

INITIAL FIRE SAFETY INSPECTION REPORT

Far East Knitting & Dyeing Industries Ltd (Extension 2)

RSC ID: 24859

ADDRESS: Chandona, Thana-Kaliakoir, Gazipur

Other Factories: Far East Knitting & Dyeing Industries Ltd(9441) & Far East Knitting & Dyeing Industries Ltd - Building 3 & 4 - (22919)



Inspected By: Ahammad Kabir & Md. Anisuzzaman

Date: 15th January 2024

Fire Safety Inspection Report

Far East Knitting & Dyeing Industries Ltd (Extension 2)

Introduction:

Far East Knitting & Dyeing Industries Ltd (Extension 2); complex was surveyed for fire safety on 15/01/2024 by The RSC Inspection Team. The purpose of the survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the RSC. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The inspection did not include identification of minor deficiencies, which will be further addressed as part of follow-up inspections.

Limitations

The information in this fire safety inspection report was obtained during a visit to the facility and during interviews with local factory management. It has not been possible to provide independent verification for all the information and data collected, and, therefore, The RSC cannot accept general responsibility for omissions or errors arising from inaccuracies in this report from the information obtained.

The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations as stated in this report will eliminate all hazards, risks or exposures or that hazards, risks or exposures not referred to in this report do not exist. Compliance with the findings and recommendations stated in this report does not relieve the factory owner from obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

General Factory Information

Factory Building name(s): Factory Building name(s): There are 16 structure under this ID-24859 which are listed below:

1. Building #3 (Mosque building), 2-Storeied RCC Structure(Construction: May- 2023 to Septembe-2023 & Occupied: August -2023. Total area= 1369 SQM, Design approved by Kaliakair Paurashava on date 8/05/2023, New construction).
2. Building # 07(Coling Tower Building), Single storied RCC building(Construction: June-2010 to December-2010 & Occupied: January -2011. Total area=37 SQM, Design approved by Kaliakair Paurashava on date 13/05/2019, Existing construction)
3. Building #21 (Slitting), Single storied Steel Structure(Construction: August- 2021 to December-2021 & Occupied: December -2021. Total area=62 SQM, Design approved by Kaliakair Paurashava on date 8/05/2023, New construction).
4. Building # 17(New Dyeing Building) ,6-Storeied RCC Structure(Construction: April- 2021 to April-2023 & Occupied: May-2023. Total area=3585 SQM, Design approved by Kaliakair Paurashava on date 8/05/2023, New construction)
5. Building # 24(Stenter Shed), Single storied Steel Structure (Construction: January-2022 to June-2022 & Occupied: December -2022, total area=140 SQM, Design approved by Kaliakair Paurashava on date 8/05/2023, New construction).
6. Building # 28 (Skynet Building), 7-Storeied RCC Structure(Construction: 1st phase: June-2013 to June 2015 & 2nd pashe: December 2018 to January-2023 and Occupied: Jan-2024. Total area=8884 SQM, Design approved by Kaliakair Paurashava on date 11/05/2013, Interim construction).
7. Building # 29 (Bonded Warehouse Building), Two storied steel structure (Construction: January-2019 to October-2019 & Occupied: December-2019. Total area: 736 SQM, Design approved by Kaliakair Paurashava on date 8/06/2023, New construction).
8. Building # 30 (Utility Building), Single storied RCC Structure(Construction: June-2020 to October-2020 & Occupied: January -2021. Total area:187 SQM, Design approved by Kaliakair Paurashava on date 8/05/2023, New construction).
9. Building #32 (Kitchen building), Two Storeied RCC Structure(Construction: June-2020 to July-2021 & Occupied: October-2021. Total area=280 SQM, Design approved by Kaliakair Paurashava on date 8/05/2023, New construction).
10. Building #33 (REB building), 4 -storied RCC Structure(Construction: June-2020 to July-2021 & Occupied: October-2021. Total area=540 SQM, Design approved by Kaliakair Paurashava on date June 2019, Interim construction).

11. Building #35 (Fair Shop building), Single storied RCC Structure(Construction: July-2023 to September-2023 & Occupied: September-2023, total area=84 SQM.
12. Building #14 (New ETP Building), 3-storied RCC structure(Construction: June-2016 to June -2018 & Occupied: January-2019. Total area=1312 SQM.
13. Building #15 (RMS Room), Single storied shed(Construction: Jan- 1996 to Feb- 1996 & Occupied: Mar -1996. Total area= 20 SQM, Existing Construction.)
14. Building #22 (Fire Pump room), Single storied shed(Construction: August- 2016 to Jan- 2018 & Occupied: Feb -2018. Total area: 90 SQM, Interim Construction)
15. Building #23 (Wastage Shed), Single storied shed(Construction: June- 2019 to Dec- 2019 & occupied: Jan- 2020. Total area= 90 SQM.
16. Building #31 (Security Shed), Single storied shed(Construction: June -2023 to July- 2023 & Occupied: July -2023. Total area= 15 SQM, New construction)

Factory Address:Chandona, Thana-Kaliakoir, Gazipur

Points of contact:

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Findings & Recommendations :

Table 1-3 summarizes the fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline.

An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for approval

Table-1: Finding & recommendation for building#28

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Through PVC pipe of toilet at building # 28	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's datasheet. Or Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months
 				

F-2	Fire rated construction	The Dining area(E4) is not separated by fire rated construction with the adjacent production occupancies(store & office area) Location: Basement & 3rd floor of the building # 28	Separate the dining area from production & other occupancies(office area & store) by minimum 3-hr fire rated construction. Provide rated exit passageways leading directly to the exit stairs of the same resistance rating.	Within 3 months
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F-3	Fire Rated Construction	Elevator shafts are directly open into the inside of exit enclosure. Location: Exit stair-1 of the building # 28	Modify the elevator shaft as per RSC Technical Guideline (Standard) V1-6.14.3. An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure. So, ensure the lift shaft is 2-hr fire rated including opening protection with similar rating.	Within 3 months
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F-4	Fire rated construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: 1st & 2nd floor of building # 28	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m² and is separated by a minimum 3.0 m (10ft) from other storage areas and they do not exceed 10 percent of the building area of the story in which they occur. If sprinkler protected, Maximum height 12 ft (3.66 m) and maximum area of 1000 ft² (93 m²) and separated by a at least 25 ft (7.62 m) from other storage areas and does not constitute more than 10 percent of the building area or 4000 ft² (372 m²) of the sprinklered area, whichever is greater. or, Enclose the storage area from the surrounding occupancy with a minimum 1 hour fire rated construction.	Within 3 months
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F-5	Fire Rated Construction	Chemical store room is not properly separated due to unprotected opening & penetrations. Location: Near to building # 28	Separate the chemical storage room by 4-hr fire rated construction. Seal all penetrations and protect the openings to maintain the required fire separations. Keep 16-points MSDS of all chemicals in the storage area. ** As per BNBC, chemical storage room will be Type-1 construction. Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline	Within 3months
				

F-6	Fire Rated Construction	Store room directly open into exit stair enclosure. Location: Basement, 4th, 5th & 6th floor of building # 28	Openings from exit enclosure to storage spaces shall be provided with a vestibule with fire rated construction as per RSC Technical Guideline (Standard) V1-6.14.3 . Provide a 1.5-hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
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F-7	Fire Rated Construction	The factory is using/storing liquified gas cylinders without proper separations Location: Near to building#24(stenter shed)	The factory shall follow TECHNICAL GUIDANCE NOTE FOR USE OF LIQUIFIED OR COMPRESSED FLAMMABLE GAS IN THE FACTORY PREMISES. LPG/CNG cylinders are permitted to be stored in a separate dedicated building on the factory premises within its boundaries if the building meets the following conditions. 1. The storage building must be at least 3 meters away from any other building and boundaries. 2. The exterior walls of the building must have a fire resistance rating of 3 hours using noncombustible construction. 3. Doors and other openings in the exterior walls must be protected with suitable closing devices having a fire protection rating of 3 hours. 4. The building is to be used for no other purpose than the storage of LPG/CNG cylinders. 5. The building must be mechanically ventilated to control the accumulation of flammable vapors. 6. The installations must be approved and accepted by the requirements of the AHJ, Gas supply company regulations, manufacturers/supplier's instructions/guidance, Chief Inspector of Boiler (CIOB) and Chief Inspector of Explosives Bangladesh (CIEB).	Within 3 months
 				

F-8	Mean of Egress	The exit discharge path (Egress Court) was less than 10 ft wide and was not separated from the building interior. Location: west side of (exit stair-2) of the building # 28	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft. to provide a minimum 2-hr fire separation.	Within 3 months
				
F-9	Mean of Egress	Walking surface were not found level from exit discharge of north stair and is not protected from slip or tripling hazard.	Provide an level walking surface in exit discharge in accordance with 6.3.4 of RSC Technical Guidelines (Standard).	Within 3 months



F-10	Mean of Egress	The exit stairs are not separated from [work areas, other spaces] on each floor by fire rated construction due to non functional fire doors. Location: Building # 28	The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes opening protection. The clearance under the bottom of a fire door shall be a maximum of 19mm. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system. Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC Technical Guideline (Standard) V1 6.8.3.1.	Within 3 months
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F-11	Means of Egress	Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch). Open guards intermediate rails or pattern is not as per standard. Location: Building # 28	Provide parapets or guards with a minimum height of 1067mm (42 inch.). Open guards shall have intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34 in.)	Within 3 months
				
F-12	Means of Egress	Building did not have stair designation signs & exit designation signs at required locations. Location: Building # 28	Provide stair designation sign & exit designation sign at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. Signs shall be posted adjacent to the door.	Within 1 month

F-13	Means of Egress	Building did not have occupant load signs at required locations. Location: Building # 28	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.	Within 1 month
F-14	Means of egress	Collapsible gates/sliding doors are provided at building exits. Location: Building # 28	Replace all collapsible gates/ sliding doors/ rolling shutter doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize specialized door locking features complying with NFPA 101.	Within 1 month



F-15	Mean of Egress	Updated fire evacuation maps is not posted at the entrance of all exit stair. Location: Building # 28	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-16	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: Building # 28	Illuminated directional signs shall be provided where there is a change in the direction for the path of travel and the direction to an exit is not obvious.	Within 1 month
F-17	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes . Location: Building # 28	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 3 months

F-18	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 1 month and modification within 3 months (If require).
				
F-19	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 Month after modification(If require).

F-20	Fire Protection System(Standpipe & Sprinkler)	Standpipe system installation requires detailed review to confirm compliance with NFPA- 14 , 20, 22 & 24 or as per RSC standard. Location: Building # 28	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install and modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA- 14, 20, 22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 1 month and modification within 3 months (If require).
		 		
F-21	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after modification(If require).
F-22	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the fire pump system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after modification(If require).

F-23	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per RSC standard.	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per RSC standard.	Within 3 months
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Table-2: Finding & recommendation for building-17

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-24	Fire rated Construction	Chemical store room is not properly separated due to unprotected opening & penetrations. Location: Near to building # 17	Separate the chemical storage room by 4-hr fire rated construction. Seal all penetrations and protect the openings to maintain the required fire separations. Keep 16-points MSDS of all chemicals in the storage area. ** As per BNBC, chemical storage room will be Type-1 construction. Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline.	Within 3 months
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F-25	Fire rated construction	Unprotected opening has been observed on the exterior wall between 2nd floor of building 2 and 1st floor of the building 17. Location: Building # 17	Provide fire rated separation at the exterior wall by 2 hour according to table 3.3.1 (a) of BNBC 2020.	Within 3 months



F-26	Fire Rated Construction	Elevator shafts are directly open into the inside of exit enclosure. Location: Exit stair-1 of the building -17	Modify the elevator shaft as per RSC Technical Guideline (Standard) V1-6.14.3. An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure. So, ensure the lift shaft is 2-hr fire rated including opening protection with similar rating.	Within 3 months
				

F-27	Fire rated construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: Several floors of building # 17	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m² and is separated by a minimum 3.0 m (10ft) from other storage areas and they do not exceed 10 percent of the building area of the story in which they occur. If sprinkler protected, Maximum height 12 ft (3.66 m) and maximum area of 1000 ft² (93 m²) and separated by a at least 25 ft (7.62 m) from other storage areas and does not constitute more than 10 percent of the building area or 4000 ft² (372 m²) of the sprinklered area, whichever is greater. or, Enclose the storage area from the surrounding occupancy with a minimum 1 hour fire rated construction.	Within 3 months
 				

F-28	Mean of Egress	The exit stairs are not separated from [work areas, other spaces] on each floor by fire rated construction due to power cable & damage with non functional fire doors. Location: Building #17	The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes opening protection. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system. No other penetration into and through the exit enclosure except for fire alarm equipment electrical raceway, required exit doors, sprinkler piping, standpipes, and electrical conduit serving the exit enclosure is permitted as per RSC Technical Guideline (Standard) V1-6.14.4 .	Within 3 months
 				
F-29	Means of Egress	Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch). Open guards intermediate rails or pattern is not as per standard. Location: Building#17	Provide parapets or guards with a minimum height of 1067mm (42 inch.). Open guards shall have intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34 in.)	Within 3 months



F-30	Means of Egress	Building did not have stair designation signs & exit designation signs at required locations. Location: Building # 17	Provide stair designation sign & exit designation sign at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. Signs shall be posted adjacent to the door.	Within 1 month
F-31	Means of Egress	Building did not have occupant load signs at required locations. Location: Building # 17	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.	Within 1 month
F-32	Mean of Egress	Updated fire evacuation maps is not posted at the entrance of all exit stair. Location: Building # 17	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month

F-33	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: Building # 17	Illuminated directional signs shall be provided where there is a change in the direction for the path of travel and the direction to an exit is not obvious.	Within 1 month
F-34	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes . Location: Building # 17	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 3 months
F-35	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. Location: Building # 17	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 1 month and modification within 3 months (If require).



F-36	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 Month after modification(If require).
F-37	Fire Protection System(Standpipe)	Standpipe system installation requires detailed review to confirm compliance with NFPA- 14 , 20, 22 & 24 or as per RSC standard. Location: Building # 17	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install and modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA 14, 20, 22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 1 month and modification within 3 months (If require).

 				
F-38	Fire Protection System (Sprinkler)	The high-rise building has an occupied floor greater than 23m (75 ft.). Location: Building # 17	Provide automatic sprinkler protection installation throughout the building in accordance with NFPA 13.	Design within 6 months and installation within 12 months
F-39	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after modification(If require).
F-40	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the fire pump system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after modification(If require).

F-41	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per RSC standard.	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per RSC standard.	Within 3 months
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Table-3: Finding & recommendation for all other building & shed.

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-42	Fire rated Construction	Chemical store room is not properly separated due to unprotected opening & penetrations. Location: Ground floor & first floor of building # 29 (Chemical bonded warehouse)	Separate the chemical storage room by 4-hr fire rated construction. Seal all penetrations and protect the openings to maintain the required fire separations. Keep 16-points MSDS of all chemicals in the storage area. ** As per BNBC, chemical storage room will be Type-1 construction. Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline.	Within 3 months
				

F-43	Fire Rated Construction	The main structural elements of factory buildings (J) are constructed by steel which is non-rated structure and were found in exposed condition without any fire protection. Location: Building # 29 (Two storied bonded warehouse)	For new construction, the building shall be Group I construction as required in BNBC 2020 Part 3 Table 3.2.4. So, provide require rating for the structural elements of the building following BNBC 2020-Table 3.2.4, 3.1.7 and 3.3.1 Factory shall ensure that, all the design, datasheet, certificate, and the design-philosophy has been reviewed from the RSC prior to install the passive fire protection system.	Within 6 months
				
F-44	Fire Rated Construction	Store room is not separated by fire rated construction due to unprotected opening Location: Ground floor of building # 3	Separated the store room from production & prayer room by minimum 1-hr fire rated construction.	Within 3 months

				
F-45	Mean of Egress	Handrails are not provided both side on the exit stair. Location: Building # 3	Provide handrails on both sides of the exit stair. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread	Within 3 months
				

F-46	Means of Egress	Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch). Location: Location: Building # 3	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 3 months
				
F-47	Means of Egress	Building did not have occupant load signs at required locations. Location: All buildings	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.	Within 1 month
F-48	Mean of Egress	The exit stairs are not separated from [work areas, other spaces] on each floor due to unprotected opening & non function fire doors. Location: Building-29 (chemical bonded warehouse) & Building#3	The exit stair enclosure shall be provided with a minimum of 1- hr. fire resistance rating with 45 minutes opening protection. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 months

 				
F-49	Mean of Egress	A single means of egress is provided in the 4- Storied REB building	Single exit is allowable on ground floor when the occupant load is limited to 50 with maximum travel distance 23 meter. Single exit is allowable on 1st floor when the occupant load is limited to 30 with maximum travel distance 23 meter. All other stories require a minimum of 2 egress exits.	Within 1 month
				

F-50	Mean of Egress	Single exit provided at ground floor where travel distance more than 23M at chemical bonded warehouse (Building # 29).	Ground or basement story is allowed a maximum of 5 occupants and 8 m (25 ft) travel distance(J occupancy) as per RSC technical guideline standard -6.6.2 Provide additional means of egress.	Within 2 months
F-51	Mean of Egress	Exit stairs do not discharge directly to the outside. Location: Building # 29(Two storied chemical bonded warehouse)	Modify stair to discharge directly outside. Or Provide 2-hr fire-rated exit passageway leading directly outside (vestibules toseparate any storage areas). Or Provide sprinkler protection for discharge floor in accordance with NFPA 13 meeting RSC technical guideline standard V1-6.17.3.	Within 3 months
F-52	Mean of Egress	Width of exit stairs are less than 1.5 m (60 in.). Location: Building # 3 (mosque building)	Provide exit stair minimum clear and unobstructed width of 1.5 m (60 in.) in accordance with RSC Technical guideline standard V1-6.5.6.2.1.	Within 4 months

F-53	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes . Location: All buildings	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 3 months
F-54	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. Location: All shed buildings	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 1 month and modification within 3 months (If require).
F-55	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard. Location: All shed buildings	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 Month after modification(If require).