

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Norban Comtex Ltd. (Extension)

RSC ID: 25500

Address: Mouza Sarabo, Chakarborti, Kashimpur, Gazipur

[23.976366, 90.264946](#)

Other Factories: Norban Comtex Ltd.[RSC ID: 10050] (within same premises)



Inspected By: Md Sadid Rahman and Hamed Mustakim

Date- 19-Feb-2024

Fire Safety Inspection Report

Factory Name: Norban Comtex Ltd. (Extension)

Introduction:

Norban Comtex Ltd. (Extension) was surveyed for fire safety on **19th February, 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): There are total 16 nos of structures in the factory compound under this RSC ID-25500 where approval authority of all structures are RAJUK. The buildings are as below:

S/N	Building Number	Building Name	Type of construction	Year of construction	Date of Occupy	Date of Approval	Construction Period	Area (sqft)
1	Building-1	08 storied Industrial Building	RCC	Aug'2019-Mar'2022	Apr'2022	Apr'2019	Interim	120456
2	Building-2	33KV substation Building	RCC	Jul'2021-Apr'2022	May'2022	Apr'2019	Interim	227
3	Building-3	11KV substation Building	RCC	Jan'2022-Mar'2022	Apr'2023	Apr'2019	Interim	559
4	Building-4	New garments Building	RCC	Jun'2015-Mar'2015	Feb'2018	Aug'2017	Interim	91632
5	Building-5	2- storied AA-ETP building	RCC	Mar'2018-Nov'2019	May'2022	Apr'2019	Interim	12908
6	Building-6	Toilet Block-1	RCC	Jun'2017-Dec'2017	Mar'2018	Aug'2017	Interim	492
7	Building-7	Atm Booth	RCC	Jan'2021-Feb'2021	May'2021	Apr'2019	Interim	86
8	Building-8	Extension WTP Building	RCC	Jan'2018-Jun'2018	Aug'2018	Apr'2019	Interim	900
9	Building-9	Toilet Block-2	RCC	Feb'2017-Apr'2017	May'2017	Aug'2017	Interim	280
10	Shed-1	Dyeing Finishing Shed	Steel	Sep'2016-Dec'2016	May'2017	Aug'2017	Interim	28116
11	Shed-2	Jhute Godown	Steel	Jan'2018-Apr'2018	Aug'2018	Aug'2017	Interim	2529
12	Shed-3	Fire Pump and Boiler Room	Steel	Aug'2022-Sep'2023	Oct'2019	Apr'2019	Interim	4676
13	Shed-4	Empty Chemical Drum Shed	Steel	Jan'2018-Apr'2018	Jun'2018	Apr'2017	Interim	1515
14	Shed-5	Locker Shed-2	Steel	Aug'2018-Nov'2018	Dec'2018	Apr'2019	Interim	540
15	Shed-6	New Workshop	Steel	Apr'2019-Aug-2019	Dec'2019	Apr'2019	Interim	2470
16	Shed-7	Jhute sorting shed	Steel	Nov'2022-Dec'2022	Jan'2023	Apr'2019	Interim	522

Factory Address: Mouza Sarabo, Chakarborti, Kashimpur, Gazipur

Findings & Recommendations :

Table 1-3 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 No.	Total Findings	Building Name	Findings Range	Remarks
1	21	Building-1	F-1 to F-21	
2	18	Building-2 to Building-9	F-22 to F-39	
3	6	Shed-1 to Shed-7	F-40 to F-45	

Table-1- Building-1: 08 storied Industrial Building

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction. Location: 08 storied Industrial Building	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. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. 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. Factory shall ensure the credibility of the functionality of the fire rated door through proper datasheet and certificate.	Within 3 Months



F-2	Fire Rated Construction	The clearance under the bottom of fire door more than 19mm at several floor. Location: 08 storied Industrial Building	The clearance under the bottom of a door shall be a maximum of 3/4 in. (19 mm) [(NFPA 80) 4.8.4.1*] Where the bottom of the door is more than 38 in. (965 mm) above the finished floor, the maximum clearance shall not exceed 3/8 in. (9.5 mm) or as specified by the manufacturer's label service procedure. [(NFPA 80) 4.8.4.2]	Within 2 Months
				

F-3	Fire Rated Construction	Rooms used for combustible storage are not separated by fire rated construction on 7th floor. Location: 08 storied Industrial Building	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. fire rated barrier construction.	Within 3 months
 				

F-4	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire rated construction on several floors. Location: 08 storied Industrial Building	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 1 hr. fire rated fire rated barrier construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) , maximum area of 23m2 (250 ft2) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m2 (1000 ft2) and and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.	Within 1 month
 				

F-5	Fire Rated Construction	Storage room discharged directly into the exit stair enclosures at ground floor, 5th, 6th & 7th floor. Location: 08 storied Industrial Building	Opening from exit enclosure to storage areas shall be provided with a vestibule with fire rated construction and openings. Provide 1.5- hr. fire rated door on the exit stair side and 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
 				

F-6	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: 08 storied Industrial Building	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 guideline. (Type-1 Construction). or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. (Type-1 Construction).	Within 2 months
				

F-7	Fire Rated Construction	Elevator shafts are directly open into exit enclosure without proper fire separation. Location: 08 storied Industrial Building	An exit stairway shall not be built around a lift shaft unless the enclosure of the lift shaft is solid and made of a material with fire resistance rating required for the type of construction of the building. Ensure minimum 1.5-hr fire rating for the doors of elevator shafts otherwise close the shafts area with 2-hr fire rated construction barrier and 1.5-hr fire rated doors.	Within 3 Months
				

F-8	Fire Rated Construction	Elevator Shafts are not provided with Fire Rated Construction and opening protection. Location: 08 storied Industrial Building	Enclose the lift shaft with a minimum 2-hr fire rated construction, the door opening of the shaft shall be 2-hr fire rated also. For new construction lift shall not be allowed inside stair enclosure.	Within 2 Months
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F-9	Fire Rated Construction	AC ductline were located in the exit stair-1 enclosure. Location: 08 storied Industrial Building	Penetrations into and through an exit enclosure shall be prohibited with the exception of required exit doors, sprinkler piping, standpipes, electrical raceway for fire alarm equipment, and electrical conduit serving the exit enclosure. Remove cable raceway/busbar riser/ plumbing pipes and electrical pipes from the exit stair enclosures. Seal all penetrations and openings in the wall of exit enclosure walls (full thickness of the wall) by fire rated materials to maintain the fire resistance rating.	Within 1 month
				

F-10	Means of Egress	Parapet has been found less than 42 inch. Location: 08 storied Industrial Building	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067 mm (42 in.).	Within 1 month
				
F-11	Means of Egress	Exit stairs serve more than 5 stories and do not have required re-entry provisions. Location: 08 storied Industrial Building	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 1 Month
F-12	Means of Egress	Building did not have Evacuation map, stair designation signs and occupant load signs at required locations on all floors. Location: 08 storied Industrial Building	Provide Evacuation map, stair designation signs and occupant load signs at required locations.	Within 1 Month

F-13	Means of Egress	Aisle mark has not been provided several floor. Location: 08 storied Industrial Building	Provide minimum aisle widths of 36-in.	Within 1 Month
				
F-14	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors. Location: 08 storied Industrial Building	Test the emergency lighting system on each floor and provide additional emergency fixtures to supply adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and along exit discharge paths and a minimum 2.5 lux along exit access aisles.	Within 1 Month

F-15	Emergency Lighting	Exit signage was not provided along a path of egress at several location. Location: 08 storied Industrial Building	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious. Lighted exit signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 1 Month
 				
F-16	Inspection Testing and Maintenance of Emergency lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with RSC technical guidelines (standard). Location: 08 storied Industrial Building	Inspect, test and maintain the emergency lighting system in accordance with RSC technical guidelines (standard). Keep written records on-site.	Within 1 month

F-17	Fire Alarm & Detection System (FADS)	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. Location: 08 storied Industrial Building	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design Review within 2 months and installation within 4 months.
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F-18	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72. Location: 08 storied Industrial Building	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.
F-19	Fire Suppression System (SUPS)	Fire protection system (Standpipe) installation is underway which requires detailed review to confirm compliance with NFPA 14,20 and RSC Technical Guidelines (Standard). Location: 08 storied Industrial Building	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with Accord standard and NFPA 14,20,22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Design Review within 2 months and installation or modification within 4 months.



F-20	Fire Protection System	Sprinkler system installed for the building along with standpipe system. Both the system requires detailed review to confirm compliance with NFPA 13, 14, 20, 22, 24 and RSC Technical Guidelines (Standard). Location: 08 storied Industrial Building	Submit the sprinkler system drawing to RSC for review. Once the design is reviewed, install and modify the sprinkler/standpipe system throughout the building in accordance with review comment, RSC Technical guideline (Standard) and NFPA 13,14,20,22 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 2 months and installation or modification within 4 months.
F-21	Inspection Testing and Maintenance of Fire Suppression System (SUPS) (ITM)	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 25. Location: 08 storied Industrial Building	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation.

Table-2- Building-4,2,3,5,6,7,8,and 9 (New garments Building and other RCC buildings)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-22	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction. Location: New Garments Building	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. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. 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. Submit proper certifications for installed fire doors to the RSC for approval. If not available, or certification is not approved, install new, properly certified fire rated doors in accordance with RSC direction.	Within 3 Months

				
F-23	Fire Rated Construction	The clearance under the bottom of fire door more than 19mm at several floor. Location: New Garments Building	The clearance under the bottom of a door shall be a maximum of 3/4 in. (19 mm) [(NFPA 80) 4.8.4.1*] Where the bottom of the door is more than 38 in. (965 mm) above the finished floor, the maximum clearance shall not exceed 3/8 in. (9.5 mm) or as specified by the manufacturer's label service procedure. [(NFPA 80) 4.8.4.2]	Within 2 Months



F-24	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire rated construction on several floors. Location: New Garments Building	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 1 hr. fire rated fire rated barrier construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) , maximum area of 23m² (250 ft²) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (1000 ft²) and and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.	Within 1 month
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F-25	Fire Rated Construction	Storage room discharged directly into the exit stair enclosures at Basement & ground floor. Location: New Garments Building	Opening from exit enclosure to storage areas shall be provided with a vestibule with fire rated construction and openings. Provide 1.5- hr. fire rated door on the exit stair side and 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
				

F-26	Fire Rated Construction	The exterior exit stair-1 of New garments building is not separated from the old garments building. Location: New Garments Building	Seal all penetrations and openings to the interior of the building (Old Garments Building) along the discharge path, up to a height of 10 ft. to provide a minimum 1-hr fire separation.	Within 2 Months
				

F-27	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: New Garments Building	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 guideline. (Type-1 Construction). or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. (Type-1 Construction).	2 months
				

F-28	Fire Rated Construction	Elevator shafts are directly open into production floor without proper fire separation. Location: New Garments Building	An exit stairway shall not be built around a lift shaft unless the enclosure of the lift shaft is solid and made of a material with fire resistance rating required for the type of construction of the building. Ensure minimum 1.5-hr fire rating for the doors of elevator shafts otherwise close the shafts area with 2-hr fire rated construction barrier and 1.5-hr fire rated doors.	Within 3 Months
 				

F-29	Fire Rated Construction	New Garments building has been found separated from adjacent old production building by 7inch thick brick wall. Location: New Garments Building	All interim 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).	3 months
 				

F-30	Means of Egress	Parapet has been found less than 42 inch. Location: Building-5, 2- storied AA-ETP building	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067 mm (42 in.).	Within 1 month
				
F-31	Means of Egress	Exit stairs serve more than 5 stories and do not have required reentry provisions on all floors. Location: New Garments Building	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 1 month
F-32	Means of Egress	Building did not have Evacuation map, stair designation signs and occupant load signs at required locations on all floors. Location: New Garments Building	Provide Evacuation map, stair designation signs and occupant load signs at required locations.	Within 1 month

F-33	Means of Egress	Aisle mark has not been provided several floor. Location: New Garments Building	Provide minimum aisle widths of 36-in.	Within 1 Month
F-34	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors. Location: New Garments Building	Test the emergency lighting system on each floor and provide additional emergency fixtures to supply adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and along exit discharge paths and a minimum 2.5 lux along exit access aisles.	Within 1 month
F-35	Inspection Testing and Maintenance of Emergency lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with RSC technical guidelines (standard). Location: New Garments Building	Inspect, test and maintain the emergency lighting system in accordance with RSC technical guidelines (standard). Keep written records on-site.	Within 1 month

F-36	Fire Alarm & Detection System (FADS)	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. Location: New Garments Building	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design Review within 2 months and installation or modification within 4 months.
				

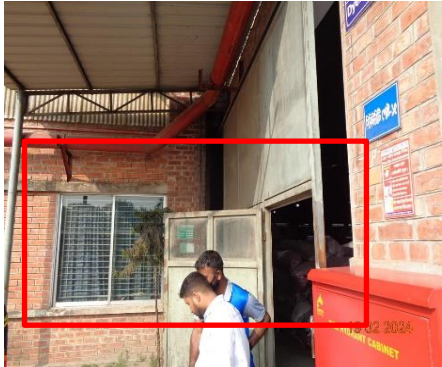
F-37	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72. Location: New Garments Building	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.
F-38	Fire Suppression System (SUPS)	Fire protection system (Standpipe) installation is underway which requires detailed review to confirm compliance with NFPA 14,20 and RSC Technical Guidelines (Standard). Location: New Garments Building	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with Accord standard and NFPA 14,20,22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Design Review within 2 months and installation or modification within 4 months.
 				

F-39	Inspection Testing and Maintenance of Fire Suppression System (SUPS) (ITM)	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 25. Location: New Garments Building	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation.
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Table-3- Shed-1: Dyeing Finishing Shed and other steel shed (shed-2,3,4

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-40	Fire Rated Construction	The main structural element of the Sheds are constructed by steel which is non-rated and were found in exposed condition without any fire protection Location: Shed-1,2,3,4,5,6 and 7.	The building shall be type-I or II construction. So, provide require rating in the structural elements of the building. Consult with a qualified fire protection engineer. Follow BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1 as reference.	3 months



F-41	Fire Rated Construction	Dyeing shed has not been separated from old knitting shed. Location:- Shed-1: Dyeing Finishing Shed	All interim 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).	3 months
 				

F-42	Means of Egress	Headroom measured less than the 80 inch. at Broken glass room.	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.).	2 months
 				
F-43	Means of Egress	Sliding doors are provided at exit of Dyeing and Finishing shed. Location:- Shed-1: Dyeing Finishing Shed	Replace all gates and doors along the means of egress with side-hinged, swinging egress doors in accordance with RSC standard 6.8.1.	1 month



F-44	Fire Alarm & Detection System (FADS)	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. Location:- Shed-1: Dyeing Finishing Shed	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design Review within 2 months and installation within 4 months.
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F-45	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.
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