



**National Fire
And
Civil Emergency
Preparedness
Council**

FIRE SAFETY SEMINAR 2009

WORKSHOP DISCUSSION

BREAKOUT GROUPS DISCUSSIONS

Approval of plans

Building owner is making renovations to few units and asks FSM for advice ? Please enlighten owner.

FSM should advise the owner to engage a Qualified Person (QP) to submit building plans for Addition and Alteration (A&A) works. After completion of works, the owner should ensure that he obtain a Fire Safety Certificate (FSC) from SCDF which should be filed for future reference.

Temporary Fire Permit / Fire Safety Certificate (TFP/FSC)

What is TFP/FSC? What happens if I occupy the premises without a TFP/FSC ?

Fire Safety Certificate

A Fire Safety Certificate (FSC) provides for the safety of the building's occupants. Therefore, owners and their Qualified Persons (QP) whom they have engaged for their fire safety works are required to apply and obtain the FSC before using or occupying the premises. The FSC is only issued after full completion of all fire safety works in the project. Failure to comply with this is an offence under the Fire Safety Act and the owner is liable to court action.

Temporary Fire Permit

A building owner may also apply and obtain a Temporary Fire Permit (TFP) for a limited period to occupy or use the premises, prior to obtaining the FSC. The TFP is only issued on condition that the fire safety works of the project has been satisfactorily completed with very minor outstanding issues left to be complied with. The timeframe to obtain the FSC after issuance of the TFP will depend on the size, type and complexity of the project. Normally, a maximum of 6 months will be granted.

BREAKOUT GROUPS DISCUSSIONS

Fire Certificate (FC)

What is FC and what is FSM's involvement for FC application?

The Fire Certificate (FC) must be obtained within twelve months from the issue of the Fire Safety Certificate (FSC). For new FC, the application shall be made upon SCDF notification. For renewal cases, an application should be made at least two months before expiry of the existing fire certificate.

The fire certificate is valid for one year. The application form should be duly completed and returned to SCDF within two weeks. If the application is in order, SCDF will make an appointment with the owner or occupier for an inspection. Meanwhile the owner or occupier has to arrange for the Professional Engineer and contractor to carry out pre-testing.

Every building has to be inspected annually on a scheduled basis. To maintain the integrity of fire safety and prevention, a high standard of inspection at all buildings is required. Some examples of the items to be inspected are listed below :

- Emergency power supply
- Sprinkler system
- Fire alarm system
- Wet riser
- Dry riser
- Lift – Domestic and Fireman
- Pressurization system
- Atrium smoke control system
- Mechanical ventilation for basement
- Air-conditioning system
- Voice communication system
- Fire Command Centre

Site inspection is conducted in three stages. They are :-

• Stage one

System operation under fire alarm activation simulated under fire condition.

• Stage two

System operation test under secondary power supply by generator.

• Stage three

Testing of individual installation or fire protection measures starting from the roof-top down to every floor till the lowest level of the building.

BREAKOUT GROUPS DISCUSSIONS

Fire Safety Permits & Clearances

Under what circumstances does building owner needs to apply for Temporary Permit from SCDF

Anyone who intends to temporarily change the use of an area within a building or an outdoor area for the purpose of holding an event where temporary / makeshift structures are erected, is required to apply and obtain an approval from the SCDF. The reason for this is to look into the fire safety aspects as a result of the setting up of the temporary structures, to provide for the safety of the public who will attend such events. Therefore, a “Temporary Change of Use” application or commonly known as a Temporary Permit application has to be made to SCDF for approval for events such as: **Promotional Activities, Stage Shows, Exhibitions, Trade Fairs, Carnivals** where temporary structures such as those shown below or similar are erected such as **Tents, Stages, Booths, Stalls / Kiosks**

The type of events that are likely to require a “Temporary Change of Use” approval are supposed to be temporary in nature to which the duration will be limited to at most 2 months. Events include:

- **Promotional Activities** - sales, product launch
- **Stage Shows** - live concerts, circus, games shows, opening ceremonies
- **Trade fairs** - trade fairs, "pasar malam", expositions
- **Carnivals** - food & funfair, charity events, sporting events, celebratory functions
- **Exhibitions** - art exhibitions, displays

Hazardous and toxic materials are not permitted in the event and so is the use of highly flammable liquids and gases. Multi-storey structures are also not allowed in such events. Covered pedestrian walkways are not recommended for the conduct of events because the free movement of the pedestrians will be obstructed. Such walkways include the building's own walkway which is on the periphery of the building.

Organizers of events incorporating fire-based shows / activities or “open- flame” cooking activities or pyrotechnic displays, are required to consult Fire Safety & Shelter Department (FSSD) on the fire safety conditions and obtain separate approval prior to making their application.

The fee for TP is \$50.

BREAKOUT GROUPS CASE 1

Scenario- xxx Premises

- Fire occurred in one of the enclosed exit staircases located in the carpark.
- As the AHU is located nearby, some smoke had propagated through the air handling system and get into the common areas in the shopping mall

Scenario

- Some smoke had accumulated in several retail units on 4th and 5th floor and some affected tenants have self-evacuated.
- EVC announcement for total evacuation was made but lower floors' tenants / patrons continue their activities.

Action Taken

- Upon detection of fire, the in-house FF team was activated for investigation. There was a small fire with intense smoke detected
- Upon assessing the situation, FSM instructed FCC to make evacuation announcement
- Some fire wardens from lower floors who are tenants themselves are busy with customers and did not carry out their fire warden roles
- Some customers refused to leave while others requested to go to the fire floor to remove their vehicles from the affected zone in the carpark.
- Most of the customers who evacuated used the escalators instead of the escape staircases directed by some of the fire wardens. As a result, bottlenecks situation found at the escalators.

Question

- **Public complained that FSM is not discharging his role and of the view that shoppers' lives at risk.**
- **PI examine and comment on this case to see what actions could have been done to manage the situation better?**
 - FSM should follow what is stated in the Fire Emergency Plan.
 - However, some cases or scenarios should be based on FSM's discretion – his appreciation of the situation.
 - If the smoke does not affect the lower floors, should evacuation be conducted? This is where FSM should decide. Generally, those in the affected area should be evacuated first.
 - FSM must display strong command and control of the situation for effective management of the situation.
 - FSM should maintain good communication between parties i.e. fire fighting team, FCC, fire wardens so as to get the necessary updates
 - FSM should emphasize proper routes of evacuation and stress its importance to fire wardens.
 - FSM should notify SCDF thru 995 quoting "There is a fire in my premise involving Fire has been extinguished and no further assistance is required."

Other suggestions

- Lessons learnt should be shared with tenants via emails, circulars, etc
- Should look into educating the tenants in evacuation procedures. Having regular trainings to the staff will definitely enhance their capabilities.
- Fire drills should include worst case scenarios to resolve loose ends

BREAKOUT GROUPS CASE 2

In Feb 2009, SCDF received feedback concerning upper floor corridor of a shopping complex has been used to display antique items for sale. The atrium was used to hold food fair with LPG cylinders to heat up food. The events have caused obstructions to the escape passageway/corridor as well.

A small fire took place at the premises and was put out by the in-house fire fighting team. Investigation revealed that the management has not obtained approval to use the place for such activities. The owner claimed that he is not aware of the fire safety requirements.

If you are the FSM of this premises, how will you handle the above issue?

BREAKOUT GROUPS CASE 2

If you are the FSM of this premises, how will you handle the above issue?

It should be the interest of the FSM to advise the owner that he should apply for a temporary change of use permit for the event. Upon approval and prior to start of event, FSM should inspect the area and ensure fire safety provisions are in order. Any shortfalls should be rectified immediately.

Constant reminders should be given to tenants and staffs to be on the look out for any fire hazards.

During the duration of the event, the FSM should constantly monitor the area and abate any fire hazards such as obstruction to fire fighting equipment and access ways.

FSM should be aware that no flammable materials should be used i.e. LPG cylinders and only electrical and food warmers should be used for the purpose of warming food.

Others:

Should the owner refuse to apply, the FSM should document all his advise and recommendations.

Prior to the event, the FSM should beef up his staffs, tenants and fire wardens' competency to handle fire and evacuation as the event will have high occupancy.