plan of Action:		
Suggested Deadline Date:	25 Aug 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:	On 2nd floor of the YCL Annex building, Maximum travel distance from the remote point was found 174 m. However Maximum travel distance on on each of the floor level at all the assessed buildings were found satisfactory.	

Source of Findings:	Visual Assessment: On 2nd floor of the YCL Annex building, Maximum travel distance from the remote point was found 174 m.	
Suggested Plan of Action:	Provide and automatic fire detection system, portable fire extinguishers, and standpipe system so that Maximum Travel distances of 200 ft/ 60 m will be allowed as per section 6.13 of the Alliance standard or provide alternative exterior staircase for safe evacuation.	
Suggested Deadline Date:	11 Sep 2014	
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:	1)Exit access corridor at the 4th floor of the YCL-1 building was found exposed to openings and production unit.	
Source of Findings:	Visual Assessment: Exit access corridor at the 4th floor of the YCL-1 building was found exposed to openings and production unit.	
Suggested Plan of Action:	Provide fire-resistive rated assemblies at the required exit access corridors. The rated assembly should be approved and/or designed by a qualified fire protection engineer. 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 4.5 unless provided with automatic sprinkler protection throughout the story or building. Window and Glass Block Assemblies are to be tested fire rating following NFPA 257.	
Suggested Deadline Date:	25 Aug 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 of the means of egress are of tiles, plaster and non-combustible paint. No document regarding the rating of the interior materials was available.	
Source of Findings:	Visual Assessment: Visually all the interior finishes was found made of non-combustible materials but no document regarding the rating of the interior materials was found.	

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 were found made of bricks, tiles, plaster and non-combustible paint. No document regarding the rating of the interior materials was available.
Source of Findings:	Visual Assessment: Exits were found made of non-combustible materials but no document regarding the rating of the interior materials was available.
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:	Number of exits provided for the existing buildings are as follows: 1. YCL Ltd. Building: 6 no. stair-exits are available (2 storied). 2. YCL-1 Building: 6/5 no. stair-exits are available (5 storied). 3. YCL-3 Building: 4 no. stair-exits are available (6 storied). 4. YCl Annex Building: 2 no. stair-exit are available (3 storied) 5. Office Building: 2 no. stair-exit are available (5 storied).
Source of Findings:	Visual Assessment: No floor or story was found provided with means of egress less than two.
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:	Number of exits provided for the existing buildings are as follows: 1. YCL Ltd. Building: 6 no. stair-exits are available (2 storied). 2. YCL-1 Building: 6/5 no. stair-exits are available (5 storied). 3. YCL-3 Building: 4 no. stair-exits are available (6 storied). 4. YCl Annex Building: 2 no. stair-exit are available (3 storied) 5. Office Building: 2 no. stair-exit are available (5 storied). However, no. exits at any floor was found adequate to meet the requirement of Alliance standard section 6.6.	
Source of Findings:	Visual Assessment: Number of means of egress from any story of the existing buildings were found adequate to meet the requirements of the Alliance standard section 6.6.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.6 Number of Means of Egress	
Question:	All paths of egress are provided with compliant means of illumination.	 
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	On the 1st floor of the YCL Annex building, ground floor of the YCL Ltd. building and ground floor of the YCL-1 building emergency light was insufficient. However, industrial grade light was no available.	
Source of Findings:	Visual Assessment: On the 1st floor of the YCL Annex building, ground floor of the YCL Ltd. building and ground floor of the YCL-1 building emergency light was insufficient.	
Suggested Plan of Action:	Install appropriate means of illumination at the noted locations. The means of egress paths shall be illuminated at all times the building is occupied. Illumination shall be a minimum of 10 lux for all corridors, exit doors, and stairways. Aisles shall be provided with a minimum 2.5 lux.	
Suggested Deadline Date:	17 Nov 2014	
Standard:	Alliance Standards Part 6 Section 6.7 Egress Illumination and Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape	

Question:	Means of egress are free from impediments, obstructions, and stored materials.	  
Priority Level:	High	
Non-Compliance Level:	3	
Description:	1. Means of egress were found obstructed by stored finished goods at mezzanine floor of YCL Ltd. 2. Means of egress near the entrance to the exit of the North-East stair were found blocked by circular columns at the ground floor of YCL-3 building.	
Source of Findings:	Visual Assessment: Means of egress at YCL Ltd.(Mezzanine floor) and at YCL-3 (ground floor) building were found obstructed.	
Suggested Plan of Action:	1.Provide alternative way for safe means of egress. 2.Keep means of egress continuously free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency.	
Suggested Deadline Date:	24 Jun 2014	
Standard:	Alliance Standard Part 6 Section 6.3.8 Impediments to means of egress and Section 6.3.9 Reliability	
Question:	Emergency power for means of egress illumination is verified at least once per year. If battery operated lights are used, these lights are tested on a monthly basis. Functional testing of battery powered lights is provided for a minimum 90 min once per year.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Records of verifying emergency power for means of egress illumination were not found as required in accordance with Alliance Standards Part 10 Section 10.12.2.3.	
Source of Findings:	Document Review: Records of verifying emergency power for means of egress illumination were not comply with the requirements of the Alliance standards section 10.12.2.3.	
Suggested Plan of Action:		
Suggested Deadline Date:	17 Jul 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	

Question:	Doors are not locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices have been removed where required.
Priority Level:	High
Non-Compliance Level:	3
Description:	All the doors were found with locking arrangements like hasps, locks, slide bolts at the exit doors but doors are not locked. This violates Alliance Standard Part 6 Section 6.8.2.
Source of Findings:	Visual Assessment: All the doors were found with locking arrangements.
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at the noted locations. However, according to section 6.8.2.2 doors may be locked where the latch and lock are disengaged with one motion where the occupant load does not exceed 49 persons. Turning a door handle and disengaging a lock is considered two motions.
Suggested Deadline Date:	03 Jul 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:	All the doors along the means of egress were found non-rated and having widths greater than 0.8 m.
Source of Findings:	Visual Assessment: All the doors of the existing buildings were found non-rated. However, all the doors were found having a width more than 0.8m.
Suggested Plan of Action:	1. 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; 2. 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; 3. Exits shall be enclosed with the same fire-resistance rating as the floor penetrated but will not need to exceed 2 hr. Provide fire door of required rating to access the corridor.
Suggested Deadline Date:	11 Sep 2014
Standard:	Alliance Standard Part 6 Section 6.5.6 Minimum Widths. Increased occupant loads will require a door width greater than 0.8 m.

Question:	All doors in a means of egress are of the side-hinged swinging type.
Priority Level:	High
Non-Compliance Level:	3
Description:	All the doors in the existing buildings were found Sliding type, Collapsible type, Rolling Shutter, single or double leaf type.
Source of Findings:	Visual Assessment: Doors along the buildings were found Sliding, collapsible, rolling shutter, single or double leaf type.
Suggested Plan of Action:	Replace all collapsible, sliding, roll-down gates and shutters in means of egresses with side-hinged swinging type doors of proper width and rating.
Suggested Deadline Date:	11 Sep 2014
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates

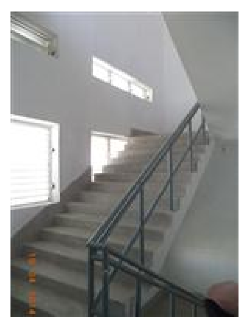
Question:	Illuminated exit signs are placed at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.
Priority Level:	Medium
Non-Compliance Level:	3
Description:	1. In Office building Exit signs were not available at 4th floor and 3rd floor, 2. In YCl Annex building Exit signs were not sufficient at ground floor and no Exit sign was available at 2nd floor, 3. In the 1st floor (mezzanine floor) and Ground floor of the YCL Ltd. building Exit signs were found insufficient in sewing section,
Source of Findings:	Visual Assessment: During Audit Exit Signs were found insufficient in 4th floor of the office building, ground floor and 2nd floor of the YCL Annex building and ground floor and 1st(mezzanine) floor of the YCL Ltd. building (at sewing section).
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:	04 Dec 2014
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs

Question:	Changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in) unless provided with a beveled slope of 1 in 2 that does not exceed 12.7 mm (1/2 in).
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Exit access corridor at the 4th floor of the YCL-1 building was found with abrupt change in elevation. However, rest of the areas of the walking surface in the existing buildings were found free such an uneven elevation.
Source of Findings:	Visual Assessment: Exit access corridor at the 4th floor of the YCL-1 building was found with abrupt change in elevation.
Suggested Plan of Action:	Provide visible markings from both directions to warn occupants of the steps.
Suggested Deadline Date:	15 Apr 2015
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:	2
Description:	The existing exit signs in other buildings were found illuminated continuously but in YCL-3 Building Exit sign was not illuminated properly.
Source of Findings:	Visual Assessment: In YCL-3 Building Exit sign was not illuminated properly.
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:	04 Dec 2014
Standard:	Alliance Standards Part 6 Section 6.11 Exit Signs and Part 10 Section 10.12 Illumination of Exit Signs and Means of Escape

Question:	Emergency power for exit signs is tested at least once per year. If battery operated, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.
Priority Level:	Medium
Non-Compliance Level:	2

Description:	No plan or record of conducting periodic test for the emergency battery back up of illumination of exit sign was found as demanded in section 10.12.1.4 of Alliance Standard.	
Source of Findings:	Document Review: Although document was found regarding the testing of the exit signs but not compliant to the Alliance Standard.	
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:	17 Jul 2014	
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Exit signs were found with appropriate illumination and contrasting graphics.	
Source of Findings:	Visual Assessment: Level of illumination and contrasting graphics of the existing Exit signs were found adequate.	
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:		
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.6 Slip Resistance	
Question:	Stairs are constructed of noncombustible materials.	

Priority Level:	Low	
Non-Compliance Level:		
Description:	All the stairs in the existing building were found made of non-combustible materials (R.C.C construction).	
Source of Findings:	Visual Assessment: All the stairs in the existing buildings were found made of non-combustible materials (R.C.C construction).	
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 of the existing buildings of the factory premises were found with widths more than 0.9 m or 35 in.	
Source of Findings:	Visual Assessment: All the stairs are having width more than 0.9 m or 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:	All the stairs of the assessed buildings in the factory premises are provided with uniform stair treads.	
Source of Findings:	Visual Assessment: All the stair treads of the existing stairs of the assessed buildings were found nominally uniform.	
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:	3	
Description:	Landings were found on both sides of the doors in all the assessed buildings but at ground floor of the office building the door was to found swing over the stair.	
Source of Findings:	Visual Assessment: Door at Office building (ground floor) was found swing over the stair.	
Suggested Plan of Action:	Replace all those doors with required rating so that the doors will not swing over the stair.	
Suggested Deadline Date:	11 Sep 2014	
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:	Landing widths at both the floor and intermediate level of the existing stairs in all the assessed buildings were found greater than the stair clear width.	
Source of Findings:	Visual Assessment: Landing widths were found adequate and greater than the stair clear widths in the assessed buildings.	
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:	1	

Description:	Hand rails were not available on both sides of the stairs at any of the assessed building. However, height of the existing handrails were found comply with requirements of the Alliance Standard 6.12.1.
Source of Findings:	Visual Assessment: No stair was found provided with handrails on both sides at the assessed building.
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:	04 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:	
Description:	Not applicable because none of the buildings in the premises is 6-storied or more. So, re-entry doors are not required.
Source of Findings:	Visual Assessment: Not applicable because all the buildings were found less than 6 story.
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates
Question:	Exterior exit stairs are separated from the building with the required rating. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure.
Priority Level:	High
Non-Compliance Level:	3
Description:	Exterior stair at the YCL Annex building was found unprotected from the exterior openings at each floor level.
Source of Findings:	Visual Assessment: Exterior stair at the YCL Annex building was found unprotected from the exterior openings at each floor level.
Suggested Plan of Action:	Provide 1 hr fire rated enclosure to protect the exterior stair or close the exterior openings as per required rating.
Suggested Deadline	11 Sep 2014

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:	Interior exit stairways(Exit-4,5 and 6) are open to the production floor and exit passage ways were found exposed to dining, utility and storage areas at the East side.	
Source of Findings:	Visual Assessment: Interior exit stairways(Exit-4,5 and 6) are open to the production floor and exit passage ways were found exposed to dining, utility and storage areas at the East side.	
Suggested Plan of Action:	Provide 1 hr. rated exit passage way for safe evacuation.	
Suggested Deadline Date:	24 Sep 2014	
Standard:	Alliance Standard Part 6 Section 6.14 Exit Enclosures	
Question:	Stair designation signs are provided at each floor entrance from the stair to the floor in English and Bengali. Signs indicate the name of the stair and the floor level. Signs are posted adjacent to the door.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	Floor level was present but not in all the stairs. However, stair name or designation was not found in any of the existing stairs.	
Source of Findings:	Visual Assessment: Stair designation and floor level marking were absent or inadequate.	
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:	17 Jul 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	

Question:	Stairwells are not utilized as storage spaces.
Priority Level:	High
Non-Compliance Level:	3
Description:	1)Stairwell of the Middle stair(internal stair) in the ground floor of the YCL-1 building was found stored with finished good materials; 2)Stairwell at the mezzanine floor of the YCL Ltd. building was found with finished good materials.
Source of Findings:	Visual Assessment: Finished goods were found stored at the middle-stairwell of the ground floor in the YCL-1 building and at the stairwell of the YCL Ltd building.
Suggested Plan of Action:	Remove all stored materials in the stairwells at the noted locations.
Suggested Deadline Date:	26 Jun 2014
Standard:	Alliance Standard Part 13 Section 13.9 Safety Inspections

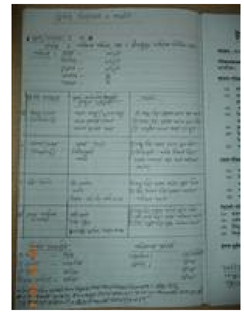
Question:	Ramps used in a means of egress do not reduce the overall means of egress width. The minimum width shall be 1.1 m (44 in.).
Priority Level:	High
Non-Compliance Level:	
Description:	Existing ramps used in means of egress at the factory premises were found with widths more than 1.1m.
Source of Findings:	Visual Assessment: All the ramps in the factory premises were provided with sufficient width.
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:	All the ramps in the factory premises are provided with slope more than 12.5 percent.
Source of Findings:	Visual Assessment: Slopes were found more than 12.5 percent.

Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 10 Ramps	
Fire Safety Programs		
Question:	Are there additional areas of non-compliance to report?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	No additional area for non-comformity was found.	
Source of Findings:	Visual Assessment: No other non conformity were found.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Not Applicable	
Question:	A Fire Safety Director position has been filled.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	A dedicated Fire Safety Director or relevant supporting document was not found during the assessment.	
Source of Findings:	Visual Assessment: No Fire Safety Director was found during the assessment.	
Suggested Plan of Action:	Provide verification that the role of Fire Safety Director has been filled.	
Suggested Deadline Date:	11 Sep 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:	3	
Description:	Through the interview it was noted that the workers are aware of the evacuation procedure upon commencing of the alarm. However, no procedure	

	defining evacuation process was available.	
Source of Findings:	Visual Assessment: No procedure defining evacuation process was available.	
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.	
Suggested Deadline Date:	17 Jul 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:	2	
Description:	1) No emergency egress map was available in S/W, N/W exit stairs of the YCL Ltd. buidling. 2) No emergency egress map was available in the exit stair of the Ground floor of Office building. However, emergency egress maps were available in other required locations.	
Source of Findings:	Visual Assessment: Emergency egress map was not available in S/W, N/W exit stairs of the YCL Ltd. buidling and in the exit stair of the Ground floor of Office building.	
Suggested Plan of Action:	Post emergency egress maps/fire evacuation maps at the entrance to each exit stair or main point of egres.	
Suggested Deadline Date:	17 Jul 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Evacuation Plan	
Question:	Fire Department pre-planning has been completed.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	Fire department pre-planning is not completed yet.	
Source of Findings:	Document Review: No document regarding fire department pre-planning was found among the documents shown by factory personnel.	
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.	
Suggested Deadline Date:	17 Jul 2014	

Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Fire Drills are conducted at required intervals based on building use type.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Fire drills are conducted quarterly in all buildings but not under the direction of a Fire Safety Director. This does not meet the requirements of Alliance Standard Part 13 Section 13.2 and BNBC Part 4 Appendix A Page 10457.	
Source of Findings:	Visual Assessment: Fire drills are conducted quarterly in all buildings but not under the direction of a Fire Safety Director.	
Suggested Plan of Action:	Fire drills shall be conducted under the direction of a Fire Safety Director. All other requirements for fire drills shall be conducted in accordance with BNBC Part 4 Appendix A.	
Suggested Deadline Date:	17 Jul 2014	
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills	
Question:	Are the required number of people trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.	  
Priority Level:	High	
Non-Compliance Level:		
Description:	Records and certificated by appropriate authority for training on fire fighting, first aid and rescue were available.	
Source of Findings:	Document Review: Records and certificates for fire fighting, first aid and rescue operation were available.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 13 Human Element Programs	

Question:	A written housekeeping policy is established and enforced.	  
Priority Level:	Low	
Non-Compliance Level:		
Description:	A written housekeeping policy been developed and records for maintaining the policy were available.	
Source of Findings:	Document Review: Written housekeeping policy and records for maintaining the policy were available.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping	
Question:	A hot-work permit program has been established.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Hot-work permit program has been established and executed when such a work take place.	
Source of Findings:	Document Review: Hot work permit was available.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:	3	
Description:	Storage of combustible materials were found in the YCL-1, YCL Ltd. and YCl-3 buildings.	

Source of Findings:	Visual Assessment: Storage of combustible materials were found in the YCL-1, YCL Ltd. and YCl-3 buildings.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	30 Jun 2014	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	No document of any training program in accordance with the Alliance Safety Training Curriculum was found.	
Source of Findings:	Document Review: Alliance safety training curriculum was not found among the documents shown by factory personnel.	
Suggested Plan of Action:	Impart training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.	
Suggested Deadline Date:	30 Jul 2014	
Standard:	Alliance Standards Part 13	
Question:	Smoking is only allowed at designated areas.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Smoking is prohibited through the entire factory premises.	
Source of Findings:	Visual Assessment: Smoking was found prohibited through the entire factory premises.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 13 Section 13.5 Smoking	

Question:	Are all applicable permits up to date including Fire License & Boiler License.
Priority Level:	Low
Non-Compliance Level:	2
Description:	All required permits and license were available except the license for storage of flammable liquid and BERC License for 06 no. of generators were not available.
Source of Findings:	Visual Assessment: Diesel storage was found with a capacity (oil barrels) of more than 2000 liters.
Suggested Plan of Action:	
Suggested Deadline Date:	17 Jul 2014
Standard:	Alliance Standard Part 13 Human Element Programs