INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**SGWICUS (BD) LTD.**
Address:	**Plot # 73, 77~80, Dhaka EPZ, Ganakbari, Savar Savar Dhaka Bangladesh**
Assessor:	**BD Technologies**
Date:	**10 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:	SGWICUS (BD) LTD.
Address:	Plot # 73, 77~80, Dhaka EPZ, Ganakbari, Savar Savar Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Savar
Zip Code:	1349
Audit Duration:	8 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	26/04/2014
Final Report Date:	26/04/2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	• Building # 1 - 3 story R.C.C. factory building/ Production Building using as sewing, finishing, inspection, iron, fabric store etc., • Building # 2 - 4 story R.C.C. office building using as admin department, conference room, accessories store, others stores, child care etc., • Building # 3 - single story building using as generator room, • Ancillary Shed # 1 –single story shed using as wastage store.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	• Building # 1 - 3 story R.C.C. factory building/ Production Building level- 3, • Building # 2 - 4 story R.C.C. office building Level-4 • Building # 3 - single story building using as generator room, • Ancillary Shed # 1 – single story shed Level-1.
Approximate Building Area (SF):	Approximate Total Building Area = 2,45,000 sq ft.
Date of Building Construction:	Factory Building/ Production Building Construction date: 1997. Office Building Construction date: 2005.
Date of Last Building Renovation/Addition:	Date of Last Building Renovation/Addition: 2005 of factory building.
Ancillary Structures in Complex:	3(• Building # 1 -4 story R.C.C. office building Level-4 • Building # 2 - single story building using as generator room, • Ancillary Shed # 1 – single story shed Level-1).

Approximate Ancillary Structures Area (SF):	33,884 sq. ft.
Number of Occupants:	• Building # 1 - 3 story R.C.C. factory building/ Production Building (GF = 830, 1st floor = 800, 2nd floor = 30) and • Building # 2 - 4 story R.C.C. Office Building (GF = 10, 1st floor = 5, 2nd floor = 25, 3rd floor = empty). Total Occupants: 1,700.
Number of Ancillary Levels (Stories):	• Building # 1 - 3 story R.C.C. factory building/ Production Building level-3, • Building # 2 - 4 story R.C.C. Office Building level-4, • Building # 3 - single story generator room level-1, • Ancillary Shed # 1 – single story shed Level-1.

ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	2
Description:	Factory Building: 1. Wooden separation wall found within the ground floor exit of the fabric store; 2. Wooden door found in inspection room which is connected with main exit; Office Building: 1. Plywood separation found in the 1st floor store. 2. No fire doors are found in store rooms of ground floor and 1st floor.
Source of Findings:	Visual Assessment: According to visual assessment of this factory.
Suggested Plan of Action:	Factory Building: 1. Provide minimum 1 hr fire-resistive rated construction barriers at exit of ground floor fabric store of factory building. 2. Remove the wooden door and replace with minimum 1 hr fire rated construction wall. Office Building: 1. Need to remove the plywood separation of the store at 1st floor and replace plywood separation with minimum 2 hr fire rated construction wall; 2. Need to install minimum 1.5 hr fire rated door at store rooms of ground floor and 1st floor of office building. Alliance Standards- 4.5.4.1, 4.6, 4.5.7 Shafts. 4.5.7.1 & BNBC Part 4 Section 2.5.
Suggested Deadline Date:	07 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:	2
Description:	Factory building has a lift shaft.
Source of Findings:	Visual Assessment: Unenclosed lift shaft was observed.
Suggested Plan of Action:	Provide minimum 1-hr fire-resistance rated construction to protect the lift shaft of the factory building (Reference Alliance Standard Part 4 Section 4.5.7.1 Separation).
Suggested Deadline Date:	10 Oct 2014
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3
Question:	Occupancy Type

Priority Level:	
Non-Compliance Level:	
Description:	Occupancy Type: G2 (as per fire license and Occupancy Certificate).
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Provide Occupancy Type for each building and structure. Reference Alliance Standards Part 3 Use and Occupancy
Question:	Construction Type
Priority Level:	
Non-Compliance Level:	
Description:	Office building: Type-1 (according to visual assessment and structural document RC slabs thickness=177.8 mm and cover over reinforcement=25.4 mm, Brick wall thickness=250 mm and RC column thickness=400 mm x 400 mm) and Factory building: Type-2 (assume based on visual assessment).
Source of Findings:	
Suggested Plan of Action:	
Suggested Deadline Date:	
Standard:	Provide construction type for each building and ancillary structure. Reference Alliance Standards Table 3.3.1
Question:	Height of Highest Occupied Floor Level Above Grade
Priority Level:	
Non-Compliance Level:	
Description:	• Building # 1 -3 story R.C.C. factory building/ Production Building level-3 (height=29 ft), • Building # 2 -4 story R.C.C. Office Building level-4 (height=37 ft), • Building # 3 -single story generator room level-1 (Ground floor), • Ancillary Shed # 1 –single story shed Level-1 (Ground floor). Roof is not occupied.
Source of Findings:	Visual Assessment: According to visual assessment of this factory.
Suggested Plan of Action:	
Suggested Deadline	

Date:		
Standard:	Provide maximum height of highest occupied floor level above grade for each type of building and ancillary structure.	
Fire Protection Systems		
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Dedicated Fire pump is not available in this factory.	
Source of Findings:	Visual Assessment: According to visual assessment and management interview of this factory.	
Suggested Plan of Action:	Install a fire pump system according to NFPA 20 with a minimum pressure of 450 kPa (65 psi) at the hydraulically most remote hose connection. Also install water tanks according to NFPA 22 and underground water mains according to NFPA 24.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Pull stations are present but not in appropriate location. Visual devices found in factory.	
Source of Findings:	Visual Assessment: According to visual assessment of this factory.	
Suggested Plan of Action:	Provide pull stations at each egress points, smoke detectors in air handling equipment, visual and audible devices spaced appropriately based on occupancy type (Reference NFPA 72).	
Suggested Deadline Date:	30 Jul 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 Standpipe System?
Priority Level:	High
Non-Compliance Level:	2
Description:	Undersized hose connections are provided.
Source of Findings:	Visual Assessment: According to Visual Assessment of Stand pipe and hose connections of this factory.
Suggested Plan of Action:	Install a standpipe system for the factory and office building at required locations (class-I standpipe hose connection provisions for Fire Service & Civil defence at each of the stair cases on each occupied level and class-II hose connections at required location on each level) designed by a qualified fire protection engineer (alliance standard 5.4.2).
Suggested Deadline Date:	20 Aug 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:	3
Description:	Fire department connections are not provided.
Source of Findings:	Visual Assessment: According to visual assessment and management interview of this factory.
Suggested Plan of Action:	Install fire department connections for both factory and office building as per Alliance Standard. Connections shall match the Fire Service and Civil Defense hose thread standard. It will allow fire department pumper vehicles to draw water from ground -level or underground water storage tanks (Alliance Standard Part 5 Section 5.5.4 Fire Department Connections).
Suggested Deadline Date:	04 Dec 2014
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:	Fire alarm and detection systems (both manual and automatic) were not covered entire floor area and it was not monitored by a central station. They are stand alone type.

Source of Findings:	Visual Assessment: According to visual assessment of this factory.	
Suggested Plan of Action:	Install a new fire alarm and detection system. Once installed, arrange for direct connection of the system to a central station monitoring service or the Fire Service and Civil Defence 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 Defense 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:	10 Jun 2014	
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:	2	
Description:	Proper documents are not found, Onsite checklist found but register is not found.	
Source of Findings:	Document Review: According to documents review and management interview of this factory.	
Suggested Plan of Action:	Establish an inspection, testing, and maintenance program for all fire extinguishers and prepare proper documentation. Program must comply with the requirements of NFPA 10.	
Suggested Deadline Date:	10 Oct 2014	
Standard:	NFPA 10 Chapter 7	
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:	Documents are not found.	
Source of Findings:	Document Review: According to documents review and management interview of this factory.	
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:	10 Oct 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:	2
Description:	Signage is not installed according to the Alliance Standards.
Source of Findings:	Visual Assessment: According to visual assessment of this factory.
Suggested Plan of Action:	Once installation of new standpipe system is completed, provide proper signage per NFPA 14.
Suggested Deadline Date:	31 Jul 2014
Standard:	Reference NFPA 14 Chapter 6
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:	Doors are found open in the assessment period but locking devices found some of the doors.
Source of Findings:	Visual Assessment: According to visual assessment of this factory.
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at the noted locations.
Suggested Deadline Date:	06 Jul 2014
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates
Question:	Exterior exit stairs are separated from the building with the required rating. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure.
Priority Level:	High
Non-Compliance Level:	2
Description:	The rating of the exterior wall does not extend 3.05 m (10 ft) beyond the ends of the stair structure and has non-fire rated windows close to exterior exit stair.
Source of Findings:	Visual Assessment: According to visual assessment of this factory.

Suggested Plan of Action:	Provide exterior wall rating as required by the Alliance Standard. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure. Provide minimum 2 hr fire rated construction to replace windows in this location. The rated assembly should be approved or designed by a qualified fire protection engineer (Alliance Standard Part 6 Section 6.3.1.3.).
Suggested Deadline Date:	30 Jul 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:	Emergency power for exit signs is tested at least once per year. If battery operated, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Proper testing documentations are not found of Emergency power.
Source of Findings:	Document Review: According to documents review and management interview of this factory.
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for exit signs are tested at least once per year. If battery operated signs are used, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year (Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape).
Suggested Deadline Date:	05 Jun 2014
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.
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 on production floor in a conspicuous space near the main point of egress.
Source of Findings:	Visual Assessment: According to visual assessment of this factory.
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:	10 Jun 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:	Testing records of emergency power are not found in the factory.	
Source of Findings:	Document Review: According to documents review and management interview of this factory.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the operation of all exit signs are 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 90 min once per year (Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape).	
Suggested Deadline Date:	31 Jul 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	
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:	Handrails are provided on only one side of each stairway.	
Source of Findings:	Visual Assessment: According to visual assessment of this factory.	
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:	10 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	
Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Exit signs do not have appropriate illumination levels and contrasting graphics.	

Source of Findings:	Visual Assessment: According to visual assessment of this factory.	
Suggested Plan of Action:	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:	10 Oct 2014	
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	
Question:	Stairs are constructed of noncombustible materials.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Stairs are constructed of combustible (wood) materials in factory building.	
Source of Findings:	Visual Assessment: According to visual assessment and photography of this factory.	
Suggested Plan of Action:	Stairs must be constructed of noncombustible materials (Alliance Standard Part 6 Section 6.9 Stairs).	
Suggested Deadline Date:	20 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
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:	Stair name and the floor level indications are not found in each floor of factory and office building.	
Source of Findings:	Visual Assessment: According to visual assessment of this factory.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level at the noted locations (Alliance Standard Part 6 Section 6.9 Stairs).	
Suggested Deadline Date:	20 Jun 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Fire Safety Programs		
Question:	Are the required number of people trained and certified in fire fighting, first aid,	

	and rescue training by the appropriate authority.
Priority Level:	High
Non-Compliance Level:	3
Description:	As per factory management, some people are trained but not sufficient to meet the requirements of the Alliance Standard. There is no evidence of fire training, also certification corresponding to training was not found.
Source of Findings:	Visual Assessment: According to documents review, worker interview and management interview of this factory.
Suggested Plan of Action:	Need to provide training and certification for the required number of people in fire fighting, first aid, and rescue training by an appropriate authority in accordance with the Alliance Safety Training Curriculum (Alliance Standards Part 13).
Suggested Deadline Date:	10 Oct 2014
Standard:	Alliance Standard Part 13 Human Element Programs
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Some training programs are implemented but documents are not found.
Source of Findings:	Document Review: According to documents review, worker interview and management interview of this factory.
Suggested Plan of Action:	Training programs need to be implemented and documented in accordance with the Alliance Safety Training Curriculum (Alliance Standards Part 13).
Suggested Deadline Date:	30 May 2014
Standard:	Alliance Standards Part 13
Question:	A Fire Safety Director position has been filled.
Priority Level:	Low
Non-Compliance Level:	2
Description:	Fire Safety Director is not found.
Source of Findings:	Visual Assessment: According to visual assessment and management interview of this factory.
Suggested Plan of Action:	Create a Fire Safety Director position and fill the position with an individual that has sufficient training to be able to carry the required duties (Alliance

	Standards Part 13 Section 13.1 Fire Safety Director).	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	A hot-work permit program has been established.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	A hot-work permit program has not been established yet.	
Source of Findings:	Visual Assessment: According to documents review and management interview of this factory.	
Suggested Plan of Action:	According to Alliance Standard, Part-9, Section-9.1.7, develop a hot work permit program. The program must comply with the requirements of NFPA 51B. In general, this program should address process of request and approval authorities, necessary checks prior approval, standby fire watch and firefighting equipment, sounding of alarm procedure, duration and expiry of permit and re-approval procedure etc. (Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B).	
Suggested Deadline Date:	10 Oct 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	
Question:	A written housekeeping policy is established and enforced.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Documentations of housekeeping policy are not found.	
Source of Findings:	Document Review: According to documents review and management interview of this factory.	
Suggested Plan of Action:	Establish written corporate and plant policies on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings. Provide a documented line of authority for authorizing a cleaning delay and rescheduling. As a general rule the maximum tolerable deposit thickness for loose fluffy lint is 13 mm (½ in.) over a maximum of 46.5 m2 (500 ft2). Limit dense deposits to 6 mm (¼ in.) and oil saturated deposits to 3.2 mm (⅛ in.)Alliance Standards Part 13 Section 13.6 Housekeeping.	
Suggested Deadline Date:	30 Dec 2014	
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping	