

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Tusuka Processing Ltd. (Unit-02)

Factory ID: 24283

Address: 420/1, Konabari, Neelnagar, Gazipur.

Google Coordinate: 24.011696, 90.324611

Other Factories: N/A



Inspected By: Nirmal Chandra Sinha and Md. Khalaquzzaman

Date: 21 November 2021

Introduction:

Tusuka Processing Ltd. (Unit-02) complex was surveyed for fire safety on **21 November 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>Building-1 & 2: 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 in building-1 and fire door installation is in progress in building-2.</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. 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 ACCORD standard 6.8.3.1.</p>	Within 3 months



2	Fire Rated Construction	<p>Building-1: Store rooms used for combustible storage are not separated by fire rated construction from work area on 4th floor.</p>	<p>Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour construction. Store rooms directly discharge in exit stair enclosure shall be separated in accordance with the Accord standard 6.14.3.</p>	Within 3 months
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3	Fire Rated Construction	<p>Building-1 & 3: Areas used for combustible storage open to the factory are not separated by fire rated construction on several floors in building-1 and on ground floor in building-3.</p>	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible,</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 (250 sq.ft). 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m² (1000 sq.ft). <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10 ft).</p>	Within 3 months
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4	Fire Rated Construction	<p>Building-1: Dining areas are not separated by fire rated construction from storage and work area on 4th floor.</p>	<p>Separate dining area by a minimum 2-hr fire rated construction having direct access to exit stairs. Seal and/or protect all openings to maintain the required fire separations.</p>	<p>Within 3 months</p>
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5	Fire Rated Construction	<p>Building-1 & 2: Building-1: Elevator/Lift shafts provided in North-west and South-Middle exit stair enclosure. Building-2: Elevator/Lift shafts provided in North-East exit stair enclosure.</p>	<p>Modify the elevator and stair enclosure arrangement in a way to satisfy Accord standard 6.14.3. Elevator shall not open into an exit enclosure.</p>	<p>Within 4 months</p>
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6	Egress	<p>Building-1: North-West exit stair directly discharge on ground floor of the building and not separated from the ETP.</p>	<p>Modify stair to discharge directly outside or Provide 2- hr fire-rated exit passageway leading directly outside.</p>	<p>Within 3 months</p>
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7	Fire Rated Construction	<p>Building-2: South-West exit stair discharge egress path not separated from the ground floor building interior.</p>	<p>The exit stair discharge path (directly to outside) shall be separated by a minimum of 2-hr. fire rated construction from the building interior. The rating of the exterior wall shall extend 3.05 m (10ft) beyond the ends of the stair structure.</p>	Within 3 months
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8	Fire Rated Construction	<p>Building-3: The newly constructed production shed building is not fire rated construction.</p>	<p>Newly construction building shall be Type-1 & Type-2 construction in accordance with Accord building standard 3.5.2.1 and BNBC part-2 Table-3.2.4. Provide fire-resistive rated construction barriers following Section 4.4 and Table 4.4.1 of the Accord Standard or Table 3.3.1 and Table 4.1.1 from BNBC Part 4. Consult a qualified fire protection engineer to design the rated construction barriers.</p>	Within 6 months
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9	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. Fire alarm system (listed and addressable) shall be installed in accordance with NFPA 72.</p>	<p>Design submission (Within 2 months), Modification within 4 months (if required)</p>
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10	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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11	Fire Protection	<p>Building-1 & 2: The existing factory building with an occupiable floor greater than 10 m (33 ft) above the finished grade is not protected with an approved standpipe system. Standpipe system has installed in the factory building-1 & 2. 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 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 6 months (if required)</p>
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12	Inspection, testing, and maintenance of the standpipe system	Inspection, testing, and maintenance of the standpipe is not in accordance with NFPA 25 or as per Accord standard.	Inspect, test and maintain the standpipe, and keep written records on-site, in accordance with NFPA 25 or as per Accord standard.	Within 1 month
13	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.	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
14	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
15	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 Accord standard.	Inspect, test and maintain the emergency lighting system in the accordance with the Accord standard. Keep written records on-site.	Within 3 months

16	Inspection, testing, and maintenance of Fire extinguisher	<p><u>All buildings in the factory premises:</u> Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.</p>	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10.	Within 3 months
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