## Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Anjuman Garments (Pvt.) Ltd.

Address of the Factory : Norshinghpur, Hazipara, Ashulia, Savar, Dhaka

Present Status of the Factory : Under Operation

Structural Assessment Conducted by : BUET

Date of Structural Inspection : 8<sup>th</sup> November 2014

### **BASIC INFORMATION:**

The factory building is a 2 storied RC structure and has reinforced concrete beam-column framing system structure. The following information was noted:

i. Building Usage Type : Garment factory

ii. Structural System : Beam-Column frame system

iii. Floor System : Edge supported RC slabs (Thickness not shown in the available

one sheet of drawing)

iv. Floor Area : Approximately 8500 sq.ft per floor

v. No. of Stories : 2 stories

vi. Construction Year : Approximately 2008 (as per verbal information)

vii. Foundation Type : Shallow footing (As per drawing)

viii. Design Drawings : One sheet of structural drawing (date not mentioned) is

available. The detail structural drawing is not available.

ix. Soil Investigation Report : Not available

x. Construction Materials : Reinforced Concrete (with brick chips)

xi. Generator : Outside of the building

### **RECOMMENDATIONS FOR CORRECTIVE ACTION:**

The recommendations of corrective action for both Structural and Fire & Electrical Safety comprises in Short Term, Mid Term and Long Term basis.

The recommendations for **Structural Safety** corrective action are:

Short Term (Immediate) : The factory owner has been instructed to prepare and submit a load plan

for vetting. As-built drawing needs to be prepared. Soil investigation at close vicinity of the building should be done as soil boring report is not

available.

Mid Term (6-weeks) : None Long Term (6-months) : None

The recommendations for **Fire & Electrical Safety** corrective action are:

Name of the Factory : Anjuman Garments (Pvt.) Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 4<sup>th</sup> November 2014

#### (A): Recommendations for Fire Safety corrective actions:

	Fire Safety Issues
Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):	

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Short Term (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity	Remove obstructions from all escape routes, aisles and passageways.
	Maintain minimum effective width of corridors, passageways and aisles.
	Remove all combustible materials from transformer, substation, boiler and generator room, if exists.
	Confirm adequate numbers of fire drills.
	Make sure that portable extinguishers are easily accessible, monitored and maintained at regular interval as per the Guidelines.
	Provide proper directional signs and exit signs in Bangla and English as per the Guidelines.
(The remedial works indicated must be carried out within a period of 6 weeks)	Prepare drawings to ensure adequate horizontal and vertical fire-rated separation inside one floor and between different floors, e.g. separation with stairways, storage, and work areas as per the Guidelines.
	Prepare plans to ensure all exit access doors are side-swinging type and open to the direction of traffic flow
	Also show methods to ensure proper separation of high risk areas (e.g., generator and substation rooms) as per the Guidelines.
	Provide design to install proper detection and alarm system. Prepare drawings to relocate and distribute the exits as remote as possible with regular interval.
	Produce drawings to demonstrate how stairways are to be made of adequate dimensions and appropriate specifications and to be converted into fire-rated enclosures equipped with fire-rated doors.
	Provide design to install proper detection and alarm system.
Long Term (The remedial works indicated must be carried out within a period of 6 months)	Ensure adequate horizontal and vertical fire-rated separation inside one floor and between different floors, e.g. separation with stairways, storage, offices, and work areas.
	Relocate and distribute the exits as remote as possible with regular interval at Alia Madrasa Road Factory.
	Ensure proper separation of high risk areas (e.g., generator, and substation rooms) as per the Guidelines.
	Install proper detection and alarm system.
	Provide fire rated enclosure, install self-closing fire rated door as per guidelines.

# (B): Recommendations for Electrical Safety corrective actions:

Electrical Safety Issues	
Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):	

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(Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity	Provide instructions for first aid and artificial respiration from exposure to electrical shock.  Provide cover on the cable trench and rubber mat in front of the panel.
	Ensure well-dressed cabling with lugs and remove loose cabling.
	Ensure earthing of panel body & door with fitted condition.
	Provide distribution board as per guideline and put identification mark on distribution panel.
Mid Term	Provide insulated conduit for electrical cables.
(The remedial works indicated must be carried out within a period of 6 weeks)	Provide new Emergency Lighting system.
Long Term (The remedial works indicated must be carried out within a period of 6 months)	N/A