INITIAL FIRE SAFETY ASSESSMENT

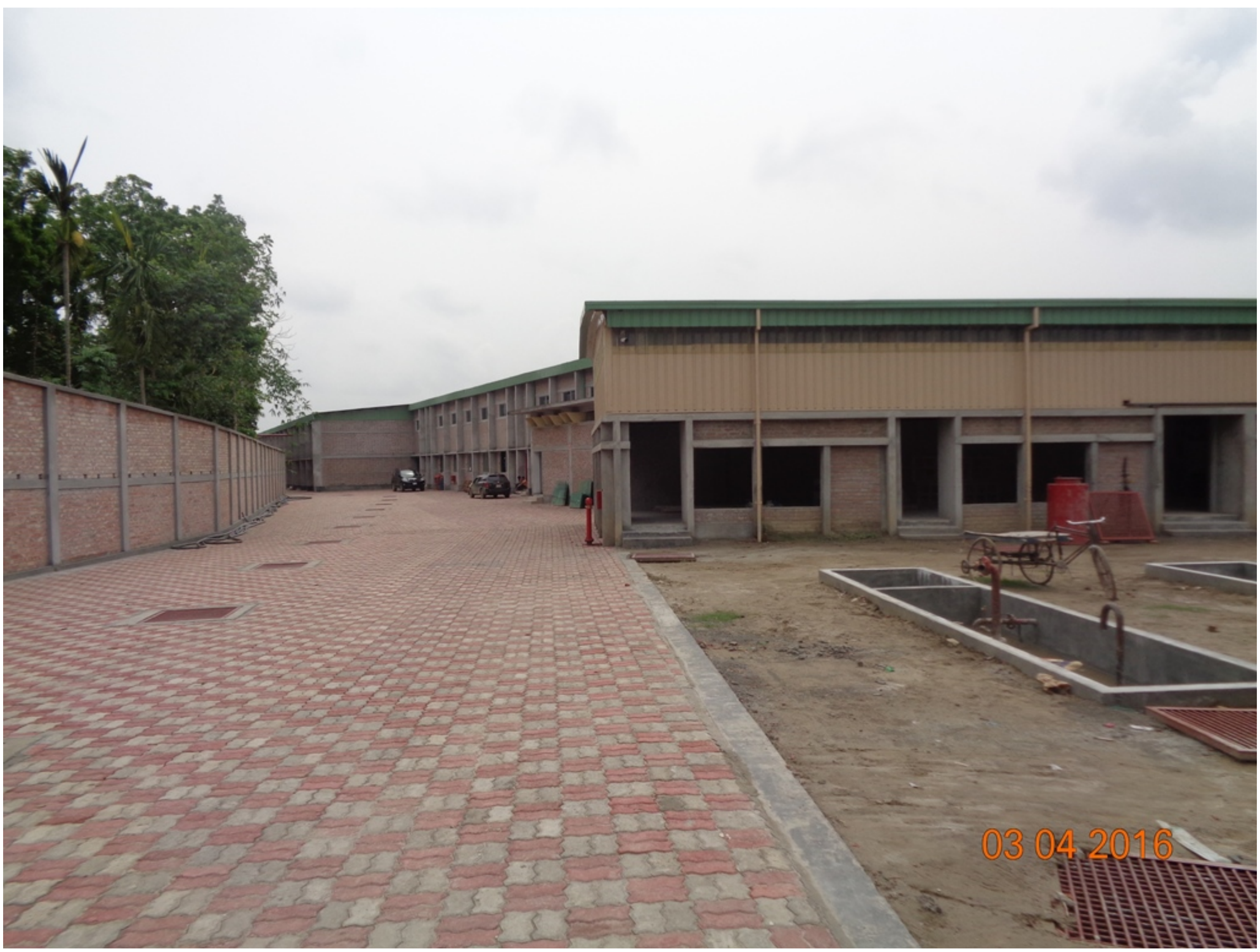
Factory Name:	**SAN Apparel Limited**
Address:	**Village Amtoil, PS- Sreepur, Dist. Magura, Jessore Magura, Jessore Khulna Bangladesh**
Assessor:	**Emkay Enterprises LTD**
Date:	**03 Apr 2016**

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.



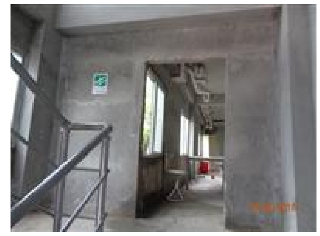
GENERAL INFORMATION

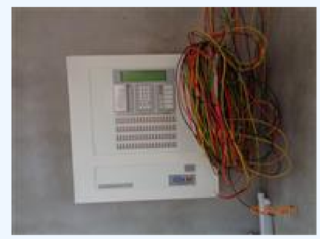
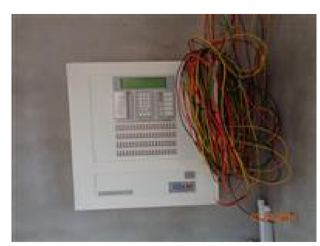
General Information	
Factory Name:	SAN Apparel Limited
Address:	Village Amtoil, PS- Sreepur, Dist. Magura, Jessore Magura, Jessore Khulna Bangladesh
Country:	Bangladesh
Province:	Khulna
City:	Magura, Jessore
Zip Code:	743263
Audit Duration:	1 Days 0 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05 April 2016
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 8 buildings, 1 main building and 7 Ancillary structures.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1-story
Approximate Building Area (SF):	Main building: 86,600 SF.
Date of Building Construction:	All buildings: 2015-16
Date of Last Building Renovation/Addition:	None
Ancillary Structures in Complex:	There are 7 ancillary structures.
Approximate Ancillary Structures Area (SF):	Total: 120,208 SF. 1. Compliance building: 42,230 SF; 2. Fabric storage: 44,036 SF (GF: 22,018 SF, 1st: 22,018 SF); 3. Finished goods & Canteen building: 23,392 SF (GF: 11,696 SF, 1st: 11,696 SF); 4. Generator building: 4,480 SF; 5. Boiler building: 4,470 SF; 6. Spare Machine Storage: 1,000 SF; 7. Fire Pump Room: 600 SF.

Number of Occupants:	Total Occupants: 398. 1. Main building: 384; 2. Compliance building: 2; 3. Fabric storage: 2 (GF: 2, 1st: 0); 4. Finished goods & Canteen building: 2; 5. Generator building: 3; 6. Boiler building: 5; 7. Spare Machine Storage: 0; 8. Fire Pump Room: 0.
Number of Ancillary Levels (Stories):	1. Fabric storage: 2-stories; 2. Finished goods & Canteen building: 2-stories; 3. all other ancillary buildings: 1-story.
Occupancy Type:	1. Main building: G2 & F1; 2. Compliance building: B2, D1 & E4; 3. Fabric storage: H2 & F1; 4. Finished goods & Canteen building: H2 & E2; 5. Generator building: K; 6. Boiler building: K & F1; 7. Spare Machine Storage: H1; 8. Fire Pump Room: K.
Construction Type:	1. Main building: Non-rated (Prefabricated steel shed); 2. Compliance building: Non-rated (Prefabricated steel shed); 3. Fabric storage: Type-1 (RCC Frame) & Non-rated (Prefabricated steel building); 4. Finished goods & Canteen building: Type-1 (RCC Frame) & Non-rated (Prefabricated steel building); 5. Generator building: Non-rated (Prefabricated steel shed); 6. Boiler building: Non-rated (Prefabricated steel shed); 7. Spare Machine Storage: Non-rated (Prefabricated steel shed); 8. Fire Pump Room: Type-1 (RCC Frame).
Height of Highest Occupied Floor Level Above Grade:	1. Fabric storage: 6.40 m (21 ft); 2. Finished goods & Canteen building: 6.40 m (21 ft); 3. All other buildings: at grade.

ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Exits were not fully protected by continuous fire rated assemblies. The buildings were 2 stories, walls of all stairwell were 5 inches and 10 inches and installation of fire doors was on-going in the exits leading to this stairwells. Also, some exits were open leading to this stairwells.	
Source of Findings:	Photograph: Unprotected exit leading to this stairwell., Visual Assessment: Installation of fire doors were on-going during the inspection.	
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:	16 Oct 2016	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Boiler room was not properly separated from Vacuum area and maintenance room on ground floor of boiler building.	
Source of Findings:	Photograph: Unprotected boiler room.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers 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:	16 Oct 2016	
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	

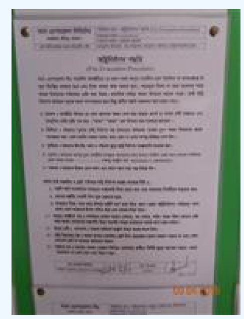
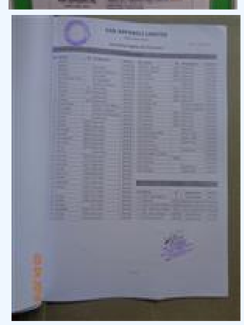
Non-Compliance Level:	1	
Description:	Occupancy certificate for buildings were not available during this inspection.	
Source of Findings:	Document Review: No occupancy certificate was found during this inspection.	
Suggested Plan of Action:	Apply to appropriate authority in an expeditious manner for issuance of the Certificates of Occupancy for each building and ancillary structure according to building use.	
Suggested Deadline Date:	12 Jun 2016	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
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; Detector Heads: Installation of automatic fire alarm with addressable detection system is on-going in the factory premises; Audible and Visual devices: Visual alarm and audible devices are available.	
Source of Findings:	Photograph: Fire Control Panel.	
Suggested Plan of Action:	Modify and 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 submitted for review by the Alliance prior to commencement of installation.	
Suggested Deadline Date:	24 Jul 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:	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 automatic fire alarm with addressable detection system is on-going in the factory premises. Control Panels of fire alarm and detection system will be located in the security room. This panel will be monitored by security.	

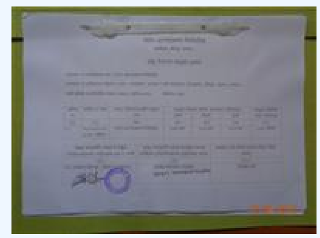
Source of Findings:	Photograph: Fire control Panel.	
Suggested Plan of Action:	Submit drawings for the fire alarm installation to the Alliance for review. Complete installation of automatic fire detection and alarm system throughout the factory. Until that time a central station monitoring service or direct connection to the Fire Service and Civil Defence can be set up; a person needs to be assigned to contact the fire department in the event of fire alarm activation. An annunciator needs to be located in a constantly attended location to alert this person. Trouble or alarm notifications shall be indicated on the fire alarm control panel.	
Suggested Deadline Date:	29 May 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:	2	
Description:	Only the inspection checklists with the monthly dates on each extinguisher were being verified. Not all of the requirements of NFPA 10 were being checked.	
Source of Findings:	Photograph: Inspection check list of extinguisher.	
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:	16 Oct 2016	
Standard:	NFPA 10 Chapter 7	
Means of Egress		
Question:	Aisles are provided with the minimum unobstructed clear width of 0.9 m (36 in) based on occupant loads.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	1. Marking of aisles was wrong in some locations of main building. 2. No aisles marking was available in fabric storage and finished goods storage building during the inspection.	
Source of Findings:	Visual Assessment: 1. Marking of aisles was wrong in some locations of main building. 2. No aisles marking was available in fabric store and finished goods store building during the inspection.	
Suggested Plan of Action:	Provide proper aisle width (clear width minimum 36 in.) and marking. Keep aisles free of storage. Relocate the items or equipment if necessary to provide proper width. The path of egress travel along a means of egress shall not be	

	interrupted by any obstruction. The capacity of the means of egress shall not be reduced along the path of travel.	
Suggested Deadline Date:	29 May 2016	
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
Question:	Exit discharge is directly to the exterior of the building, unless the requirements of 6.17.2 are met, at grade or provides direct access to grade. Exit discharge shall not reenter a building.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Some exits on the south side of main building discharge outside of the building through an egress court. The width of egress court was measured to be approximately 7.5 ft & 8.5 ft, but egress route was not protected as per Alliance standard.	
Source of Findings:	Photograph: Unprotected egress court.	
Suggested Plan of Action:	Provide an Egress Court in accordance with Alliance Standard Section 6.17.2 for non-compliant arrangements. Consult a qualified fire protection engineer to design and/or approve the required egress court.	
Suggested Deadline Date:	16 Oct 2016	
Standard:	Alliance Standard Part 6 Section 6.17 Exit Discharge. See Section 16.7.2 and 16.7.3 for exceptions.	
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:	The minimum width door opening was measured to be more than 0.8 m (32 in) along the path of egress, but all the exit doors leading to stairwells were open.	
Source of Findings:	Photograph: Open exit along the stairwell.	
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 1.0 m (39 in), and are listed, approved, self-closing, fire rated door assemblies (door and frame) with latching panic hardware where required.	
Suggested Deadline Date:	16 Oct 2016	
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:	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:	3	
Description:	An exterior steel stair was installed at Middle-East side of the fabric storage building. Fire-resistive rated assembly between the exterior exit stair and the building was not provided.	
Source of Findings:	Photograph: Unprotected exterior exit stair.	
Suggested Plan of Action:	Provide a fire-resistive rated assembly between the exterior exit stairs (and 10 ft beyond the ends of the stairs) and the building to achieve the required separation. Enclose any openings (windows, etc.) with required fire rated construction within that 10 ft wall section. The rated assembly should be designed and/or approved by a qualified fire protection engineer.	
Suggested Deadline Date:	16 Oct 2016	
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:	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:	3	
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: No signage was found during this inspection.	
Suggested Plan of Action:	Post the occupant load for every assembly and production floor in a conspicuous space near the main exit or exit access doorway for the space.	
Suggested Deadline Date:	29 May 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:	3	
Description:	No testing plan or records were available during visit.	

Source of Findings:	Document Review: No testing plan or records were available 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:	29 May 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:	3	
Description:	No testing plan or records were available during this inspection.	
Source of Findings:	Document Review: No document was shown during inspection.	
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:	29 May 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:	3	
Description:	Stair designation signs were posted but posting location and components of sign were not as per Alliance standard.	
Source of Findings:	Photograph: Stair designation sign.	
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:	24 Jul 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:	398 workers have been trained from Fire Service and Civil Defence out of 398 workers but the certificate has not been received yet.	
Source of Findings:	Document Review: Workers have been trained from Fire Service and Civil Defence.	
Suggested Plan of Action:	Arrange for certification certificates 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.	
Suggested Deadline Date:	16 Oct 2016	
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:	An emergency evacuation plan has been developed and communicated to all employees but it does not encompass all the requirements as per Alliance Standard.	
Source of Findings:	Photograph: 1. Emergency evacuation policy; 2. List of fire fighter & first aid team.	
Suggested Plan of Action:	Develop an emergency evacuation plan in accordance with the Alliance Standard and communicate the plan to all employees.	
Suggested Deadline Date:	29 May 2016	
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:	No emergency egress maps were posted at the entrance to each exit stair or	

	main point of egress.	
Source of Findings:	Visual Assessment: No emergency egress maps were noticed during the inspection.	
Suggested Plan of Action:	Create and post emergency evacuation maps at the entrance to each stair or main point of egress.	
Suggested Deadline Date:	29 May 2016	
Standard:	Alliance Standards Part 13 Section 13.4 Evacuation Plan	
Question:	Fire Drills are conducted at required intervals based on building use type.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Fire drills were conducted on a monthly basis but not as per the all requirements of BNBC Part 4 Appendix A.	
Source of Findings:	Photograph: Documentation of fire drills.	
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:	29 May 2016	
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	3	
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:	Document Review: No document was shown during inspection.	
Suggested Plan of Action:	Implement training programs and document in accordance with the Alliance Safety Training Curriculum.	
Suggested Deadline Date:	16 Oct 2016	
Standard:	Alliance Standards Part 13	
Question:	Fire Department pre-planning has been completed.	
Priority Level:	Low	

Non-Compliance Level:	3
Description:	Fire Department pre-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:	29 May 2016
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:	3
Description:	A written housekeeping policy was not established or enforced.
Source of Findings:	Document Review: No written housekeeping policy was found.
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.
Suggested Deadline Date:	16 Oct 2016
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping
Question:	A hot-work permit program has been established.
Priority Level:	Low
Non-Compliance Level:	3
Description:	No hot-work permit program has been established. During inspection no hot work operation was ongoing in the facility.
Source of Findings:	Document Review: No document was shown during inspection.
Suggested Plan of Action:	Develop a hot work permit program. The program must comply with the requirements of NFPA 51B.
Suggested Deadline Date:	29 May 2016
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B

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 Dec 2017; Boiler license: Two boiler was available, Applied for license on 10 March 2016; Waiver certificate: There were two generators of capacity 1000 KW. Applied to BERC on 13 March 2016 for waiver certificate for the capacity of 400 KW.
Source of Findings:	Photograph: 1. Fire license; 2. Trade license; 3. Industry license.
Suggested Plan of Action:	Collect all applicable permits and licenses kept up to date including boiler license and BERC license from BERC.
Suggested Deadline Date:	29 May 2016
Standard:	Alliance Standard Part 13 Human Element Programs