INITIAL FIRE ASSESSMENT REPORT (FAR)

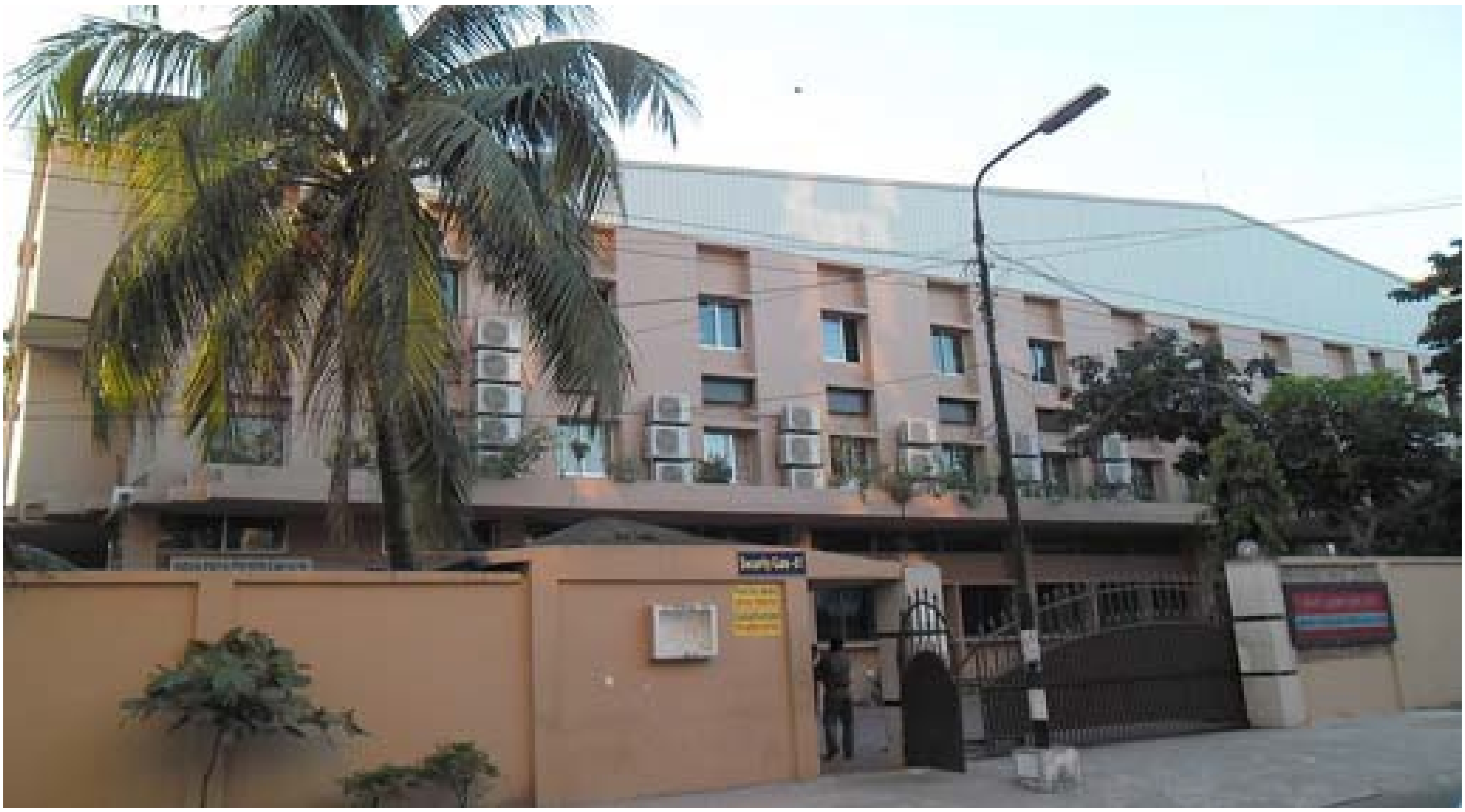
Factory Name:	**SMART JACKET (BD) LIMITED**
Address:	**Plot No - 11, 12 & 13, Roasd 5, Sector 1/A, CEPZ, Chittagong Chittagong Chittagong Bangladesh**
Assessor:	**Uttaron Technologies**
Date:	**02 Nov 2013**

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.

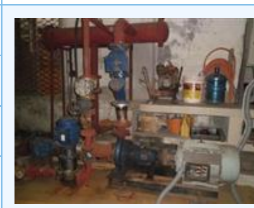


GENERAL INFORMATION

General Information	
Factory Name:	SMART JACKET (BD) LIMITED
Address:	Plot No - 11, 12 & 13, Roasd 5, Sector 1/A, CEPZ, Chittagong Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	4223
Audit Duration:	2 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	2 Nov 2013
Final Report Date:	Update once final report is complete (after all comments incorporated).
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	6 storied Factory building and two other small and Low rise adjacent buildings
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	6 stories
Approximate Building Area (SF):	Approximate floor area 456,580 SF (GF: 95,500 SF 1st FL: 72,216 SF 2nd FL: 72,216 SF 3rd FL: 72,216 SF 4th FL: 72,216SF 5th FL: 72,216 SF)
Date of Building Construction:	2012
Date of Last Building Renovation/Addition:	N/A
Ancillary Structures in Complex:	Ancillary Structures (office floor) with the main building 1st & 2nd floor steel structure.
Approximate Ancillary Structures Area (SF):	Approximate floor area 43,412 SF (GF: 14,473 SF 1st FL: 14,473 SF 2nd FL: 14,473 SF) with small building.
Number of Occupants:	At Building 1: 4850 persons in the whole factory (2000 at Ground floor, 2000 at 1st floor, 800 at 2nd floor). The maximum workers found 2000 at Gr. Floor & 1st Floor.
Number of Ancillary Levels (Stories):	3 stories
Occupancy Type:	G2
Construction Type:	All building are Type 1
Height of Highest Occupied Floor Level Above Grade:	55 FT

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:	Found numbers of Penetrations on the barrier walls and floor slabs used for gas lines and other utilities in all floors, which are sealed by using available materials	
Source of Findings:	Photograph: Found numbers of Penetrations on the barrier walls and floor slabs used for gas lines and other utilities in all floors, which are sealed by using available materials	
Suggested Plan of Action:	Provide fire-resistive rated penetration protection for penetrations in 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:	16 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 shafts provided with the minimum fire-resistance rating?	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	There are one Cargo lift and one passenger lift, lift shafts are 10 inch RCC wall having 5 hours fire resistance rating. Lift with doors are fabricated with non-rated materials surronded by RCC wall.	
Source of Findings:	Visual Assessment: Lift Door are not fire resistant construction.	
Suggested Plan of Action:	Provide fire-resistive rated opening protection for rated walls of the lifts in accordance with Alliance Standard Sections 4.6. Consult a qualified fire protection engineer to design the required opening protectives or penetration systems.	
Suggested Deadline Date:	15 Sep 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3	
Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	
Priority Level:	High	
Non-Compliance Level:		
Description:	Fire doors are not found in this factory.	
Source of Findings:	Visual Assessment: As seen on site	
Suggested Plan of Action:	Upgrade and seal the exit enclosures with fire rated barriers and / or assemblies, to meet the requirements of the location and the standard.	
Suggested Deadline	16 Oct 2014	

Date:		
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
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:	Trouble or alarm notifications not indicated as there is no Fire indication panel installed	
Source of Findings:	Visual Assessment: As seen on site	
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.	
Suggested Deadline Date:	16 Aug 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:	3	
Description:	Found Manual type Fire Alarm system with 1 no. sound device with break glass in front of every stair with emergency power supply	
Source of Findings:	Visual Assessment: As seen on site	
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 shall be submitted for review by the Alliance prior to commencement of installation.	
Suggested Deadline Date:	16 Oct 2014	
Standard:	Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices spaced appropriately based on occupancy type. Reference NFPA 72	
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Found 01 no. motor driven fire pump and 01 no. jockey pump. Flow capacity & pressure head of the pump not mentioned.	
Source of Findings:	Photograph: Fire pump.	
Suggested Plan of Action:	Bring current fire pump up to standard or install a dedicated fire pump for the facility in accordance with NFPA 20. Also, 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.	
Suggested Deadline Date:	31 Oct 2014	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Does the building have a Standpipe System?	
Priority Level:	High	
Non-Compliance Level:		
Description:	Not found.Found 8 Nos. 4 inch dia. GI pipe.	
Source of Findings:	Photograph: Not found.Found 8 Nos. 4 inch dia. GI pipe.	
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer. Standpipe system must comply with the requirements of NFPA 14.	
Suggested Deadline Date:	16 Oct 2014	
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2	
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Siamese connection is not found.	
Source of Findings:	Visual Assessment: As seen on site	
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:	16 Jan 2015	
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:	Fire extinguishers are inspected, tested, and maintained not as per NFPA 10.	
Source of Findings:	Visual Assessment: Fire extinguishers are inspected, tested, and maintained not as per NFPA 10.	
Suggested Plan of Action:	Establish an inspection, testing, and maintenance program for all fire extinguishers. Program must comply with the requirements of NFPA 10.	
Suggested Deadline Date:	15 Jan 2015	

Standard:	NFPA 10 Chapter 7	
Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Fire alarm and detection system is not monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense	
Source of Findings:	Visual Assessment: Fire alarm and detection system is not monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense	
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 Defense as per Alliance Standard Part 5 Section 5.7.5 Monitoring. Until that time that a central station monitoring service or direct connection to the Fire Service and Civil Defence can be set up, 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:	16 Aug 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Document not found during visit	
Source of Findings:	Visual Assessment: As seen on site	
Suggested Plan of Action:	Once a dedicated fire pump is installed, establish an inspection, testing, and maintenance program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline Date:	16 Jan 2015	
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps	
Question:	Are inspection, maintenance, and testing procedures of the standpipe and hose system documented and up to date? Including inspection and testing of hoses if provided.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Inspection, maintenance, and testing records not found.	
Source of Findings:	Visual Assessment: Document for standpipe ITM was not provide.	
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 25.	
Suggested Deadline Date:	15 Jan 2015	
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2	

Question:	Is signage for the standpipe system installed at required locations and on required components?
Priority Level:	Low
Non-Compliance Level:	1
Description:	No signage for the standpipe system installed at required locations and on required components.
Source of Findings:	Visual Assessment: Signage for the standpipe not found.
Suggested Plan of Action:	Once standpipe system is installed, install signage at required locations and on required equipment. Signage must comply with NFPA 14.
Suggested Deadline Date:	31 Jul 2014
Standard:	Reference NFPA 14 Chapter 6

Means of Egress

Question:	Occupant loads on each level (floor) do not exceed the capacity of the available means of egress.
Priority Level:	High
Non-Compliance Level:	3
Description:	4850 persons in the whole factory. The maximum workers found 2000 at Gr. Floor & 1st Floor. The calculated capacity of the means of egress considering the maximum number of workers is: 8 mm per person * 2000 = 16000 mm = 630 inch. 05 (five) nos. of stairs are found of width 127 inch, 124 inch, 72 inch, 120 inch & 55 inch in the means of egress. As per Alliance section 6.5.4. Total width of stairs are (127+124+72+120+55)= 498 inch. Aisles found minimum of 36" & 48" .
Source of Findings:	Visual Assessment: Additional stair required.
Suggested Plan of Action:	Reduce the occupant load to 1581 persons at Gr. Floor & 1st Floor or provide an additional stair of width =(630-498)=132 inch.
Suggested Deadline Date:	15 Jul 2014
Standard:	Alliance Standard Part 6 Section 6.4 Occupant Load
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:	Found doors are open in the working hour. The doors having locking provision.
Source of Findings:	Visual Assessment: The doors having locking provision.
Suggested Plan of Action:	Locking arrangement at the doors should be removed as per Alliance Standard.
Suggested Deadline Date:	31 Aug 2014
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates

Question:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Doors do not exist in the means of egress. Sliding gates made of sheet of 6 ft wide -2 nos., 10 ft. wide - 2 nos. & 4 ft. wide - 1 and all opening height 8 ft from floor level are found in the means of egress which are kept open for working time. No doors have required ratings.	
Source of Findings:	Photograph: Doors do not exist in the means of egress.	
Suggested Plan of Action:	Replaced all non- compliant doors and frames in the egress with side-swinging doors. Replacement doors shall be listed, approved, self –closing, fire rated door assemblies (door and frame) with latching panic hardware.	
Suggested Deadline Date:	15 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:		
Description:	Sliding gates made of sheet are installed in the means of egress.	
Source of Findings:	Photograph: Sliding gates made of sheet are installed in the means of egress.	
Suggested Plan of Action:	Replace non-compliant doors and frames in the means of egress with side-swinging doors. Replacement doors shall be a minimum width of 0.8 m (32 in), and are listed, approved, self-closing, fire rated doors assemblies (door and frame) with latching panic hardware.	
Suggested Deadline Date:	16 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:	3	
Description:	Handrails are provided on one side of each stairway. The largest stair width is found to be 127 inch.	
Source of Findings:	Visual Assessment: As seen on site	
Suggested Plan of Action:	Provide handrails on both sides of each stairway. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.).	
Suggested Deadline Date:	15 Jan 2015	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 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:		
Description:	Occupant loads were not posted for any assembly or the production floor in a conspicuous space, near the main point of egress.	
Source of Findings:	Visual Assessment: Occupant loads are not posted.	
Suggested Plan of Action:	Occupant load signage should be posted for every assembly and production floor, at a conspicuous space near the main exit or exit access doorway for the space.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load	
Fire Safety Programs		
Question:	Storage areas underneath the cutting tables are clear of combustibles.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Storage areas underneath the cutting tables are not clear.	
Source of Findings:	Visual Assessment: As seen on site	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables in accordance with Alliance Standard Section 13.7.2.	
Suggested Deadline Date:	15 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:		
Description:	The factory has not received the Alliance Safety Training Curriculum at the time of the assessment and has not conducted safety training curriculum per Alliance Standards Part 13.	
Source of Findings:	Visual Assessment: As seen on site	
Suggested Plan of Action:	Training programs need to be implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Suggested Deadline Date:	16 Aug 2014	
Standard:	Alliance Standards Part 13	
Question:	A Fire Safety Director position has been filled.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	A separate Fire Safety Director's position was not created or filled at the time of the audit.	
Source of Findings:	Visual Assessment: No fire safety director	

Suggested Plan of Action:	Create a Fire Safety Director position and fill the position with an individual that has had sufficient training to be able to carry the required duties.
Suggested Deadline Date:	16 Jan 2015
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director
Question:	Fire Department pre-planning has been completed.
Priority Level:	Low
Non-Compliance Level:	
Description:	Fire Department pre-planning has not been completed
Source of Findings:	Visual Assessment: As seen on site
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.
Suggested Deadline Date:	16 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:	
Description:	A written housekeeping policy was not established or enforced.
Source of Findings:	Visual Assessment: Housekeeping record not found
Suggested Plan of Action:	Produce, establish and enforce a written policy and procedure for housekeeping to ensure scheduled cleaning of all floors, walls, ceilings, air ventilation systems and other building components. Ensure the timely removal of defective, waste and rubbish materials is included. As a general rule the maximum tolerable deposit thickness for loose fluffy lint is 13 mm (½ in.) over a maximum of 46.5 m2 (500 ft2). Limit dense deposits to 6 mm (¼ in.) and oil saturated deposits to 3.2 mm (⅛ in.).
Suggested Deadline Date:	16 Apr 2015
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping
Question:	Smoking is only allowed at designated areas.
Priority Level:	Low
Non-Compliance Level:	
Description:	Smoking is prohibited according to their own notice but smoking policy not found.
Source of Findings:	Visual Assessment: As seen on site
Suggested Plan of Action:	Smoking shall be prohibited in any garment factory building, separate storage building, or any building or area where the Inspector of the Factories Rules (1.6.3.7) Part 53 requires that smoking be prohibited. If an Owner creates a designated smoking area outside the buildings, information on the location of these designated areas shall be posted on the signs required in 13.5.2.
Suggested Deadline Date:	15 Aug 2014

Standard:	Alliance Standards Part 13 Section 13.5 Smoking	