INITIAL FIRE SAFETY ASSESSMENT

Factory Name:	**SP GARMENTS LTD**
Address:	**Shirir Chala, Mahona, Babanipur, Vawalgor, Gazipur Sadar, Gazipur Gazipur Bangladesh**
Assessor:	**Uttaron Technologies**
Date:	**20 May 2017**

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:	SP GARMENTS LTD
Address:	Shirir Chala, Mahona, Babanipur, Vawalgor, Gazipur Sadar, Gazipur Gazipur Bangladesh
Country:	Bangladesh
Province:	
City:	Gazipur
Zip Code:	
Audit Duration:	1 Days 0 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	May 28 2017
Final Report Date:	May 29 2017
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 6 buildings in the complex, 2 main and 4 ancillary buildings.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	Main building: 5-stories.
Approximate Building Area (SF):	Total 176,325 SF (Each floor 35,265 SF)
Date of Building Construction:	2013-2015
Date of Last Building Renovation/Addition:	N/A
Ancillary Structures in Complex:	There are four ancillary structures in complex.
Approximate Ancillary Structures Area (SF):	Total Ancillary Area: 8,714 SF. 1) Boiler & Compressor: 3,950 SF; 2) Chemical storage: 1,560 SF; 3) Child care & Medical: 936 SF; 4) Biological unit: 2,268 SF.
Number of Occupants:	Total 600 (GF: 2, 1st: 90, 2nd: 508, 3rd: 0, 4th: 0)
Number of Ancillary Levels (Stories):	Single storied building
Occupancy Type:	G2
Construction Type:	Steel structured RCC
Height of Highest Occupied Floor Level Above Grade:	14.6 m (48 ft)

ASSESSMENT FINDINGS

Fire Protection Construction		
Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	No fire-resistive rated doors are provided at any exit enclosure on the 4th floor.	
Source of Findings:	Photograph: No door found at site during visit.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers and associated opening protection for exit enclosures in accordance with Alliance Standard Sections 4.5, 4.6, and 6.3.1.2. Consult a qualified fire protection engineer to design the required rated construction barrier and opening protection.	
Suggested Deadline Date:	31 Aug 2017	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are openings and penetrations through rated walls and/or assemblies protected?	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Opening space has been seen on each floor at stair case.	
Source of Findings:	Photograph: Opening space has been seen on each floor at stair case.	
Suggested Plan of Action:	Provide fire-resistive rated penetration protection for rated walls and assemblies in accordance with Alliance Standard Sections 4.6 and 4.7. Consult a qualified fire protection engineer to design the required penetration systems.	
Suggested Deadline Date:	31 Aug 2017	
Standard:	Includes doors, windows, ducts, piping, etc. Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	No separation was provided between storage area and production area. Location: 1st Floor	
Source of Findings:	Photograph: No separation	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers (with associated opening protection) between hazard types in accordance with Alliance Standard Sections 3.4 and 4.5. Consult a qualified fire protection engineer to design the required rated construction barrier.	
Suggested Deadline Date:	31 Oct 2017	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Certificates of Occupancy for each building have been issued and are on file.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No Certificates of occupancy were available during visit.	
Source of Findings:	Visual Assessment: Documents not found during visit.	
Suggested Plan of Action:	Apply to appropriate authority in an expeditious manner for issuance of the Certificates of Occupancy for each building and ancillary structure according to building use.	

Suggested Deadline Date:	16 Jul 2017
Standard:	Are certificates of occupancy provided for each building or ancillary structure?
Fire Protection Systems	
Question:	Is the building protected by an automatic sprinkler system?
Priority Level:	High
Non-Compliance Level:	3
Description:	An automatic sprinkler system is required for this building as it's a non-rated steel structure and each floor area is 35,265 SF.
Source of Findings:	Visual Assessment: An automatic sprinkler system is not found.
Suggested Plan of Action:	Install automatic fire sprinkler systems throughout the facility in accordance with Alliance Standards and NFPA 13. Develop shop drawings and hydraulic calculations, including all details as outlined in NFPA 13. All sprinkler system installations shall be submitted for review to the Alliance prior to commencement of installation. Manufacturing areas and storage less than 12 feet high is classified Ordinary Hazard (Group 2). Sprinkler systems should be designed to deliver 0.20 gpm/ft2 over the most remote 1500 square feet, 250 gpm hose allowance, 90 minute water supply duration. Acceptance testing of the installation shall be conducted in accordance Alliance Standard Section 5.3.4.
Suggested Deadline Date:	28 Feb 2018
Standard:	Reference Alliance Standards Part 3 Section 3.5.3 Existing Buildings, Part 5 Section 5.3 Automatic Sprinkler Systems and Section 6.13 Travel Distance
Question:	Does the building have a Standpipe System?
Priority Level:	High
Non-Compliance Level:	3
Description:	The standpipe system is not installed. No design documents have been prepared.
Source of Findings:	Visual Assessment: The standpipe system is not installed.
Suggested Plan of Action:	Install standpipe system at required locations in accordance with Alliance Standard Section 5.4 and NPFA 14. Standpipe system must comply with NFPA 14. The hydraulic calculations should be submitted and reviewed by Alliance prior to start of work. All standpipe system installation activities shall be submitted for reviewed by the Alliance prior to commencement of installation in accordance with Section 5.4.3.2.
Suggested Deadline Date:	31 Aug 2017
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2
Question:	Does the building have a fire pump?
Priority Level:	High
Non-Compliance Level:	3
Description:	Fire pump was not found in the factory during visit.
Source of Findings:	Visual Assessment: Fire pump not found in the factory during visit.
Suggested Plan of Action:	Install a dedicated fire pump for the facility in accordance with NFPA 20 to supply the demands of the connected fire protection systems along with a stored source of water sufficient to meet the demands in accordance with NFPA 22. Fire pump installation is to be tested for final acceptance in presence of Alliance and a final inspection of the installation shall be conducted by the Alliance prior to final acceptance of the installation by the Alliance as per clause 5.5.5. Acceptance testing of the installation shall be in accordance with NFPA 20, 22, and 25 testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance. The pump is to be connected to an alternative power source such as a generator. The generator is to be configured with an ATS (auto starter).
Suggested Deadline	31 Aug 2017

Date:		
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Trouble or alarm notifications were not indicated on the fire alarm control panel.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	No fire alarm control panel is installed in the building.	
Source of Findings:	Visual Assessment: No fire alarm control panel is installed in the building.	
Suggested Plan of Action:	Install an automatic fire alarm and detection system for the facility. System shall comply with the Alliance Standard and NFPA 72. Consult a qualified fire protection engineer and/or authorized fire alarm company to design and install the system. Prior to beginning any work, submit the design drawing for the fire alarm and detection system to the Alliance for review and approval.	
Suggested Deadline Date:	20 Dec 2017	
Standard:	Alliance Standard Part 13 Section 13.10 Maintenance of Fire Protection Equipment	
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	No fire alarm control panel is installed in the building.	
Source of Findings:	Visual Assessment: No fire alarm control panel is installed in the building.	
Suggested Plan of Action:	Install initiating devices and notification appliances as required by the Alliance Standard and NFPA 72. This includes electrical supervision of all valves controlling fire protection systems (sprinklers, fire pumps, water supplies, etc.). Connect devices to an automatic fire alarm and detection system for the facility. All fire alarm installations or modifications shall be documented with shop drawings and submitted for review by the Alliance prior to commencement of installation.	
Suggested Deadline Date:	31 Aug 2017	
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 fire department connections provided and clearly identified for the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Siamese connection not found during visit.	
Source of Findings:	Visual Assessment: Fire department connection not found.	
Suggested Plan of Action:	Provide Fire Department (Siamese) connections in accordance with Alliance Standard Section 5.5.4. Connections shall match the Fire Service and Civil Defence hose thread standard.	
Suggested Deadline Date:	30 Nov 2017	
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections	
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:	There is no fire alarm and detection system provided for the facility.	
Source of Findings:	Photograph: While there are devices installed, no central fire alarm control panel is provided for the facility.	

Suggested Plan of Action:	Install a new automatic fire alarm and detection system. Once installed, arrange for direct connection of the fire alarm and detection system to a central station monitoring service or the Fire Service and Civil Defence as per Alliance Standard Section 5.7.5. Until that time, a person trained to contact the Fire Service and Civil Defence in the event of fire alarm activation shall be provided. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.
Suggested Deadline Date:	20 Dec 2017
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring
Question:	Fire extinguishers are inspected, tested, and maintained as required.
Priority Level:	Medium
Non-Compliance Level:	1
Description:	The factory maintains an inspection and maintenance checklist for each extinguisher, but it is not in compliance with all elements of the standard.
Source of Findings:	Document Review: The factory maintains an inspection and maintenance checklist for each extinguisher which is need to update as per standard.
Suggested Plan of Action:	Establish an inspection, testing, and maintenance program for all fire extinguishers and prepare proper documentation. Program must comply with NFPA 10.
Suggested Deadline Date:	30 Nov 2017
Standard:	NFPA 10 Chapter 7
Means of Egress	
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:	No testing documents found during visit.
Source of Findings:	Document Review: No testing documents found during visit.
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for all egress lighting is verified at least once per year. If battery-operated lights are used, these lights shall be tested on a monthly basis. Functional testing of battery powered lights shall be provided for a minimum 30 min once per year.
Suggested Deadline Date:	30 Jun 2017
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting
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 testing documents found during visit.
Source of Findings:	Document Review: No testing documents found during visit.
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for exit signs is verified at least once per year. If battery-operated signs are used, these signs shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum 90 min once per year.
Suggested Deadline Date:	30 Jun 2017
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.

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:	2	
Description:	The required number of people are not trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.	
Source of Findings:	Document Review: Documents were not found.	
Suggested Plan of Action:	Provide training and certification for the required number of people (18% of total workers) in fire fighting, first aid, and rescue training by an appropriate authority in accordance with the Alliance Safety Training Curriculum.	
Suggested Deadline Date:	30 Nov 2017	
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:	Evacuation plan not provided at each floor.	
Source of Findings:	Visual Assessment: Evacuation plan not provided at each floor.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes all components required by the Alliance Standards and communicate the plan to all employees as per Alliance Standard Section 13.1.	
Suggested Deadline Date:	30 Jun 2017	
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:	3	
Description:	Emergency egress maps are not posted.	
Source of Findings:	Visual Assessment: Emergency egress maps are not posted.	
Suggested Plan of Action:	Create and post emergency egress maps at the entrance to each exit stair or main point of egress as per Alliance Standards Section 13.4.	
Suggested Deadline Date:	30 Jun 2017	
Standard:	Alliance Standards Part 13 Section 13.4 Evacuation Plan	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Training programs are not implemented or documented in accordance with Alliance Safety Training Curriculum.	
Source of Findings:	Visual Assessment: Documents were not found.	
Suggested Plan of Action:	Implement training programs and document in accordance with the Alliance Safety Training Curriculum.	
Suggested Deadline Date:	30 Jun 2017	
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 drill documents were not found.
Source of Findings:	Visual Assessment: Fire drill documents were not found.
Suggested Plan of Action:	Conduct fire drills on a quarterly basis as outlined in BNBC Part 4 Appendix A. Fire drills shall be conducted under the direction of a Fire Safety Director.
Suggested Deadline Date:	30 Jun 2017
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills
Question:	Fire Department pre-planning has been completed.
Priority Level:	Low
Non-Compliance Level:	1
Description:	No pre-planning documents were found on site.
Source of Findings:	Visual Assessment: No pre-planning documents were found on site.
Suggested Plan of Action:	Complete Fire Department pre-planning activities with the local Fire Service and Civil Defence in accordance with Alliance Standard Section 13.1.1(2).
Suggested Deadline Date:	30 Jun 2017
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director