

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Apex Yarn Dyeing Ltd.

Factory ID: 24240

Address: Chandora, Shafipur, Kaliakoir, Gazipur.

Google Coordinate: 24.042802, 90.260889

Other Factories: N/A



Inspected By: Nirmal Chandra Sinha and Md. Anayet Hossain

Date: 18 October 2021

Introduction:

Apex Yarn Dyeing Ltd. complex was surveyed for fire safety on **18/10/2021** 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.

Table 1 summarizes 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 Findings & Recommendations:

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	<p>3-storied dyeing shed building: The exit stairs are not separated from work areas and other spaces on each floor by fire-rated construction. During inspection it was observed that the factory has installed fire doors at exit.</p>	<p>Submit installed fire rated door documents to the RSC for review. Provide minimum 1.5-hr fire rated doors for buildings that are 4 or more stories. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation as per Accord standard 6.3.1.3. 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.</p> <p>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



2	Fire Rated Construction	<p>3-storied dyeing shed building: First and 2nd floors are not separated by fire-rated construction from ground floor work area.</p>	<p>Separate ground and first floor by a minimum 2-hr fire rated construction from ground floor production area. Seal and/or protect all openings to maintain the required fire separations.</p>	Within 3 months
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3	Fire Rated Construction	The east exit discharge path of store shed building is less than 10 ft wide and is not separated from the building interior of dyeing building ground floor and winding shed.	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 1-hr fire separation. Alternatively, provide a second remote discharge path to the public way (only include this if feasible).	Within 3 months
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4	Fire Rated Construction	<p><u>Winding Shed and Dyeing building:</u> Storage rooms and process areas used for combustible storage are not separated by fire rated construction from work area on ground floor.</p>	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. 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"> - Maximum height of 2.45m (8ft.) and maximum area of 23m² (250 ft²) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (1,000 ft²). <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).</p>	Within 3 months
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5	Fire Detection & Alarm System	<p><u>All buildings in the factory premises:</u> An addressable fire alarm system has installed in the factory building premises. Fire detection system installation requires to detailed review to confirm compliance with NFPA 72 and Accord standard for all buildings in the factory premises.</p>	<p>Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.</p>	<p>Design submission (Within 2 months), Modification within 4 months (if required)</p>
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6	Inspection, Testing, and Maintenance of the Fire Detection & Alarm System	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per Accord standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 1 month
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7	Fire Protection	<p>3-storied dyeing shed building: The standpipe is required for the building as the existing factory building with an occupiable floor greater than 10 m (33 ft) above the finished grade. Standpipe system has installed in the factory building premises. Standpipe system installation requires to detailed review to confirm compliance with NFPA 14 and Accord standard for the buildings in the factory premises.</p>	<p>Provide a standpipe system throughout the building in accordance with NFPA 14. Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.</p>	<p>Design submission (Within 2 months), Modification within 4 months (if required)</p>
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8	Inspection, Testing, and Maintenance of the Standpipe System	Inspection, testing and maintenance of the standpipe system is not 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
9	Egress lighting	<u>All buildings in the factory premises:</u> Directional signs are not provided where direction of the path of travel to an exit has changed. Location: All production shed building.	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
10	Emergency Lighting	<u>All buildings in the factory premises:</u> Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.	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
11	Inspection, testing, and maintenance of Emergency light and Exit Sign	<u>All buildings in the factory premises:</u> Inspection, testing and maintenance for the emergency lighting system was not in accordance with the RSC standard.	Inspect, test and maintain the emergency lighting system in the accordance with the RSC standard. Keep written records on-site.	Within 3 months