

No : 07/2012
Date : 29 May 2012



AIRPORT EMERGENCY SERVICE

FIRE SAFETY CIRCULAR

To All F&B Operators

FIRE SAFETY INFORMATION AND LESSONS LEARNT FROM RECENT KITCHEN FIRES IN CHANGI AIRPORT

Three (3) cases of kitchen fires occurred at Changi Airport since the beginning of 2012. In our continuous effort to reduce kitchen fires and its potential effects on occupational safety & health, AES would like to share the following fire safety information and lessons learnt from these recent fires. (See also Annex A)

- i) Unattended or extended deep frying or cooking oil heating activities using a deep fryer or a wok/chip pan over an induction/gas stove may lead to the cooking oil or submerged food crumbs catching fire. In one of the fires, the unattended chip pan of cooking oil overheated and escalated into a fire in under 6 minutes whilst in another incident, the cooking oil in a deep fryer caught fire after being heated for 30 minutes. Remember to switch off the cooking stove if you need leave and avoid unnecessary extended heating of cooking oil.
- ii) Do not conduct open flame cooking, deep frying or cooking oil heating activities in kitchens without any kitchen fire suppression systems installed as it is a high fire risk activity that has to be declared to CAG due to differing fire safety requirements for such activities and areas.
- iii) Use the available portable fire extinguishers to fight incipient fires as long as it does not pose any danger to the users. Activate the kitchen fire suppression system manual pull switch if the fire is too big to be tackled by portable fire extinguishers. Activating the kitchen fire suppression system will also activate AES resources to the fire scene. Do not use water on cooking oil fires.

- iv) Ensure deep fryers, kitchen fire suppression systems, portable fire extinguishers and other systems such as sprinklers, fire/gas detectors and fire alarm systems etc are professionally serviced or maintained as per recommended schedule to ensure their serviceability. Kitchen hoods, ducts and fans shall be cleaned regularly to ensure no grease build up that may become a fire hazard.
- v) AES recommends that daily internal safety briefings and checks be conducted for all kitchen staff before work is started. Kitchen supervisors are encouraged to conduct daily fire safety patrols to remove or detect any fire hazards or bad fire safety habits and reiterate the dangers of unattended cooking.
- vi) AES recommends that good induction stoves be used for cooking activities as there is no open flame, flammable gas and very hot surfaces involved and cooking temperatures may be safely controlled using the thermostat, alarm timer or even overheat safety feature as compared to a traditional gas stove.
- vii) AES recommends that good electric deep fryers be used for deep frying activities as there is no open flame and flammable gas involved and cooking temperatures may be safely controlled using the thermostat.
- viii) AES recommends that good electric air fryers be used to replace the traditional electric deep fryers for frying activities as there is no open flame, flammable gas and hot cooking oil involved and cooking temperatures may be safely controlled using the thermostat.
- ix) AES recommends that external kitchen thermometers and alarm timers be used to monitor deep frying and cooking oil heating activities. Deep frying and cooking oil heating temperatures should be kept at the recommended maximum temperature of 180°C to avoid accidental triggering of kitchen fire suppression systems and igniting overheated cooking oil or submerged food crumbs whilst alarm timers could alert the kitchen staff on the frying/heating time.

- x) Sprinklers installed in kitchens to complement the kitchen fire suppression systems will be activated upon exposure to temperatures above 68°C. As such, extreme care and caution should be taken during cooking, deep frying and heating activities to ensure that these sprinklers are not unnecessarily activated.
- xi) Unless done properly, frequent reheating of used cooking oil lowers its flash point and increases the risk of kitchen fires. As a guide, overheated cooking oil fires occurs at around 320°C and may be lower for reheated cooking oils.

2 With immediate effect, all F&B operators are requested to submit the declaration forms in Annex B to CAG on an annual basis. AES will not hesitate to issue a stern warning and/or a service charge of SGD350.00 per hour or part thereof for any fire vehicle turnout due to a kitchen fire caused by negligence or ignorance of airport fire safety requirements.

3 For further clarifications, you may contact the Airport Emergency Service Fire Safety Unit (AES FSU) at 65412535 or at **fire.safety@changiairport.com**.

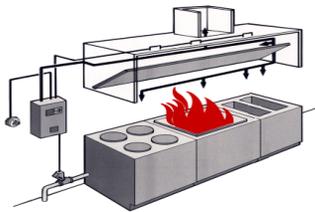
NAZRI BAMADHAJ
for SUPERINTENDENT, FIRE SAFETY
AIRPORT EMERGENCY SERVICE

Annex A

FIRE SAFETY INFORMATION AND LESSONS LEARNT FROM RECENT KITCHEN FIRES IN CHANGI AIRPORT



Switch off the cooking stove if you need to go away even for a short while and avoid unnecessary extended heating of cooking oil.



Open flame cooking, deep frying or cooking oil heating activities shall only be conducted in kitchens installed with kitchen fire suppression systems.



Use the portable fire extinguisher to fight incipient fires as long as it does not pose any danger.



Activate the kitchen fire suppression system manual pull switch if the fire is cannot be extinguished using portable fire extinguishers. Do not use water on cooking oil fires.



Clean kitchen hoods, ducts and fans regularly to prevent any grease build up that may become a fire hazard.



Monitor open flame cooking, deep frying and cooking oil heating activities using external kitchen thermometers and alarm timers.



Good induction stoves are recommended for cooking activities due to its safety aspects and features.



Good electric deep fryers are recommended for deep frying activities due to its safety aspects and features. Electric deep fryers do not use open flame and flammable gas thus reducing fire hazards.



Good electric air fryers are recommended for deep frying activities due to its safety aspects and features. Electric air fryers do not use open flame, flammable gas and hot cooking oil thus reducing fire hazards.



Annex B

Superintendent, Fire Safety
Airport Emergency Service
Fire Safety Unit
Changi Airport Group (Singapore) Pte Ltd
Singapore Changi Airport
P O Box 168
Singapore 918146

ANNUAL FIRE SAFETY DECLARATION FORM

I declare that all the fire safety requirements in Schedule 3 of the Tenancy Agreement have been complied with and that no additions or alterations have been done that may increase the level of fire risk in my kitchen.

No.	Item	Declaration (Circle Accordingly)	Remarks
1	Have you installed additional cooking equipment such as deep fryers or gas/electric/induction stoves in the past one year ?	Yes / No	
2	Have you done any addition or alteration works to your kitchen in the past one year ?	Yes / No	
3	Have you serviced your kitchen fire suppression system ?	Yes / No / N.A.	Pls provide date (s)

Name & signature of authorized company representative:

Date:

F&B outlet name:

Location & unit no: