FSM Performance & Case Studies

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https://www.scdf.gov.sg/

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Commonly Neglected FSM Duties

- **ERP** – Reviewed/Endorsed yearly and communicated to the occupants
- **Evacuation Drills** – Conducted 2x a year
- **TTX** – Conducted 2x a year
- **CERT** – Trained* and Equipped*
- **Daily Checks** – Remove the fire hazard
Commonly Neglected FSM Duties

- **Maintenance of fire safety works**
  - Fire Certificate
- **Occupant Load** – Building Plans
- **Fire Safety Report** – Submitted annually to building owner
- **Notify SCDF** – Occurrence of any fire incident in the premises
Anything I can do better to assist my Building Owner?

- Fire Drill
- CERT
- Daily Checks
- ERP
- TTX
- Fire Safety Report

How many of the duties have I performed to satisfaction?
Case Study – Daily Checks

- **Date & Time:** 28 March 2018 at 2120hrs
- **Venue:** Commercial Shopping Centre
- **What Happened:** Smoke emerged from staircase at basement 1. The fire was extinguished quickly but smoke filled up the common areas at basement 1 & 2 and evacuation was conducted.
- **Construction material left unchecked under the staircase** increased the risk of fire.
- Smoke created from the discarded material would have endangered occupants using the affected staircase.
Lessons Learnt

✓ Daily checks conducted should have identified the fire hazard.
✓ Identified fire hazards should be removed swiftly.
✓ Discarded material under staircases, would compromise the safety of the smoke stop staircases.
✓ Improper storage of material will invite more accumulated trash.
✓ There must be a system in place to report fire hazards and swift alleviation of the hazards.
Case Study – Locked Exit Doors

- **Date & Time:** 24 June 2018 at 1604 hrs
- **Venue:** Commercial Shopping Centre
- **What Happened:** Fire Alarm was triggered. Occupants escaping via EM exit doors found that the doors were not released automatically by the fire alarm. It was found to be a false alarm and the situation reverted back to normal.
- Investigation showed that the EM Lock system server was logged off, thus preventing the doors from unlocking automatically.
- Had it been an actual fire incident, there would be people trapped and consequences would be more severe.
The EM Lock system server was logged off. This interfered with the fire alarm system and did not allow all the exit doors to be automatically unlocked upon activation.
Lessons Learnt

- Access to the EM lock system should have been restricted.
- Regular maintenance and testing must be done on the fire safety systems.
- FSMs must ensure that the fire alarm or sprinkler activation will automatically unlock all exit doors.
- There should not be any software or wiring that impedes this process.
- The doors shall remain unlocked until the investigation to the alarm has been completed and the building fire alarm system has been manually reset.
- A manual release device also has to be provided within 1.5m of the exit door.
Case Study – Isolation of EVCS

- **Date & Time:** 2 Jan 2018 at 0945hrs
- **Venue:** Hotel
- **What Happened:** False ceiling had collapsed during renovation works and fire alarm was triggered.
- As the EVCS was isolated, no announcement was broadcasted.
- The occupants were not informed promptly of the collapsed ceiling.
- The affected occupants were subsequently evacuated to the floor above.
- The delay in notifying the occupants can lead to delayed evacuation that may result in casualties during an actual fire.
Lessons Learnt

✓ There should not be continuous isolation of EVCS.
✓ Any isolation should be re-instated at the end of the day.
✓ Temporary fire precautionary measures should be in place i.e. such as extra fire extinguishers, appointing fire watch personnel, emergency responders and communication aids.
✓ Designated alternate assembly area must be identified.
✓ A Fire Plan submission is required for any works done on the fire protection system.
Case Study – ERP/Notify SCDF

- **Date & Time**: 22 June 2017 at 2156hrs and 2353hrs.
- **Venue**: Light Industrial premises
- **What Happened**: Alarm activated twice in the middle of the night, and was reported as false alarm. FSM was not informed of the alarm activation and the sprinkler was found to have been activated.
- Sprinkler activation caused water damage to property and no fire report was available for insurance claim.
- Case of confirmed fire incident was not reported to SCDF.
Lessons Learnt

- There was no proper investigation on fire alarm activation.
- There should be a proper reporting process to the FSM and FCC for alarm activation after hours.
- This must be incorporated into the ERP and communicated to the related parties.
- Any occurrence of fire incident should be reported to SCDF.
Records of Non-performance

- We keep records of such lapses or failures of FSM in discharging their duties.
- Actions such as Letter of Warning (LOW) and Notice of Fire Safety Offence (NFSO) are included and will be considered for the next offence. Repeated similar offence will warrant a higher penalty.
- In the extreme cases it can lead to removal from the FSM appointment or even temporary suspension or de-registration.
Enhancement to the Scheme

- Fire Safety Feedback Management System
  - Allow FSMs to aid building owners to alleviate non-compliances before commencing any enforcement action
  - Hazard Mitigation Plan substantiated with pictures
  - Raise the standard of fire safety in the premises

- SCDF_FSM@scdf.gov.sg
  - Avenue for feedback
  - Report non-compliances to Fire Safety
Proposed FSM Handbook

- Convenient guide for quick reference
- Working booklet to aid in FSM duties
- Sample content
  - Duties of FSM and building owner/occupier
  - Common non-compliances and examples
  - Important CPs and SSs key content
  - Report/Form templates
Thank You