

INITIAL FIRE SAFETY INSPECTION REPORT

Manvill Styles Limited

RSC ID: 26120

728 South shyampur, Hemayetpur, Savar, Dhaka-1340

23.777511,90.258387

Other Factories: None



Inspected By: Md. Sadid Rahman

Date: 23-Mar-2025

Fire Safety Inspection Report

Manvill Styles Limited

Introduction:

Manvill Styles Limited complex was surveyed for fire safety on **23-Mar-2025** 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): There are total 3 no's of structures in the factory compound under this RSC ID 26120 where approval authority of all structures are Tetuljhara Union Parishad. The buildings are as below:

SI No	Building Name & Description	Construction History	Period
1	<p>Building-1 5 storied RCC building (Occupied Roof). (Proposed 6 storied RCC Building).</p> <p>Total Approx Area: 36,000 Sft</p>	<p>Ground to 2nd Floor: Construction Start: Aug-2013 Construction End: Sep-2014 Date of first Operation: Dec-2014</p> <p>3rd Floor and Roof Shed Construction Start: Apr-2023 Construction End: Nov-2023 Date of first Operation: Dec-2023 Building Approval: On Dec 2011 from Tetuljhara Union Parishad</p>	Interim
2	<p>Building-2 2 Storied (G+1) RCC Rented building Total Approx Area: 4800 Sft</p>	<p>Construction Start: Jun-2011 Construction End: Dec-2011 Date of first Operation: Feb-2017 Building Approval: On Dec 2011 from Tetuljhara Union Parishad</p>	Existing
3	<p>Shed Building-3 Single storied Steel shed Total Approx Area: 14,000 Sft</p>	<p>Construction Start: Nov-2010 Construction End: Nov-2011 Date of first Operation: Dec-2011</p> <p>Building Approval: On Dec 2011 from Tetuljhara Union Parishad</p>	Existing

Factory Address: 728 South shyampur, Hemayetpur, Savar, Dhaka-1340

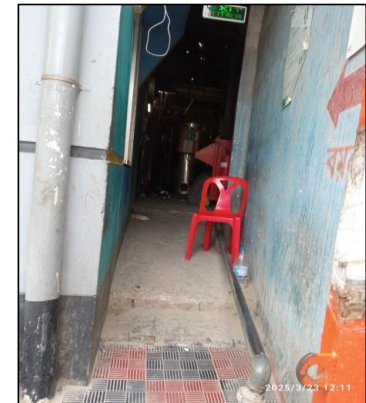
Findings & Recommendations :

Table 1 summarize 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 review.

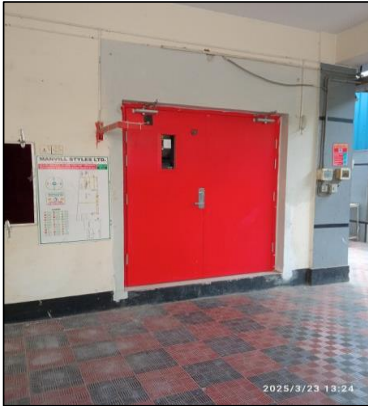
Table No.	Total Finding	Building	Finding Range	Remarks
Table 1	25	Building-1 and 2	F- 1 to 25	
Table 2	14	Shed Building 3	F- 26 to 39	

Table-1: For Building-1 and 2

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Means of Egress	<p>The exit stairs are not separated from work areas and other spaces on each floor due to missing and non functional fire rated door.</p> <p>Location: Building-1 (Stair-1 and 2, Boiler on ground Floor).</p>	<p>Provide minimum 1-hr rated doors for buildings with 3 or fewer stories and 1.5-hr fire rated doors for buildings that are 4 or more stories. Provide minimum 1-hr rated doors for Boiler Room. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels.</p> <p>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.</p> <p>Factory shall ensure the integrity of the fire rated door and 3rd party certification through proper documents (datasheet, certificate and listing labeling).</p>	Within 3 months



F-2	Means of Egress	Storage room discharges directly into exit stair enclosure on 1st floor and ground floor . Location: Building-1	Openings from exit enclosure to storage room spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1 hr. fire rated door on the exit stair side and a 1- hr. fire rated door on the storage 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-3	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies due to plumbing pipe and cable riser in several locations. Location: Building-1	<p>Provide a minimum 2-hr fire-rated shaft to separate the sanitary pipe and cable riser from each floor level.</p> <p>or</p> <p>seal all penetrations and openings in floors/ceiling assemblies by 3-hr fire-rated listed/certified materials. The installation of such fire-rated materials shall be following certified design. Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system (If required).</p> <p>or</p> <p>Penetrations in a single concrete floor by steel, ferrous or copper conduits, pipes, tubes or vents with a maximum 150 mm (6 in.) nominal diameter shall be permitted to be protected using concrete, grout or mortar installed the full thickness of the floor or the thickness required to maintain the fire-resistance rating. The penetrating items shall not be limited to the penetration of a single concrete floor, provided the area of the opening through each floor does not exceed 0.0929 m² (144 in²).</p> <p>Floor penetrations for electrical busbar, cable, metal plumbing pipes etc. can be protected by concrete, grout or mortar installed the full thickness of the floor, if the penetration area is within 144 sq. inches as per 4.7.1 or 4.7.2 of RSC Technical Guidelines Standard</p>	Within 3 months
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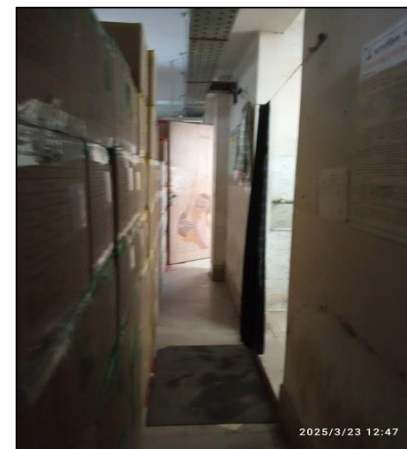


F-4	Fire-Rated Construction	<p>Room used for combustible storage are not separated from office/ other area by fire rated construction.</p> <p>Location: 1st floor and 4th floor of building-1 and ground floor of building-2.</p>	<p>Separate the storage room by a minimum 1- hr. fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.</p>	Within 3 months
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F-5	Fire Rated Construction	<p>4th floor of the interim building has been constructed with non rated structure (Roof) and the occupancy of that floor is Sample , Prayer room, Accessories store, Kitchen. Primary roof structural element has been found in exposed condition without any fire protection.</p> <p>Location: 4th Floor of Building-1.</p>	<p>Interim building shall be type-1 or type-2 construction as per Table 3.2.4 of BNBC-2006. Provide required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the RSC Standard or Table 3.3.1 and Table 4.1.1 from BNBC Part 4. Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system.</p>	Within 6 Months
				

F-6	Fire Rated Construction	<p>Areas used for in-process storage of combustible materials are open to the surrounding occupancy.</p> <p>Combustible materials has kept under cutting table which is non compliant.</p> <p>Location: 2nd Floor of Building-1.</p>	<p>Provide defined storage areas and limit the storage arrangement as follows: -</p> <ol style="list-style-type: none"> 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. <p>or</p> <ol style="list-style-type: none"> 3. Enclose the storage area from the surrounding occupancy with a minimum 1-hour construction. 	Within 3 Months
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F-7	Fire Rated Construction	<p>The intermediate distance between Building-1 and Shed building-3 has been found 5 feet (at North side).</p> <p>Exterior wall is not protected by fire rated assembly as per BNBC 2006, Table 3.2.2.</p> <p>Location: Building-1</p>	<p>All buildings and structures shall be separated from other buildings in accordance with BNBC 2006 Part 3 Table 3.2.2 and BNBC 2006 Part 3 Section 2.4.1.3. Exterior walls of exit enclosures in interim and existing buildings must meet the requirements of BNBC 2006. (See also 6.14.5).</p>	Within 3 months
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F-8	Fire Rated Construction	<p>Liquefied or compressed gas cylinders are located within the factory.</p> <p>Location: 4th Floor of Building-1</p>	<p>Factory Shall follow TECHNICAL GUIDANCE NOTE FOR USE OF LIQUIFIED OR COMPRESSED FLAMMABLE GAS IN FACTORY PREMISES:</p> <ol style="list-style-type: none"> 1. The storage building must be at least 3 meters away from any other buildings 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). <p>All general safety guidance shall be also meet.</p> <p>Or,</p> <p>Remove the cylinder from the factory premises.</p>	Within 3 months
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F-9	Means of Egress	<p>North-West exit stair discharge width is less than 10 feet and not separated from Shed Building-3.</p> <p>Location: Building-1 and Shed building-3.</p>	<p>An egress court serving as a portion of the exit discharge shall be open to the sky or provided with a fire resistance rated enclosure the same as the exit enclosure. Egress discharge has been found less than 3050 mm (10 ft) in width (as measured from the building-1 and Shed Building-3) shall be provided with walls having a 1-hr fire resistance rated construction for a distance of 3050 mm (10 ft) above the floor of the court.</p>	Within 1 month
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F-10	Means of Egress	<p>Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch.).</p> <p>Location: Building-1.</p>	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 1 month
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F-11	Means of Egress	<p>Building did not have stair designation signs, occupant load signs and updated evacuation maps at required locations on all floors. Location: Building-1</p>	<p>Provide stair designation signs, occupant load signs and evacuation maps at required locations.</p>	Within 1 months
<div style="display: flex; justify-content: space-around;">   </div>				
F-12	Means of Egress	<p>Directional signs are not provided where direction of the path of travel to an exit has changed. Location: Ground floor and 1st floor of Building-1.</p>	<p>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.</p>	Within 1 month
				

F-13	Means of Egress	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.</p> <p>Location: Building-1</p>	<p>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.</p>	Within 3 Months
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F-14	Means of Egress	<p>The stair used for maintenance purpose of water tank has been found non compliant.</p> <p>Location- Building-1 (Roof).</p>	<p>Constructed stairs of interim construction shall be in compliance with BNBC 2006 Part 3 Section 1.12.5. Moreover, follow the 6.9.2.2 and 6.9.2.3 of the RSC technical guidelines standard for Landings and Treads.</p>	Within 3 months
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F-15	Means of Egress	<p>Aisle marking has been found less than 36 inch in some location.</p> <p>Location: 2nd floor of Building-1.</p>	<p>Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).</p>	<p>Within 3 months</p>
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F-16	Means of Egress	<p>Doors along means of egress are provided with a non compliant locking feature.</p> <p>Location: Building-1</p>	<p>Remove locking devices from all egress devices.</p> <p>No locks or other devices shall be installed on a means of egress component that would prevent any occupant from having safe egress from the building or structure and doors shall not be locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices are prohibited unless meet the following conditions:</p> <ul style="list-style-type: none"> • Doors may be locked where the latch and lock are disengaged with one motion where the occupant load does not exceed 49 persons. Turning a door handle and disengaging a lock is considered two motions. • Doors may be provided with locking hardware from the ingress side provided that a panic bar is installed on any door with an occupant load exceeding 49 persons. 	Immediate
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F-17	Means of Egress	Storage was located in the exit stair. Location: Stair -1 of Building-1 (4th Floor).	Remove all storage from exit stairs and egress paths. Means of egress shall be maintained continuously free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency. No furnishings, decorations, or other objects shall obstruct exits and access to exits. Nothing shall obstruct or impede visibility to exits.	Immediate
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F-18	Means of Egress	<p>The egress path along means of egress has interrupted by obstruction/storage/process work/machineries.</p> <p>Location: Ground Floor of Building-2, 4th Floor of Building-1.</p>	<p>Keep egress paths and stairs clear of storage/obstruction.</p> <p>Means of egress shall be maintained continuously free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency. No furnishings, decorations, or other objects shall obstruct exits and access to exits. Nothing shall obstruct or impede visibility to exits.</p>	Immediate
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F-19	Fire Alarm & Detection System (FADS)	<p>The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards.</p> <p>Location- Building- 1 and 2.</p>	<p>Submit the fire alarm system design to RSC for review. Once the design is reviewed, install and modify the fire detection and alarm system throughout the building in accordance with review comment, Accord/ RSC Technical Guidelines (Standard) and NFPA 72. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.</p> <p>Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.</p>	<p>Design within 2 months, installation/modification on within 6 months</p>
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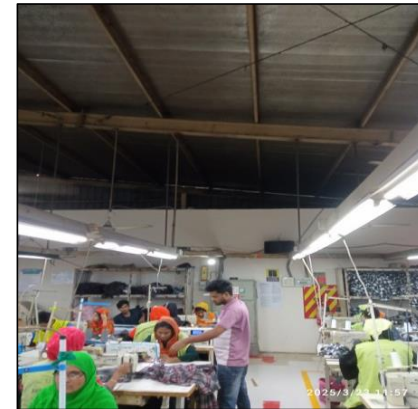
F-20	Inspection, testing, and maintenance	Inspection, testing and maintenance of the addressable fire alarm and detection system is not in accordance with NFPA 72, and the RSC Technical Guidelines (Standard).	Inspect, test and maintain the addressable fire alarm and detection system and keep written records on- site, in accordance with NFPA 72 and the RSC Technical Guidelines (Standard)	Within 1 month after installation
F-21	Fire Protection System	The required standpipe system is not installed in accordance with the RSC standard.	Install a new standpipe system in accordance with RSC standard 5.4 and NFPA 14. A class III system shall be installed in buildings with the highest occupiable floor 10 m (33 ft.) above grade or more. A class I system shall be permitted in buildings protected throughout by an approved automatic sprinkler system.	Design within 2 months, installation/modification on within 6 months



F-22	Inspection, testing, and maintenance	Inspection, testing and maintenance of the standpipe system is not available in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation
F-23	Inspection, testing, and maintenance	Inspection, testing, and maintenance for the fire pump is not available in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after installation
F-24	Inspection, testing, and maintenance	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with the RSC Technical Guidelines (Standard)	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 month
F-25	Inspection, testing, and maintenance	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and RSC standards.	Within 3 month


Table-2: Shed Building-3

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-26	Fire Rated Construction	<p>The generator, transformer, air compressor room is not separated by fire rated construction due to opening, non-rated doors and penetrations)</p> <p>Location: Ground Floor of Shed Building-3.</p>	<p>Separate the Generator, transformer, air compressor room by a minimum 2-hr fire rated construction. Seal and/or protected all fire separations.</p>	<p>Within 3 months</p>

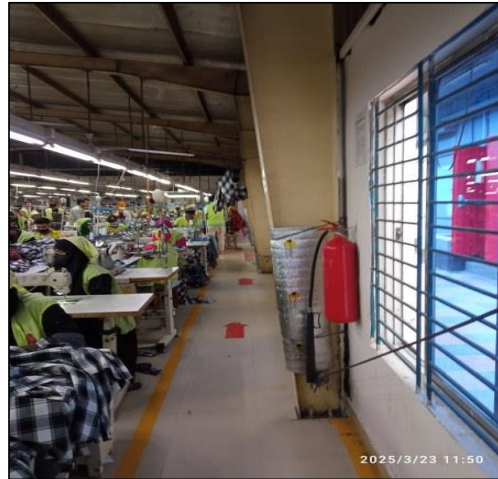


F-27	Means of Egress	<p>Building did not have occupant load signs and updated evacuation maps at required locations on all floors.</p> <p>Location: Shed Building-3</p>	<p>Provide stair designation signs, occupant load signs and evacuation maps at required locations.</p>	<p>Within 1 month</p>
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F-28	Means of Egress	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.</p> <p>Location: Shed Building-3</p>	<p>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.</p>	Within 3 Months
				

F-29	Means of Egress	<p>Aisle marking has been found less than 36 inch in some location.</p> <p>Location: South side of Shed Building-3.</p>	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 3 months
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F-30	Means of Egress	<p>Doors along means of egress are provided with a non compliant locking feature.</p> <p>Location: Shed Building-3</p>	<p>Remove locking devices from all egress devices.</p> <p>No locks or other devices shall be installed on a means of egress component that would prevent any occupant from having safe egress from the building or structure and doors shall not be locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices are prohibited unless meet the following conditions:</p> <ul style="list-style-type: none"> • Doors may be locked where the latch and lock are disengaged with one motion where the occupant load does not exceed 49 persons. Turning a door handle and disengaging a lock is considered two motions. • Doors may be provided with locking hardware from the ingress side provided that a panic bar is installed on any door with an occupant load exceeding 49 persons. 	Immediate
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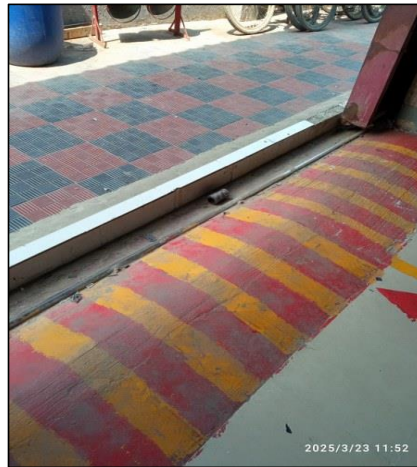


F-31	Means of Egress	<p>The egress path along means of egress has interrupted by obstruction/storage/process work/machineries.</p> <p>Location: Shed Building-3</p>	<p>Keep egress paths and stairs clear of storage/obstruction.</p> <p>Means of egress shall be maintained continuously free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency. No furnishings, decorations, or other objects shall obstruct exits and access to exits. Nothing shall obstruct or impede visibility to exits.</p>	Immediate
				

F-32	Means of Egress	<p>Sliding type doors have provided along means of egress [exit discharge].</p> <p>Location: South and West exit of Shed Building-3.</p>	<p>Replace all sliding gates by the side-hinged swinging type doors.</p> <p>All doors in a means of egress shall be of the side-hinged swinging type. Roll-down and sliding gates and shutters shall not be allowed. Doors serving an occupant load of more than 50 shall swing in the direction of egress travel.</p>	Within 1 month
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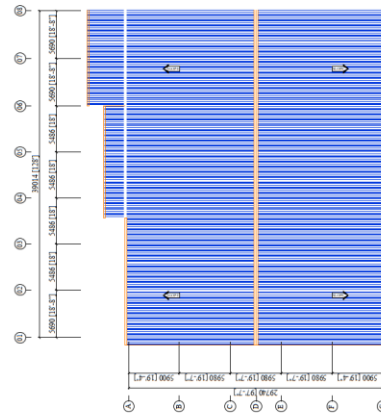
F-33	Means of Egress	<p>Uneven walking surface were found along with means of egress.</p> <p>Location: West exit discharge of Shed Building-3.</p>	<p>Walking surfaces shall be mostly level; however, shall not exceed a slope of 1 in 20 in the direction of travel unless meeting the requirements for ramps in 6.10.</p>	Within 1 month
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F-34	Means of Egress	<p>Headroom measured less than the 80 inch due to cable tray. Location: South-West side of shed building-3. Available Headroom: 75 inch.</p>	<p>All means of egress shall have a minimum ceiling height of 2.3 m (7 ft 6 in.) with projections from the ceiling not less than 2.03 m (6 ft 8 in.). The minimum ceiling height shall be maintained for at least 2/3 of the space or room as long as the remaining area shall be not less than 2.03 m (6 ft 8 in.). Headroom on stairs shall not be less than 2.03 m (6 ft 8 in.).</p>	Within 1 month
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F-35	Means of Egress	<p>The exits are not remotely located from each other such that a single fire event could compromise both exits of the building.</p> <p>Location: Shed Building-3 Diagonal Distance: More than 170 feet Exit Distance: Approximately 80 feet.</p>	<p>Provide additional exit or reconfigure the exit arrangement to ensure that the exit doors or means of egress openings are located a distance apart as per RSC Technical Guideline (Standard) section of 6.6.6</p>	Within 3 months
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F-36	Fire Alarm & Detection System (FADS)	<p>The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards.</p> <p>Location- Shed Building- 3.</p>	<p>Submit the fire alarm system design to RSC for review. Once the design is reviewed, install and modify the fire detection and alarm system throughout the building in accordance with review comment, Accord/ RSC Technical Guidelines (Standard) and NFPA 72. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.</p> <p>Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.</p>	<p>Design within 2 months, installation/modification on within 6 months</p>
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F-37	Inspection, testing, and maintenance	Inspection, testing and maintenance of the addressable fire alarm and detection system is not in accordance with NFPA 72, and the RSC Technical Guidelines (Standard).	Inspect, test and maintain the addressable fire alarm and detection system and keep written records on- site, in accordance with NFPA 72 and the RSC Technical Guidelines (Standard).	Within 1 month after installation
F-38	Inspection, testing, and maintenance	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with the RSC Technical Guidelines (Standard).	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 month
F-39	Inspection, testing, and maintenance	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and RSC standards.	Within 3 months