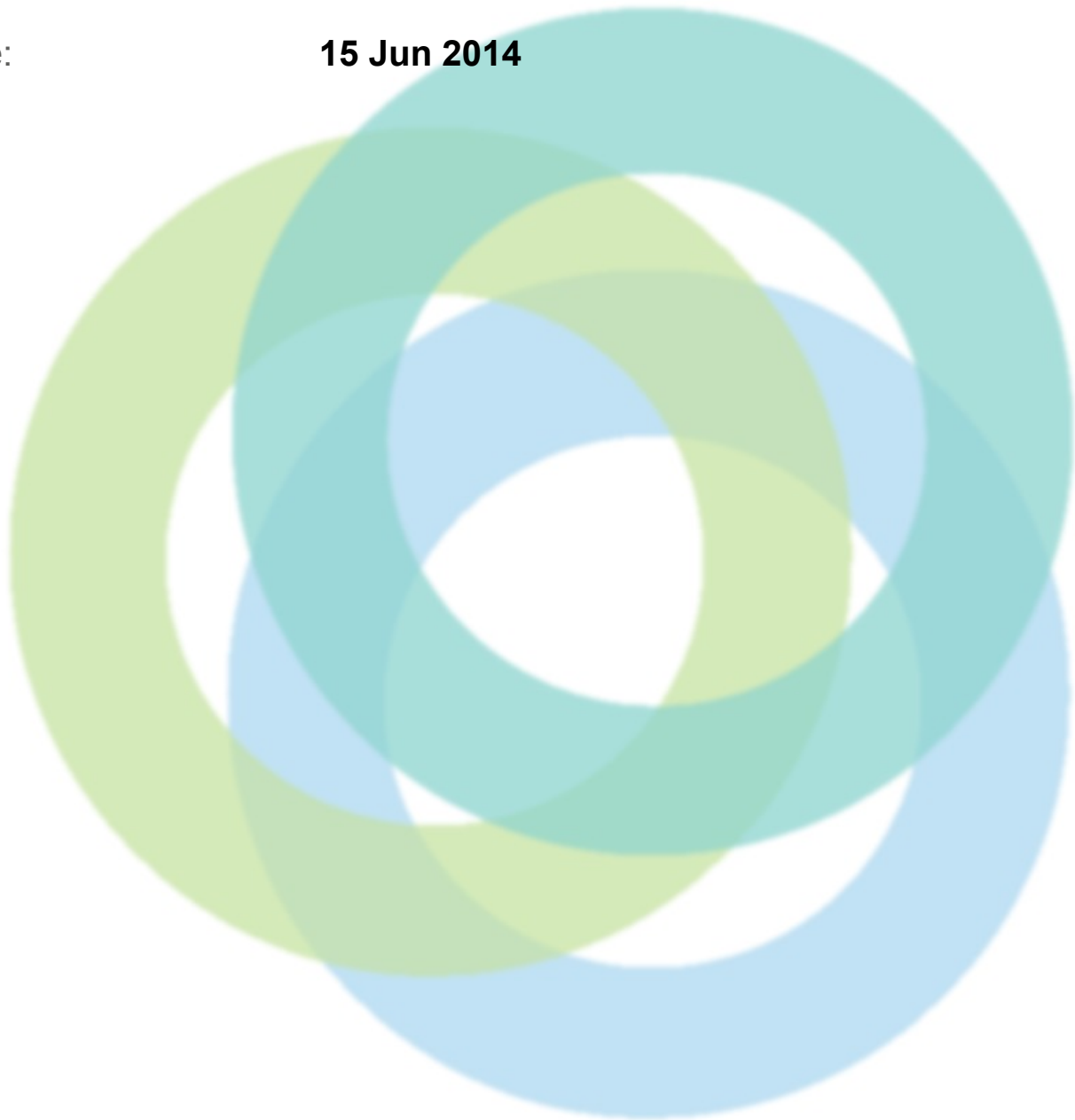


INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name: **JAMUNA DENIM LTD (Washing & Garments Unit)**
Address: **Jarun, Konabari, Gazipur Gazipur Dhaka Bangladesh**
Assessor: **Bureau Veritas**
Date: **15 Jun 2014**





Introduction to the Report

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

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

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



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ALLIANCE
FOR BANGLADESH WORKER SAFETY

GENERAL INFORMATION

General Information	
Factory Name:	JAMUNA DENIM LTD (Washing & Garments Unit)
Address:	Jarun, Konabari, Gazipur Gazipur Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Gazipur
Zip Code:	1706
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	06-15-2014
Final Report Date:	06-28-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 11 buildings in the factory premises out of which three are main production buildings and eight are ancillary buildings. The buildings are named as: 1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.), 2) Four story RCC main production building (Jamuna Denim Garments Ltd.), 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.), 4) Three story RCC Day care building, 5) Single story generator shed, 6) Single story boiler shed, 7) Single story welding shop shed, 8) Single story chemical and yarn store shed, 9) Single story workshop and accessories store shed, 10) Single story dining shed, 11) Single story RCC Finished good and fabric store.
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) Main production building (Jamuna Knitting & Dyeing Ltd.): 42 ft [54 ft], 4, 0, 4. 2) Main production building (Jamuna Denim Garments Ltd.): 40.35 ft [50.35 ft], 4, 0, 4. 3) Main production building (Jamuna Optimo Jeans Ltd.): 46 ft [57 ft], 6, 0, 6. 4) Day care building: 20 ft [30 ft], 3, 0, 3. 5) Generator shed: 1 ft [16.40 ft], 1, 0, 1. 6) Boiler shed: 1 ft [16.40 ft], 1, 0, 1. 7) Welding shop shed: 1 ft [16.40 ft], 1, 0, 1. 8) Chemical and yarn store shed: 1 ft [16.40 ft], 1, 0, 1. 9) Workshop and accessories store shed: 1 ft [16.40 ft], 1, 0, 1. 10) Dining shed: 1 ft [13 ft], 1, 0, 1. 11) Finished good and fabric store: 1 ft [13 ft], 1, 0, 1.
Approximate Building Area (SF):	Total area of buildings in the factory premises: 559064 sft. Building wise breakdown as follows: 1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): 353392 sft, 2) Four story RCC main production building (Jamuna Denim garments ltd): 120589 sft, 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.): 65143 sft, 4) Three story RCC Day care building: 6600 sft, 5) Single story



	generator shed: 2529 sft, 6) Single story boiler shed: 1442 sft, 7) Single story welding shop shed: 603 sft, 8) Single story chemical and yarn store shed: 3002 sft, 9) Single story workshop and accessories store shed: 1507 sft, 10) Single story dining shed: 2000 sft, 11) Single story RCC Finished good and fabric store: 2257 sft.
Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): Finished in 2006, 2) Four story RCC main production building (Jamuna Denim Garments Ltd.): Finished in 1992, 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.): Finished in 1992, 4) Three story RCC Day care building: Finished in 2008, 5) Single story generator shed: Finished in 2006, 6) Single story boiler shed: Finished in 2008, 7) Single story welding shop shed: Finished in 2009, 8) Single story chemical and yarn store shed: Finished in 2008, 9) Single story workshop and accessories store shed: Finished in 2008, 10) Single story dining shed: Finished in 2008, 11) Single story RCC Finished good and fabric store: Finished in 2010.
Date of Last Building Renovation/Addition:	No record for date of renovation or addition was found from factory personnel.
Ancillary Structures in Complex:	1) Three story RCC Day care building, 2) Single story generator shed, 3) Single story boiler shed, 4) Single story welding shop shed, 5) Single story chemical and yarn store shed, 6) Single story workshop and accessories store shed, 7) Single story dining shed, 8) Single story RCC Finished good and fabric store.
Approximate Ancillary Structures Area (SF):	1) Three story RCC Day care building: 6600 sft (Ground floor: 2200 sft, 1st floor: 2200 sft, 2nd floor: 2200 sft), 2) Single story generator shed: 2529 sft, 3) Single story boiler shed: 1442 sft, 4) Single story welding shop shed: 603 sft, 5) Single story chemical and yarn store shed: 3002 sft, 6) Single story workshop and accessories store shed: 1507 sft, 7) Single story dining shed: 2000 sft, 8) Single story RCC Finished good and fabric store: 2257 sft.
Number of Occupants:	Total number of occupants: 3117. 1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): 1100 , 2) Four story RCC main production building (Jamuna Denim Garments Ltd.): 1927, 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.): 52, 4) Three story RCC Day care building: 10 , 5) Single story generator shed: 2, 6) Single story boiler shed: 3, 7) Single story welding shop shed: 5, 8) Single story chemical and yarn store shed: 5, 9) Single story workshop and accessories store shed: 5, 10) Single story dining shed: 3, 11) Single story RCC Finished good and fabric store: 5.
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) Day care building: 20 ft [30 ft], 3, 0, 3. 2) Generator shed: 1 ft [16.40 ft], 1, 0, 1. 3) Boiler shed: 1 ft [16.40 ft], 1, 0, 1. 4) Welding shop shed: 1 ft [16.40 ft], 1, 0, 1. 5) Chemical and yarn store shed: 1 ft [16.40 ft], 1, 0, 1. 6) Workshop and accessories store shed: 1 ft [16.40 ft], 1, 0, 1. 7) Dining shed: 1 ft [13 ft], 1, 0, 1. 8) Finished good and fabric store: 1 ft [13 ft], 1, 0, 1.
Occupancy Type:	1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): [Ground floor: G2 (Dyeing and Printing), 1st floor: G2 (Knitting), H2 (Storage), 2nd floor: G2 (Sewing, Cutting, Finishing, spot removing room), 3rd floor: G2 (Sewing, Cutting, Finishing)], 2) Four story RCC main production building (Jamuna Denim Garments Ltd.): [Ground floor: G2 (Dyeing and Washing), 1st floor: G2 (Sewing, Cutting, Finishing), 2nd floor: G2 (Sewing, Cutting, Finishing), 3rd floor: G2 (Sewing, Cutting, Finishing)], 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.): [Ground floor: G2 (Finishing Section), F1 (Office), 1st floor: G2 (Sewing), 2nd floor: G2 (Sewing, Finishing), 3rd floor: G2 (Sewing, Finishing), 4th Floor: G2 (Cutting, fabric relaxation), 5th floor: H1 (Idle Machine Room)], 4) Three story RCC Day care building: [Ground Floor: B2 (Day Care), 1st Floor: F1 (Office), 2nd Floor: F1 (Office)], and see the description.
Construction Type:	1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): Type 1, 2) Four story RCC main production building (Jamuna Denim Garments Ltd.): Type 1, 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.): Type 1, 4) Three story RCC Day care building: Type 1, 5) Single story generator shed: Non-rated, 6) Single story workshop and accessories store shed: Non-rated, 7) Single story welding shop shed: Non-rated, 8) Single story chemical and yarn store shed: Non-rated, 9) Single story workshop and accessories store shed: Non-rated, 10) Single story dining shed: Non-Rated, 11) Single story RCC Finished good and fabric store: Type 1.

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ALLIANCE
FOR BANGLADESH WORKER SAFETY

Height of Highest Occupied Floor Level Above Grade:

1) Four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): 12.80 m or 42 ft, 2) Four story RCC main production building (Jamuna Denim Garments Ltd.): 12.30 m or 40.35 ft, 3) Six story RCC main production building (Jamuna Optimo Jeans Ltd.): 14.02 m or 46 ft, 4) Three story RCC Day care building: 6.1 m or 20 ft above grade, 5) Single story generator shed: 30 cm or 1 ft above grade, 6) Single story boiler shed: 30 cm or 1 ft above grade, 7) Single story welding shop shed: 30 cm or 1 ft above grade, 8) Single story chemical and yarn store shed: 30 cm or 1 ft above grade, 9) Single story workshop and accessories store shed: 30 cm or 1 ft above grade, 10) Single story dining shed: 30 cm or 1 ft above grade, 11) Single story RCC Finished good and fabric store: 30 cm or 1 ft above grade.



ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are openings and penetrations through rated walls and/or assemblies protected?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	On 2nd floor there is a spot removing room in four story RCC main production building (Jamuna Knitting & Dyeing Ltd) which does not have fire rated opening. Generator shed distance is within 3.0 m of Jamuna Knitting & Dyeing building.	
Source of Findings:	Photograph: Unprotected openings and penetrations through some rated walls at different locations are found.	
Suggested Plan of Action:	Install fire rated doors and windows or fill in unprotected openings with fire resistive rated assemblies.	
Suggested Deadline Date:	07 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:	3	
Description:	There are 3 stairs in Jamuna Knitting & Dyeing (4 story building) and 2 stairs in Jamuna Optimo Jeans Ltd. (6 story building) and 3 stairs in Jamuna Demin Garments Ltd. (4 story building). None of the stairs are fire rated. No fire door is installed at ex	
Source of Findings:	Photograph: Exit enclosures are not found with fire rated construction barriers.	
Suggested Plan of Action:	Provide 2 hr fire-resistive rated construction barriers at exit enclosures. Fit doors that swing in the direction of egress, side-swinging, self-closing, non-lockable fire doors of 1.5 hr rating in all stairwell enclosures. Consult a qualified fire protection engineer to design the required rated construction barriers.	
Suggested Deadline Date:	07 Oct 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	



Question:	Is each floor separated with a fire-resistive rated construction barrier?
Priority Level:	High
Non-Compliance Level:	2
Description:	From physical measurement, slab thickness of all main production buildings were found to be 7.0 inches with finishing, which is capable of providing approximately 3.0 hour fire resistance. The slab for a Type 1 building needs to have a 3 hour fire rating.
Source of Findings:	Photograph: Slab thickness was measured and found to be 7 inches with finishing. In six story RCC main production building (Jamuna Optimo Jeans Ltd.), steel shutter was found in the opening of slab in each floor.
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between floors following Table 4.4.1 of Alliance Standard. Consult a qualified fire protection engineer to design the rated construction barriers.
Suggested Deadline Date:	07 Oct 2014
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.
Priority Level:	Medium
Non-Compliance Level:	3
Description:	No proper fire separation at main production building (Jamuna Knitting and Dyeing) was found between fabric store and knitting section. No proper separation between chemical store and knitting store was found. All these occupancies need to be fire separat
Source of Findings:	Photograph: Non-rated separations between hazards are found in different 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:	30 Dec 2014
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:	2
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 Gazipur City corporation for issuance of occupancy certificate and pursue the matter to expedite.
Suggested Deadline Date:	26 Aug 2014
Standard:	Are certificates of occupancy provided for each building or ancillary structure?

Fire Protection Systems

Question:	Does the building have a fire pump?
Priority Level:	High
Non-Compliance Level:	3
Description:	There is no fire pump in the factory premises to supply water in case of fire incidence. Only centrifugal pump is installed and it provides a negligible water jet pressure on roof.
Source of Findings:	Visual Assessment: Centrifugal pump was found.
Suggested Plan of Action:	Install a pump dedicated for fire fighting or fire protection following the requirements of NFPA 20 as mentioned in Alliance Standard Section 5.5.1. Fire pump installation is to be tested for final acceptance in presence of Alliance and a final inspection of the installation shall be conducted by the Alliance prior to final acceptance of the installation by the Alliance as per clause 5.5.5. Acceptance testing of the installation shall be in accordance with NFPA 20, 22, and 24 testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance.
Suggested Deadline Date:	07 Oct 2014
Standard:	Alliance Standard Part 5 Fire Protection Systems
Question:	Does the building have a Standpipe System?
Priority Level:	High
Non-Compliance Level:	2
Description:	Highest occupiable floor of four story RCC main production building (Jamuna Knitting & Dyeing Ltd.): 12.80 m or 42 ft, Four story RCC main production building (Jamuna Denim Garments Ltd.): 12.30 m or 40.35 ft, Six story RCC main production building (Jamuna
Source of Findings:	Visual Assessment: Class II type hose connection is found but class III type is not installed.
Suggested Plan of Action:	Install a NFPA 14-compliant Class III standpipe system at required locations designed by a qualified fire protection engineer. The hydraulic calculations and system installations shall be submitted for review by the Alliance prior to



	commencement of installation.
Suggested Deadline Date:	07 Oct 2014
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2
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:	An automatic fire alarm and detection system is not available in the factory. 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:	Visual Assessment: No such monitoring system was found.
Suggested Plan of Action:	Provide an automatic fire alarm and detection system per NFPA 72 and 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:	12 Aug 2014
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Fire department (Siamese) inlet connection and outlet connection (pillar hydrant) are not provided as required.
Source of Findings:	Visual Assessment: Fire department (Siamese) inlet connection and outlet connection (pillar hydrant) are not found.
Suggested Plan of Action:	Install fire department connections where required and in compliance with the Standard. Fire department outlet connections as well as inlet 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	30 Dec 2014



Date:	
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections
Question:	Fire extinguishers are inspected, tested, and maintained as required.
Priority Level:	Medium
Non-Compliance Level:	1
Description:	Extinguishers are inspected monthly by factory's concerned people. But no document was found in support of i) annual maintenance of extinguishers by a servicing agent and ii) annual testing of nozzle of CO2 extinguisher.
Source of Findings:	Document Review: Relevant documents are not compliant with NFPA 10.
Suggested Plan of Action:	Fire extinguishers are to be inspected, tested and maintained in accordance with NFPA 10.
Suggested Deadline Date:	30 Dec 2014
Standard:	NFPA 10 Chapter 7
Question:	Are portable fire extinguishers installed throughout the building at required locations and mounted at the correct height?
Priority Level:	Medium
Non-Compliance Level:	
Description:	
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	BNBC Part 4 Section 4.10 and NFPA 10
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 available standpipe system is not installed.
Source of Findings:	Visual Assessment: Signage for the installed standpipe system was not found.
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer. Install required identification signs at the noted locations





	as per NFPA 14.	
Suggested Deadline Date:	26 Aug 2014	
Standard:	Reference NFPA 14 Chapter 6	
Question:	Are inspection, maintenance, and testing procedures of the standpipe and hose system documented and up to date? Including inspection and testing of hoses if provided.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Inspection, maintenance, and testing procedures of the standpipe and hose system 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 an inspection, maintenance, and testing program for the standpipe and hose system. Program must comply with the requirements of NFPA.	
Suggested Deadline Date:	30 Dec 2014	
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	There is no fire pump in the factory premises to supply water in case of fire incidence.	
Source of Findings:	Visual Assessment: There is no fire pump installed.	
Suggested Plan of Action:	Install a pump dedicated for fire fighting following the requirements of NFPA 25. Then establish an inspection, maintenance, and testing program for the fire pump.	
Suggested Deadline Date:	30 Dec 2014	
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps	
Means of Egress		



Question:	Doors are not locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices have been removed where required.
Priority Level:	High
Non-Compliance Level:	3
Description:	There are collapsible gates and doors with locking arrangements at each egress location.
Source of Findings:	Visual Assessment: There are locking arrangements at the exit doors but doors are not locked.
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.
Suggested Deadline Date:	29 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:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and don't have required ratings. Fire doors are not installed at any exit enclosure as required.
Source of Findings:	Photograph: Doors along the path of egress have a minimum width of 0.8 m (32 in) and do not have required ratings.
Suggested Plan of Action:	Provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosures.
Suggested Deadline Date:	07 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:	3
Description:	Some of the doors in the means of egress are collapsible and sliding type.
Source of Findings:	Photograph: Some of the doors in the means of egress are collapsible and





	sliding type and some are open.	
Suggested Plan of Action:	Replace all non-compliant doors and frames in the means of egress with doors that are listed, approved, automatic-closing, side-swinging, fire rated doors in compatible fire rated frames with latching panic hardware.	
Suggested Deadline Date:	07 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Occupied roofs are provided with the minimum number of exits required as a story.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	There is an idle machine room on 5th floor roof of Jamuna Optimo Jeans Ltd. The roof is occupied and provided with only a single exit. Roofs of the other buildings are unoccupied.	
Source of Findings:	Visual Assessment: Single exit was found on the 5th floor roof of Jamuna Optimo Jeans Ltd.	
Suggested Plan of Action:	Provide occupied roof with an additional exit.	
Suggested Deadline Date:	07 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.6 Number of Means of Egress	
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:	2	
Description:	Some aisles widths in Optimo Jeans Ltd (5 story building) on 2nd and 4th floor were found less than 0.9 m. All other aisles were found to 0.9 m or greater	
Source of Findings:	Photograph: Some aisle widths were found less than 0.9 m.	
Suggested Plan of Action:	Remove existing aisle marking and draw new marking fulfilling the minimum aisle width requirement. Relocate the machines accordingly if necessary.	
Suggested Deadline Date:	07 Oct 2014	
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
Question:	Exit access corridors serving an occupant load exceeding 30 are separated by walls having a fire-resistance rating of 1 hr.	



Priority Level:	High
Non-Compliance Level:	2
Description:	On the first floor, there is an exit access corridor which is not fire protected as the openings of accessories stores and finished goods store are not closed.
Source of Findings:	Visual Assessment: On the first floor, there is an exit access corridor.
Suggested Plan of Action:	Provide fire-resistive rated assemblies at the required exit access corridors. The rated assembly should be approved and 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 Alliance Standard Part 4 Section 4.5 unless provided with automatic sprinkler protection throughout the story or building. Window and glass block assemblies are to be tested for fire rating following NFPA 257.
Suggested Deadline Date:	07 Oct 2014
Standard:	Alliance Standard Part 6 Section 6.3 and Part 4 Section 4.5. Does not apply if an automatic sprinkler system is installed throughout the building.
Question:	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:	There is an exterior stair at Jamuna Demin Ltd which is connected from ground floor to 1st floor barred window. The external steel stair of this building does not have a fire separation from the building beyond 10 feet of its span as required.
Source of Findings:	Photograph: Exterior exit stair is not fire separated from the building.
Suggested Plan of Action:	Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft beyond the end of the stair to achieve the required separation. The rated assembly should be approved and designed by a qualified fire protection engineer.
Suggested Deadline Date:	07 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 on each level (floor) do not exceed the capacity of the available means of egress.
Priority Level:	High
Non-Compliance Level:	





Description:		
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.4 Occupant Load	
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:		
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.17 Exit Discharge. See Section 16.7.2 and 16.7.3 for exceptions.	
Question:	Landings are provided on both sides of doors used along the path of egress. Doors do not swing out over stairs.	
Priority Level:	High	
Non-Compliance Level:		
Description:		
Source of Findings:		
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	



Non-Compliance Level:	2
Description:	Occupant loads are not posted in any assembly and production floor as required.
Source of Findings:	Visual Assessment: Occupant loads are not found posted in any assembly and production floor.
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:	12 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:	2
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 exit signs, egress lighting is verified at least once per year. If battery-operated signs are used, these lights shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum of 90 minutes once per year.
Suggested Deadline Date:	12 Aug 2014
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting
Question:	Illuminated exit signs are placed at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Illuminated exit signs are placed at entrances to exits, but not along the path of egress.
Source of Findings:	Photograph: Illuminated exit signs are found at entrances to exits but not along





	the path of egress.
Suggested Plan of Action:	Install illuminated exit signs at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.
Suggested Deadline Date:	30 Dec 2014
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs
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 backup for exit signs used does not provide sufficient illumination (50 lux at surface of exit sign).
Source of Findings:	Photograph: IPS is used as backup power.
Suggested Plan of Action:	Provide an emergency power source, either by battery back up or by connecting to the emergency power system, for compliantly illuminated exit signs.
Suggested Deadline Date:	30 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 record of verifying emergency power for means of egress illumination was found as required in accordance with Alliance Standards, but an emergency light checking register was available.
Source of Findings:	Document Review: No document in accordance with Alliance Standards regarding testing of emergency power for exit signs was found among the documents shown by the factory personnel.
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery operated signs are used, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum of 90 minutes once per year.
Suggested Deadline Date:	12 Aug 2014





Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
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:	All stairs have handrails on only one side. The handrails are mounted at 38 inches.	
Source of Findings:	Photograph: Handrails are provided on only one side of stairs.	
Suggested Plan of Action:	Provide handrails on both side of each stairway. Provide handrail of height between the range 865 mm (34 in.) and 965 mm (38 in.).	
Suggested Deadline Date:	30 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:	2	
Description:	The six story RCC main building (Jamuna Optimo Jeans Ltd.) has 6 stories, but doors are not provided with re-entry. Stair doors with re-entry are required in at least 1 floor. All other buildings are less than six stories.	
Source of Findings:	Visual Assessment: No re-entry door was found in the six story RCC main building (Jamuna Optimo Jeans Ltd.).	
Suggested Plan of Action:	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets the following requirements. Stair doors may be permitted to be locked from the stair (ingress) side that prevents re-entry to the floor provided at least two floors allowing re-entry to access another exit are provided, there are not more than 4 stories intervening between re-entry floors, re-entry is allowed on the top or next to top level, reentry doors are identified as such on the stair side, and locked doors shall be identified as to the nearest re-entry floors. When the discharge floor is determined to be a required re-entry floor using the above requirements, re-entry does not have to be provided back into the building on this level.	
Suggested Deadline Date:	07 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Stair designation signs are provided at each floor entrance from the stair to the	



	floor in English and Bengali. Signs indicate the name of the stair and the floor level. Signs are posted adjacent to the door.
Priority Level:	Low
Non-Compliance Level:	2
Description:	Floor level posted but stair name or designation is not mentioned.
Source of Findings:	Visual Assessment: No floor level, stair name or designation was found posted.
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:	12 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:	1
Description:	Some exit signs do not have appropriate illumination levels and contrasting graphics as required.
Source of Findings:	Photograph: Some exit signs are found without appropriate illumination levels.
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:	30 Dec 2014
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:	1
Description:	Around two hundred people are trained among 3117 people and certified in fire fighting, first aid and rescue, but this does not meet the requirement of 25 percent of workers.






Source of Findings:	Document Review: Certificates of fire training were found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Train and certify at least 25 percent (25% of 3117=780 people) of workers in firefighting, first aid and rescue by the proper authority.	
Suggested Deadline Date:	30 Dec 2014	
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 commencing of the alarm. However, no procedure defining evacuation process was available.	
Source of Findings:	Worker Interviews: No procedure defining evacuation process was available, but workers are aware of evacuation procedures.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes duties and responsibilities of various people or groups, interfacing between groups and fire brigade, headcount and identification of trapped victims, physically disabled people and their rescue, etc. and all components required by the Alliance Standards and communicate the plan to all employees. The evacuation plan shall include provisions to assist physically disabled persons. A list of all employees with physical disabilities shall be kept by the Fire Service Director.	
Suggested Deadline Date:	12 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Storage areas underneath the cutting tables are clear of combustibles.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Spaces underneath cutting table were not clear of combustibles.	
Source of Findings:	Visual Assessment: Combustibles are found underneath the cutting table.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	12 Aug 2014	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	



Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	No document of any training program in accordance with the Alliance Safety Training Curriculum was available among the documents shown by the factory personnel.
Source of Findings:	Document Review: No document regarding any training program in accordance with the Alliance Safety Training Curriculum was found.
Suggested Plan of Action:	Impart training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.
Suggested Deadline Date:	12 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:	1
Description:	Fire drills are conducted quarterly in all buildings but not under the direction of a Fire Safety Director, which is required.
Source of Findings:	Document Review: Fire drill report was found.
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.
Suggested Deadline Date:	12 Aug 2014
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills
Question:	A Fire Safety Director position has been filled.
Priority Level:	Low
Non-Compliance Level:	2
Description:	No viable documentation and physical presence of Fire Safety Director was noted. However factory has informed that they have a designated person for this.
Source of Findings:	Document Review: No record of filling the position of fire safety director has been found. But factory authority claims that they have appointed one.
Suggested Plan of Action:	Create a Fire Safety Director position and fill the position with an individual that has had sufficient training to be able to carry the required duties. The duties of





	the Fire Safety Director shall include the following: (1) Establish internal and external rally points and communicate to all employees in the building. (2) Fire department pre-planning. (3) Conduct safety inspections as outlined in Alliance standard 13.9. (4) ensure all testing of fire protection equipment is conducted in accordance with Alliance standard 13.10.	
Suggested Deadline Date:	30 Dec 2014	
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:	2	
Description:	Fire department pre-planning was not found.	
Source of Findings:	Document Review: No document regarding fire department pre-planning has been found among the documents shown by factory personnel.	
Suggested Plan of Action:	Complete fire department Pre-planning activities with the local Fire Service and Civil Defense.	
Suggested Deadline Date:	12 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:	1	
Description:	A housekeeping policy was available but it does not meet the requirements of Alliance Standards.	
Source of Findings:	Document Review: Housekeeping policy was found but not according to Alliance Standards.	
Suggested Plan of Action:	Establish written corporate policies on housekeeping to ensure scheduled cleaning for floor, wall, ceiling and supply. Promptly reschedule skipped cleanings. Provide a documented line of authority for authorizing a cleaning delay and rescheduling.	
Suggested Deadline Date:	24 Mar 2015	
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping	
		

Factory Name: **JAMUNA DENIM LTD (Washing & Garments Unit)**


Address: **Jarun, Konabari, Gazipur Gazipur Dhaka Bangladesh**

Assessor: **Bureau Veritas**

Date: **15 Jun 2014**



ALLIANCE
FOR BANGLADESH WORKER SAFETY

Question:	A hot-work permit program has been established.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	A hot-work permit program is found but not as per Alliance Standards.	
Source of Findings:	Document Review: A hot-work permit program was presented by the factory personnel.	
Suggested Plan of Action:	Develop a hot-work permit program that meets the requirements of NFPA 51B. 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 re-approval procedure, etc.	
Suggested Deadline Date:	30 Dec 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	