INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**GREEN TEXTILE LIMITED (BANGLADESH)**
Address:	**Nijuri Bazar, Baraid 2, Madurai, Bhaluka Mymensingh Mymensingh Dhaka Bangladesh**
Assessor:	**Emkay Enterprises LTD**
Date:	**17 Nov 2015**

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:	GREEN TEXTILE LIMITED (BANGLADESH)
Address:	Nijuri Bazar, Baraid 2, Madurai, Bhaluka Mymensingh Mymensingh Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Mymensingh
Zip Code:	
Audit Duration:	1 Days 0 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	24 November 2015
Final Report Date:	To be filled out by the “Alliance QA” representative
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 3 buildings, 1 Main building and 2 Ancillary buildings.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	Main Building: 2-stories with mezzanine (G+M+1).
Approximate Building Area (SF):	Main Building: 129,412 SF (GF: 56,242 SF, Mezz: 16,090 SF, 1st: 57,080 SF).
Date of Building Construction:	All buildings: 2014-15
Date of Last Building Renovation/Addition:	None.
Ancillary Structures in Complex:	There are 2 ancillary structures.
Approximate Ancillary Structures Area (SF):	Total: 4,250 SF. 1) ETP: 2,935 SF; 2) Guard room: 1,315 SF.
Number of Occupants:	Total Occupants: 34. 1) Main building: 30 (GF: 30, Mezz: Vacant, 1st: Vacant under construction); 2) ETP: 2;

	3) Guard room: 2.
Number of Ancillary Levels (Stories):	Both structures are 1-story.
Occupancy Type:	G2, H2, F1, K & E4
Construction Type:	1) Main building: Type-1 (RCC frame) with non-rated steel shed on roof deck; 2) ETP: Type-1; 3) Guard room: Type-1 (Brick wall with RCC slab).
Height of Highest Occupied Floor Level Above Grade:	1) Main Building: Building Height: 14.60 m (47.9 ft), Highest Occupied Floor Height: 7.32 m (24 ft); 2) Ancillary Buildings: At grade.

ASSESSMENT FINDINGS

Expansion Details

Question:	Are as-built drawings available for new fire safety features of the building?
Priority Level:	High
Non-Compliance Level:	3
Description:	No fire separation drawings were available. As-built drawings of automatic fire alarm and addressable detection system of the building was available but the drawing does not encompass all the requirements of the Alliance Standard.
Source of Findings:	Document Review: No proper as-built drawings were available for new fire safety features (fire separation & detection system) of the building.
Suggested Plan of Action:	Prepare as-built drawings were for new fire safety features (fire separation & detection system) of the building.
Suggested Deadline Date:	03 Jun 2016
Standard:	Alliance Standard reference 8.20

Fire Protection Construction

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	3
Description:	The building is 2 stories, walls of stairwells were 5 inches & fire rated doors were installed in some exits leading to stairwells. Installation of fire rated doors was found to be on-going in exits leading to stairwells. Also fire door certificates were available.
Source of Findings:	Photograph: 1. Fire rated door in exit enclosure; 2. Fire door certificate.
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 and 4.6. Consult a qualified fire protection engineer to design the required rated construction barrier and opening protection.
Suggested Deadline Date:	11 Mar 2016
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation

Question:	Are shafts provided with the minimum fire-resistance rating?
Priority Level:	High
Non-Compliance Level:	3
Description:	Installation of lift was on-going in the shaft and the shaft opening was open with floors, but the opening was not protected by rated assemblies.
Source of Findings:	Photograph: Unprotected shaft opening.
Suggested Plan of Action:	Provide minimum 1-hour fire-resistive rated continuous barriers at shaft enclosures with 1-hour fire-resistive opening protection at shaft opening(s). Consult a qualified fire protection engineer to design the required rated construction of shaft.
Suggested Deadline Date:	11 Mar 2016
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3

Question:	Certificates of Occupancy for each building have been issued and are on file.
Priority Level:	Low
Non-Compliance Level:	1
Description:	Occupancy certificate for building was not available during this inspection, but the factory has applied to Public Works Department (PWD), Mymensingh, Bangladesh on 15 Nov 2015 for occupancy certificate.
Source of Findings:	Photograph: Application copy for occupancy certificate.
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:	29 Jan 2016
Standard:	Are certificates of occupancy provided for each building or ancillary structure?

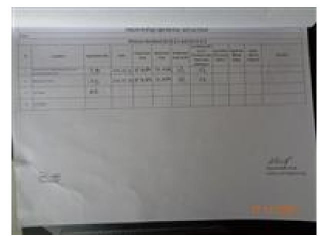
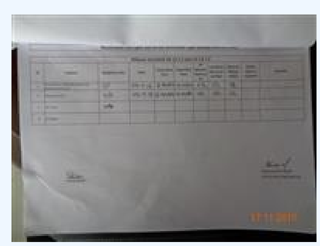

GREEN TEXTILE LIMITED

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 at egress points: Manual fire alarms are installed. Push type switches are used as fire alarm call points; Detectors: Installation of automatic fire alarm and addressable detection system was on-going in the factory premises, but the number of detectors was not sufficient; Audible and Visual devices: Visual alarm and audible devices are available.
Source of Findings:	Photograph: 1. Push switch as fire alarm call point; 2. Fire alarm control panel.
Suggested Plan of Action:	Install initiating devices and notification appliances as required by the Alliance Standard and NFPA 72. 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:	11 Mar 2016
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:	Trouble or alarm notifications were not indicated on the fire alarm control panel.
Priority Level:	High
Non-Compliance Level:	2
Description:	Installation of centralized detection system was on-going.
Source of Findings:	Visual Assessment: panel installation not complete yet.
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. 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:	15 Mar 2016
Standard:	Alliance Standard Part 13 Section 13.10 Maintenance of Fire Protection Equipment
Question:	Are portable fire extinguishers installed throughout the building at required locations and mounted at the correct height?
Priority Level:	Medium

Non-Compliance Level:	3	
Description:	Portable fire extinguishers were not installed throughout the whole building at required locations as the finishing work on the 1st floor of main building was on-going.	
Source of Findings:	Visual Assessment: No portable fire extinguishers were found at 1st floor of main building as the finishing work was on-going.	
Suggested Plan of Action:	Install fire extinguishers at locations and heights in accordance with BNBC Part 4 and NFPA 10.	
Suggested Deadline Date:	11 Mar 2016	
Standard:	BNBC Part 4 Section 4.10 and NFPA 10	
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:	Installation of centralized detection system was on-going. Also, a room was available for central station monitoring service.	
Source of Findings:	Visual Assessment: Installation of centralized detection system was on-going during the inspection.	
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:	15 Jan 2016	
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 & maintenance checklists with the monthly dates on each extinguisher, but not all of the requirements of NFPA 10 are being checked.	
Source of Findings:	Photograph: Inspection & maintenance checklists of extinguisher.	
Suggested Plan of	Establish an inspection, testing, and maintenance program for all fire	

Action:	extinguishers and prepare proper documentation. Program must comply with NFPA 10.	
Suggested Deadline Date:	03 Jun 2016	
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:	1	
Description:	It is recommended that currently installed Class-III standpipe system remain for added protection of the facility. Plan and record of inspection, testing and maintenance of the standpipe and hose system were not available.	
Source of Findings:	Visual Assessment: No plan or records found.	
Suggested Plan of Action:	Establish an inspection, testing, and maintenance program for the standpipe system. Program must comply with NFPA 25. Any newly installed standpipe system needs to be evaluated for compliance with the design pressure and flow demands of NFPA 14 or BNBC Section 5.4.3.	
Suggested Deadline Date:	15 Mar 2016	
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2	
Means of Egress		
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 were found on both sides of the stairs. East side stair width was measured to be 2.36 m (93 in), but no intermediate handrail was found.	
Source of Findings:	Photograph: No intermediate handrail.	
Suggested Plan of Action:	Provide intermediate handrail for stair as the width exceeds 2.2 m (87 in). Mount new handrail at a height consistent with existing height (between 30 in. and 44 in).	
Suggested Deadline Date:	03 Jun 2016	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	

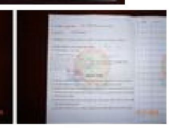
Question:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Occupant loads are not posted for any assembly or production floor areas in a conspicuous space near the main point of egress.	
Source of Findings:	Visual Assessment: No signage was found during this inspection.	
Suggested Plan of Action:	Post the occupant load for all assembly and production floor areas in a conspicuous space near the main exit or exit access doorway for the space in accordance with Alliance Standard Section 6.4.4.	
Suggested Deadline Date:	15 Jan 2016	
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:	1	
Description:	Testing and maintenance records were available for the emergency power for means of egress illumination, but does not encompass all the requirements of the Alliance Standard.	
Source of Findings:	Photograph: Testing records of means of egress illumination.	
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 90 min once per year.	
Suggested Deadline Date:	15 Jan 2016	
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:	1	

Description:	Testing and maintenance records for emergency power for exit sign was available, but does not encompass all the requirements of the Alliance Standard.
Source of Findings:	Photograph: Testing records of exit sign.
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:	15 Jan 2016
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.
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:	1
Description:	No stair designation signs were posted at any of the stairs.
Source of Findings:	Visual Assessment: No stair designation signs were posted at any of the stairs.
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level in both English and Bengali.
Suggested Deadline Date:	11 Mar 2016
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:	None of the workers have received fire safety training in firefighting, first aid or rescue training by the appropriate authority.
Source of Findings:	Document Review: No document was found during this assessment.
Suggested Plan of Action:	Provide training and certification for the required number of people (25% 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:	03 Jun 2016
Standard:	Alliance Standard Part 13 Human Element Programs

Question:	Are all applicable permits up to date including Fire License & Boiler License.
Priority Level:	Low
Non-Compliance Level:	3
Description:	Fire license: Valid up to 30 June 2016; Trade license: Valid up to 30 June 2016; Industry license: Valid up to 31 December 2015; Boiler license: One boiler, valid up to 14 April 2016; BERC License: Three generators were available. Capacity of generators were 800 KW. Waiver certificate was available for the capacity of 809.20 KW. Also applied for another BERC license for the capacity of 1.164 MW on dated 06 October 2015.
Source of Findings:	Photograph: 1. Industry license, 2. Fire license, 3. Boiler license, 4. Waiver certificate.
Suggested Plan of Action:	Collect and keep all applicable permits and licenses up to date, including BERC license from BERC.
Suggested Deadline Date:	29 Jan 2016
Standard:	Alliance Standard Part 13 Human Element Programs





Question:	Fire Department pre-planning has been completed.
Priority Level:	Low
Non-Compliance Level:	1
Description:	Fire Department per-planning has not been completed.
Source of Findings:	Document Review: No document was found during visit.
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:	15 Jan 2016
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director