

# INITIAL FIRE SAFETY INSPECTION REPORT

**RGR Sweater Ltd. (Extension 2)**

**RSC ID: 26205**

**Madhokala, Sreepur, Gazipur 1740**

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**Other Factories: RGR Sweater Ltd. (10259)**

**RGR Sweater Ltd - Extended building (12469)**



**Inspected By: Nainin Nowrose**

**Date: 16-April-2025**

# Fire Safety Inspection Report

## Introduction:

**RGR Sweater Ltd. (Extension 2)** complex was surveyed for fire safety on **16-April-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

SI No	Building Name & Description	Construction History	Period
1	<b>Yarn Distribution Part-1</b> Single storied RCC Building. Total Approx Area: 111 sqm	Construction Start: Jul, 2019 Construction End: Dec, 2019 Date of first Operation: Jan, 2020 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	Interim
2	<b>Yarn Distribution Part-2</b> Single Storied Steel Shed Total Approx Area: 371 sqm	Construction Start: Nov, 2023 Construction End: Mar, 2024 Date of first Operation: Apr, 2024 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	New
3	<b>Jute Store</b> Single Storied Steel Shed. Total Approx Area: 138 sqm	Construction Start: Dec, 2021 Construction End: Feb, 2022 Date of first Operation: Mar, 2022 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	New
4	<b>Jute Wastage</b> Single Storied Steel Shed. Total Approx Area:50.5 sqm	Construction Start: Dec, 2021 Construction End: Feb, 2022 Date of first Operation: Mar, 2022 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	New

5	<b>Staff workers dining &amp; kitchen</b> Single Storied Steel Shed. Total Approx Area: 383 sqm	Construction Start: Jan, 2020 Construction End: Jun, 2020 Date of first Operation: Jul, 2020 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	Interim
6	<b>Fire pump room</b> Single Storied RCC building. Total Approx Area: 46 sqm	Construction Start: Jun, 2020 Construction End: Dec, 2020 Date of first Operation: Jan, 2021 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	Interim
7	<b>Green Corner Shed</b> Single Storied Steel Shed. Total Approx Area: 6.5 sqm	Construction Start: Nov, 2022 Construction End: Dec, 2022 Date of first Operation: Jan, 2023 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	New
8	<b>Sweet Shop Shed</b> Single Storied Steel Shed. Total Approx Area: 9.3 sqm	Construction Start: Nov, 2022 Construction End: Dec, 2022 Date of first Operation: Jan, 2023 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	New
9	<b>Linking Building</b> 2 Storied RCC Building Total Approx Area: 1676 sqm	Construction Start: Dec, 2021 Construction End: Dec, 2022 Date of first Operation: Jan, 2023 Building Approval: On 27 Mar 2024 from Sreepur Pourashava	New

10	<p><b>ETP building</b>  2 Storied with basement RCC Building  Total Approx Area: 137 sqm</p>	<p>Construction Start: Dec, 2018  Construction End: Nov, 2019  Date of first Operation: Jan, 2021  Building Approval: On 27 Mar 2024 from Sreepur Pourashava</p>	Interim
11	<p><b>New Generator Shed</b>  Single Storied Steel Shed.  Total Approx Area: 74 sqm</p>	<p>Construction Start: Jan, 2022  Construction End: Mar, 2022  Date of first Operation: Apr, 2022  Building Approval: On 27 Mar 2024 from Sreepur Pourashava</p>	New
12	<p><b>2 nos canopy</b>  Steel construction  Total Approx Area: 214+107 sqm</p>	<p>Construction Start: Jun, 2023  Construction End: Aug, 2023  Date of first Operation: Sep, 2023  Building Approval: On 27 Mar 2024 from Sreepur Pourashava</p>	New

**Factory Address: Madhokala, Sreepur, Gazipur 1740**



**Findings & Recommendations :**

Table 1 & 2 summarize the major fire safety issues identified during the inspection. Recommendations have been provided to address each issue. 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.

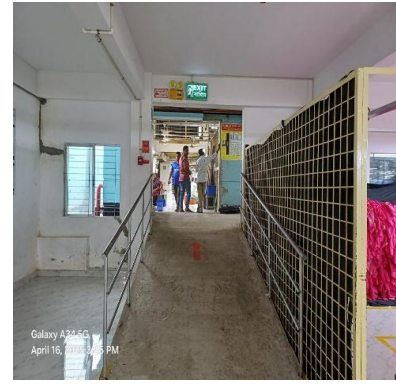
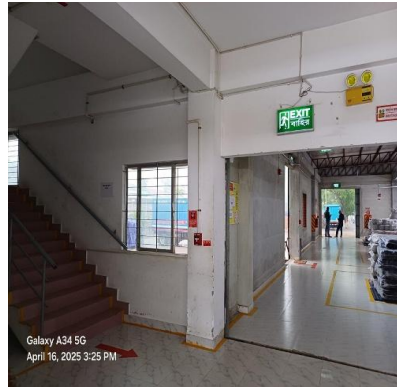
**Table-1: For Linking Building**

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Means of Egress	<p>The exit stair enclosures are not separated from work areas and other spaces on each floor by fire-rated construction.</p> <p><b>Location: Linking Building</b></p>	<p>The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating for buildings with 3 or fewer stories and a minimum of 2- hr. fire resistance rating for buildings 4 or more stories. Provide 1-hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction for building with 3 or fewer stories. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction for building with 4 or more stories in accordance with section 6.3.1.2 of RSC Technical Guidelines (Standard)<sup>1</sup> V1.0.</p> <p>Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft. beyond the end of the stair to achieve the required separation. The rated assembly shall be approved and/or designed by a qualified fire protection engineer.</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>	Within 3 months

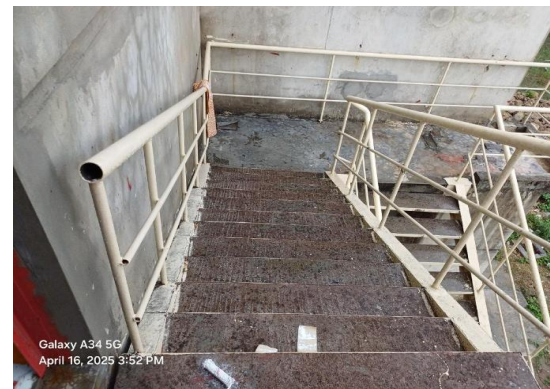
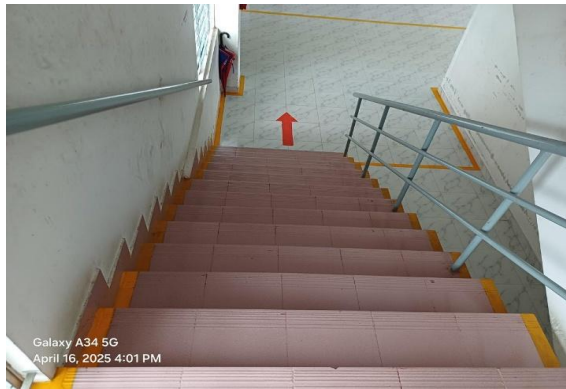


F-2	Mean of Egress	<p>Storage areas discharges directly into the exit stair enclosure.</p> <p><b>Location: 1st floor, Linking Building</b></p>	<p>Openings from exit enclosure to Storage areas/ basements/ transformer rooms/ generator rooms/ boiler rooms and similar normally unoccupied spaces shall be provided with a vestibule with fire rated construction and openings in accordance with section 6.14.3 of RSC Technical Guidelines (Standard)<sup>1</sup> V1.0. . Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the Store, generator, sub-station room side . Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure as per RSC Technical Guidelines (Standard)<sup>1</sup> V1.0. section 6.14.3. The minimum width for vestibules shall not be less than 1.1m and length 1.8m.</p>	Within 3 months
				

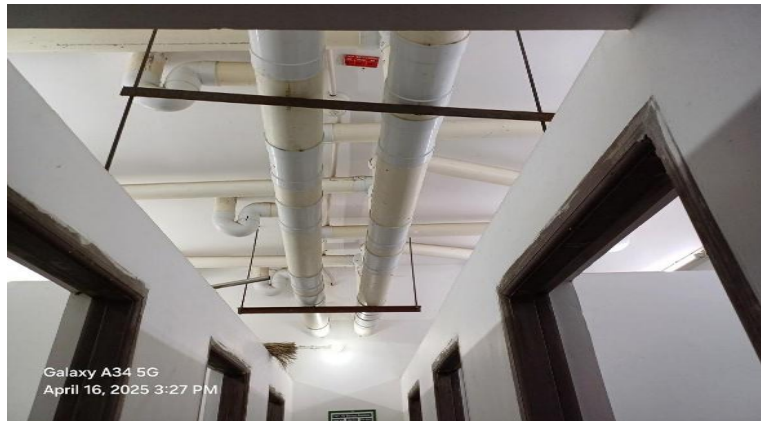
F-3	Mean of Egress	<p>East stair, southeast &amp; southwest exit terminate the occupants in interior of the Linking Building, Yarn Distribution Part-2 &amp; Linking shed which is not in accordance with section 6.17 of RSC Technical Guidelines (Standard)<sup>1</sup> V1.0.</p> <p><b>Location: Ground floor, Linking Building.</b></p>	<p>1. Modify stair to discharge directly outside. Or</p> <p>2. A maximum of 50 percent of the number and capacity of the exit enclosures can discharge through areas on the level of exit discharge where all of the following are met:</p> <p>(1) Automatic sprinkler protection is provided throughout the level of exit discharge or portion of the level of discharge where separated from non sprinklered portions of the floor by fire barriers with the same fire resistance rating as the exit enclosure.</p> <p>(2) The interior discharge is not through a storage or hazardous occupancy.</p> <p>(3) The entire area of the level of exit discharge is separated from areas below by construction having a fire resistance rating not less than that required for the exit enclosure.</p> <p>(4) The way to the exterior shall be free and unobstructed and shall be readily visible and identifiable from the point of discharge of the interior exit.</p>	Within 3 months
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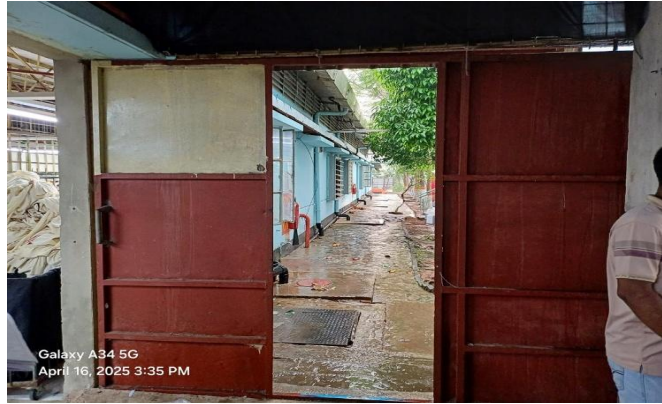
F-4	Mean of Egress	<p>Stair clear width was found less than 60 inch. (East Stair &amp; West Stair clearance width 53 &amp; 45 inch).</p> <p><b>Location: Linking Building.</b></p>	<p>Stairs shall have a minimum clear width of 60 inch for all industrial occupancies as per RSC Technical Guideline (Standard) section of 6.5.6</p>	<p>Within 3 months</p>
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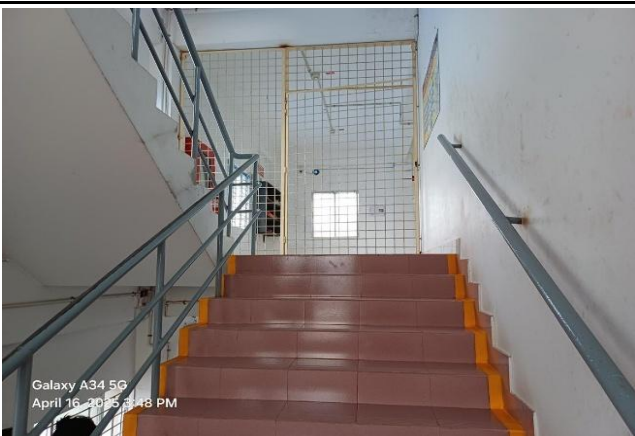
F-5	Fire Rated Construction	<p>Penetrations through floor/ceiling assemblies are found unsealed due to pvc plumbing pipe.</p> <p><b>Location: Ground floor, Linking Building.</b></p>	<p>Seal all penetrations and openings in floor/ceiling assemblies by a listed through-penetration fire stop system tested in accordance with ASTM E814 or approved alternative standard to maintain minimum 2-hr. fire resistance rating. Installation shall be as per manufacturer published installation guideline and the certification authority guideline to ensure the fire-rating in accordance with section 4.7 of RSC Technical Guideline (Standard)</p> <p>Or,</p> <p>Provide a minimum 2-hr fire rated shaft to separate the penetration from each floor if required.</p>	Within 3 months
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F-6	Mean of Egress	<p>Non compliant sliding door has been found at east exit.</p> <p><b>Location: Ground floor, Linking Building.</b></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
 <p>Galaxy A34 5G April 16, 2025 3:19 PM</p>				
F-7	Mean of Egress	<p>Doors in a means of egress was found less than 1 m (39 in.).</p> <p>Available door Width: 35 in.</p> <p><b>Location: Ground floor, Linking Building.</b></p>	<p>Doors in a means of egress shall have a minimum width of 1 m (39 in.) as per RSC Technical Guideline (Standard) section of 6.5.6</p>	Within 3 months





F-8	Means of Egress	<p>Building does not have stair/floor level designation signs at required locations on all floors.</p> <p><b>Location: Linking Building.</b></p>	<p>Provide stair 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 in accordance with RSC Technical Guidelines (Standard)<sup>1</sup> V1.0 Section 6.9.3.</p>	Within 1 month
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F-9	Means of Egress	<p>Some lighted exit signs were two-sided, so that they indicated an exit where there were none.</p> <p><b>Location: Ground floor, Linking Building.</b></p>	<p>Ensure that lighted exit signs are only visible from the side that directs people toward an exit path.</p>	<p>Within 1 month</p>
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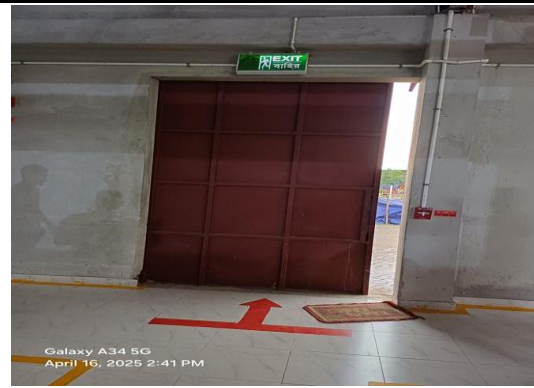
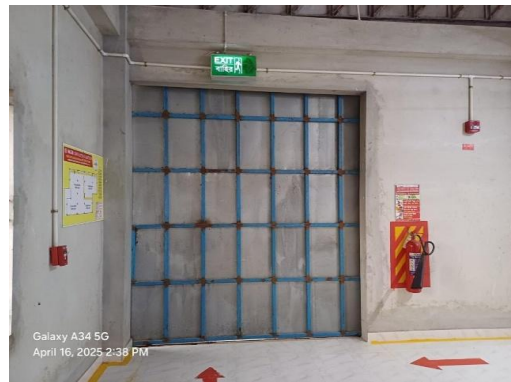
F-10	Fire Rated Construction	The required fire separation distance of Linking Building does not comply with the requirements of BNBC 2020.	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2020 Part 3 Table 3.2.2 & 3.2.3 and BNBC 2020 Part 3 Section 2.4.1.3.	Within 6 months
				

F-11	Means of egress	<p>Uneven walking surface were found at southwest exit discharge path.</p> <p><b>Location: Linking Building.</b></p>	<p>Walking surfaces shall be mostly level. Remove unnecessary items and level exit path to the public way.</p>	<p>Within 1 month</p>
				

**Table-2: For Yarn Distribution Part-2 & other sheds**

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-12	Fire Rated Construction	<p>Rooms used for storage of combustibile materials are not separated from the surrounding occupancies of Yarn Distribution Part-1 &amp; Linking building.</p> <p><b>Location: Yarn Distribution Part-2</b></p>	<p>Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 hr. fire rated door and seal all penetrations and openings by 0.75 hr. (45 Minutes) fire rated fire rated barrier construction.</p> <p>Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows:</p> <ul style="list-style-type: none"> <li>- Maximum height of 2.45m (8ft.) , maximum area of 23m<sup>2</sup> (250 ft<sup>2</sup>) and 3m (10ft.) clear distance from adjacent another unenclosed combustibile storage.</li> <li>- If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m<sup>2</sup> (1000 ft<sup>2</sup>).</li> </ul> <p>-In process storage shall be limited to 10 percent of the building area of the story in which they occur.</p>	Within 3 months

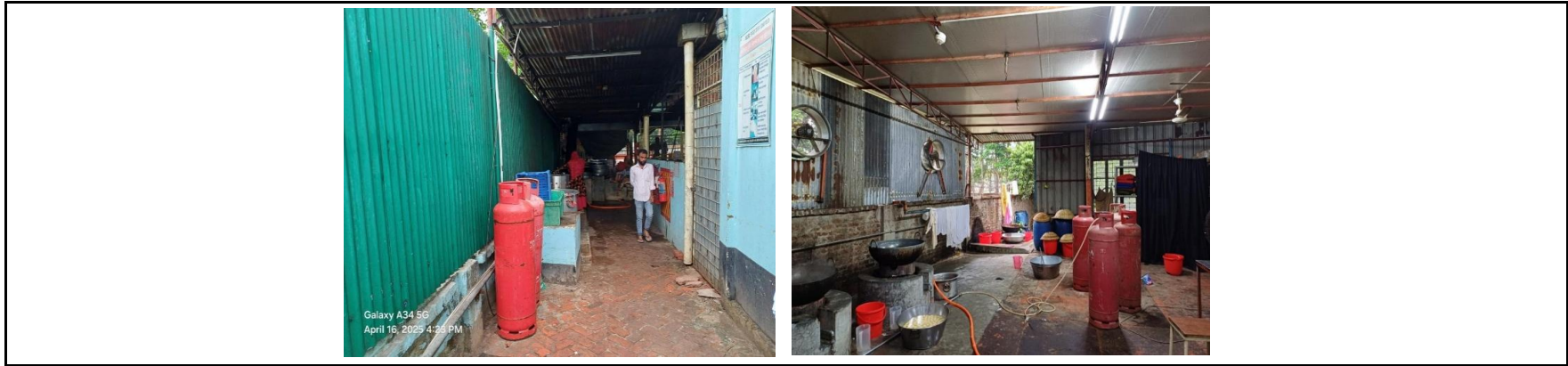
F-13	Mean of Egress	<p>Non compliant sliding door has been found at north &amp; east exit.</p> <p><b>Location: Yarn Distribution Part-2</b></p>	<p>All doors in a means of egress shall be of the side-hinged swinging type. Roll-down and sliding gates and shutters shall not be allowed. Doors serving an occupant load of more than 50 shall swing in the direction of egress travel.</p>	Within 1 month
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F-14	Mean of Egress	<p>Southeast &amp; west exit terminate the occupants in interior of the Linking Building &amp; Yarn Distribution Part-1 which is not in accordance with section 6.17 of RSC Technical Guidelines (Standard)<sup>1</sup> V1.0.</p> <p><b>Location: Yarn Distribution Part-2</b></p>	<p>Exits shall discharge directly to the exterior of the building unless meeting the requirements of 6.17.2 or 6.17.3 as per RSC Technical Guidelines (Standard)<sup>1</sup> V1.0. The exit discharge shall be at grade or provide direct access to grade. Exit discharge shall not reenter a building.</p> <p>A maximum of 50 percent of the number and capacity of the exit enclosures can discharge through areas on the level of exit discharge where all of the following are met:</p> <ol style="list-style-type: none"> <li>(1) Automatic sprinkler protection is provided throughout the level of exit discharge or portion of the level of discharge where separated from non sprinklered portions of the floor by fire barriers with the same fire resistance rating as the exit enclosure.</li> <li>(2) The interior discharge is not through a storage or hazardous occupancy.</li> <li>(3) The entire area of the level of exit discharge is separated from areas below by construction having a fire resistance rating not less than that required for the exit enclosure.</li> <li>(4) The way to the exterior shall be free and unobstructed and shall be readily visible and identifiable from the point of discharge of the interior exit.</li> </ol>	Within 3 months
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F-15	Fire Rated Construction	<p>Liquefied or compressed gas cylinders were located within the factory without adequate fire separation.</p> <p><b>Location: Staff workers dining &amp; kitchen shed</b></p>	<p>Remove the liquefied or compressed flammable gas cylinders. The storage or use of liquefied or compressed flammable gas (LPG/CNG) cylinders within the factory building as per section 3.4.2.1.11 of RSC Technical Guidelines (Standard)<sup>1</sup> V1.0.</p> <p>Or,</p> <p>Factory shall follow the requirements RSC Published "SUPPLEMENTARY PAPER ON TECHNICAL GUIDANCE NOTE FOR USE OF LIQUIFIED OR COMPRESSED FLAMMABLE GAS IN FACTORY PREMISES" to use or store liquefied or compressed flammable gas cylinders in the factory premises.</p>	Within 3 months
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F-16	Fire Rated Construction	<p>Dining (E4-100) area is not separated from iron board making area (G2) with fire rated assemblies.  <b>Location: Staff workers dining &amp; kitchen shed</b></p>	<p>Separate the dining area from other occupancies with 3-hr fire rated construction, provide minimum 3-hr. rated doors for the openings and seal the unprotected penetrations.</p> <p>Provide required exits that lead directly to the street or exit stairwell or leading to a corridor or open space.</p>	Within 3 months
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F-17	Fire Rated Construction	<p>The Yarn Distribution Part-2 was constructed at 2023 - 2024. The construction type is unprotected steel construction. It was observed that Yarn Distribution Part-2 height is less than 8M. Front (east) side is open space &amp; other surrounding distance west side- Adjacent Linking Building, south side- 3 ft 10 inch away winding shed, North side- 49 feet apart internal road then dairy firm.</p> <p>This shed has determined as a Type-I-E construction as per table 3.3.1(a) BNBC-2020. However fire resistance rating for exterior wall does not meet require fire rating in this shed.</p> <p><b>Location: Yarn Distribution Part-2</b></p>	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2020 Part 3 Table 3.2.2 & 3.2.3	Within 6 months
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F-18	Fire Rated Construction	The required fire separation distance of all sheds does not comply with the requirements of BNBC 2020 & 2006.	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2020 Part 3 Table 3.2.2 & 3.2.3 and BNBC 2020 Part 3 Section 2.4.1.3.	Within 6 months
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F-19	Fire Alarm & Detection System (FADS)	<p>Automatic fire alarm &amp; detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standards.</p> <p><b>Location: All building &amp; sheds</b></p>	<p>Submit the fire alarm and detection system design to RSC for review.</p> <p>Once the design is reviewed, install and modify the fire detection and alarm system throughout the building in accordance with review comment, RSC Technical Guidelines (Standard) and NFPA 72.</p> <p>After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.</p>	Design within 2 month and modification/ installation with 4 months
 <p>The row contains four photographs documenting the fire alarm system installation. From left to right: 1. A fire alarm control panel with a red frame and a digital display, with various wires connected to it. 2. A white circular fire detector mounted on a wall. 3. A red fire alarm pull station with a 'PUSH PULL DOWN' button and a 'Simplex' logo, next to a red label that reads 'LOOP NO 02 DEVICE NAME MCP 07 DEVICE NO'. 4. A red fire alarm detector mounted on a wall, with a red label below it that reads 'LOOP NO 02 DEVICE NAME HAS 02 DEVICE NO'.</p>				
F-20	Fire Detection System ( ITM of FADS)	<p>Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.</p>	<p>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>	Within 1 month after installation

F-21	Fire Protection System(ITM of Fire Extinguisher)	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 on- site, in accordance with NFPA 10 and RSC Technical Guidelines (Standard) <sup>1</sup> V1.0.s.	Within 1 month
F-22	ITM of Emergency lighting system	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with the RSC Technical Guidelines (Standard) <sup>1</sup> V1.0..	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with the RSC Technical Guidelines (Standard) <sup>1</sup> V1.0.. Keep written records on-site.	Within 1 month