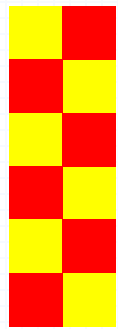




SCDF

The Life Saving Force

... for a safer Singapore



FSM Briefing 2022: Common Fire Safety Enforcement Findings

28 July 2022

*CPT Sonia Chin, Staff Officer
Fire Safety Department, SCDF*



Agenda

- Introduction
- Enforcement Workflow
- Common Fire Hazards & Fire Safety Offences
- Fire Hazard Mitigation Plan (FHMP)



Introduction

- **SCDF regulates fire safety to attain a fire-safe built environment by:**
 - ✓ Formulating fire safety policies – E.g. Fire Safety Act (FSA), Code of Practice for Fire Precautions in Buildings (Fire Code)
 - ✓ Implementing fire safety requirements – E.g. Fire Safety Certificate (FSC), Petroleum and Flammable Materials License (P&FM), Temporary Permit
 - ✓ Partnering the industry players to improve on regulatory systems – E.g. Fire Safety Managers (FSM), Building Owners
 - ✓ Maintaining an effective regulatory regime – E.g. Regular Inspections, Enforcement Actions



Regulatory Regime

- **To create a fire-safe environment by enforcing the FSA and achieved through:**
 - ✓ Scheduled fire safety enforcement checks
 - ✓ Responding to public feedbacks
 - ✓ Concerted joint efforts by SCDF and building managements / owners / FSMs / CERTs





THE STATUTES OF THE REPUBLIC OF SINGAPORE

FIRE SAFETY ACT

(CHAPTER 109A)

(Original Enactment: Act 39 of 1993)

Enforcement Action

REVISED EDITION 2000

(30th December 2000)

Prepared and Published by

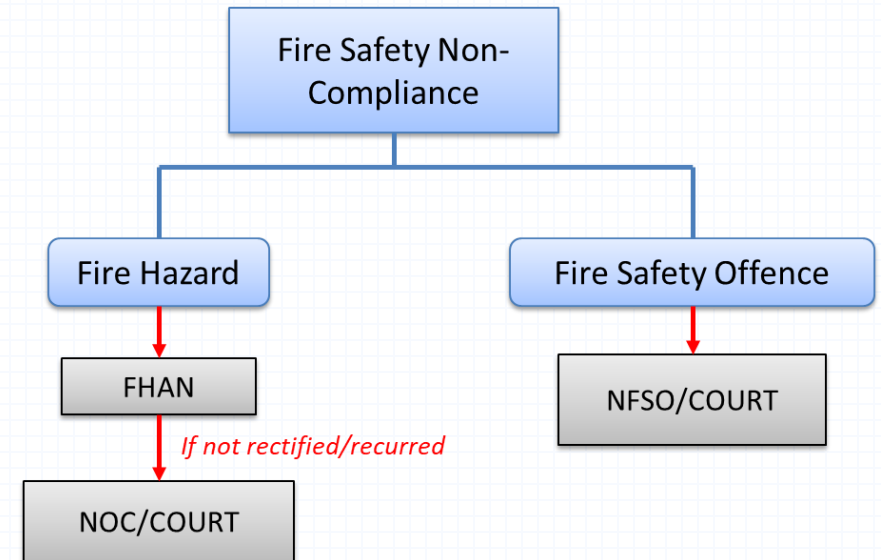
THE LAW REVISION COMMISSION
UNDER THE AUTHORITY OF
THE REVISED EDITION OF THE LAWS ACT (CHAPTER 275)

Informal Consolidation – version in force from 1/9/2013



Fire Safety (Amendment) Act 2019)

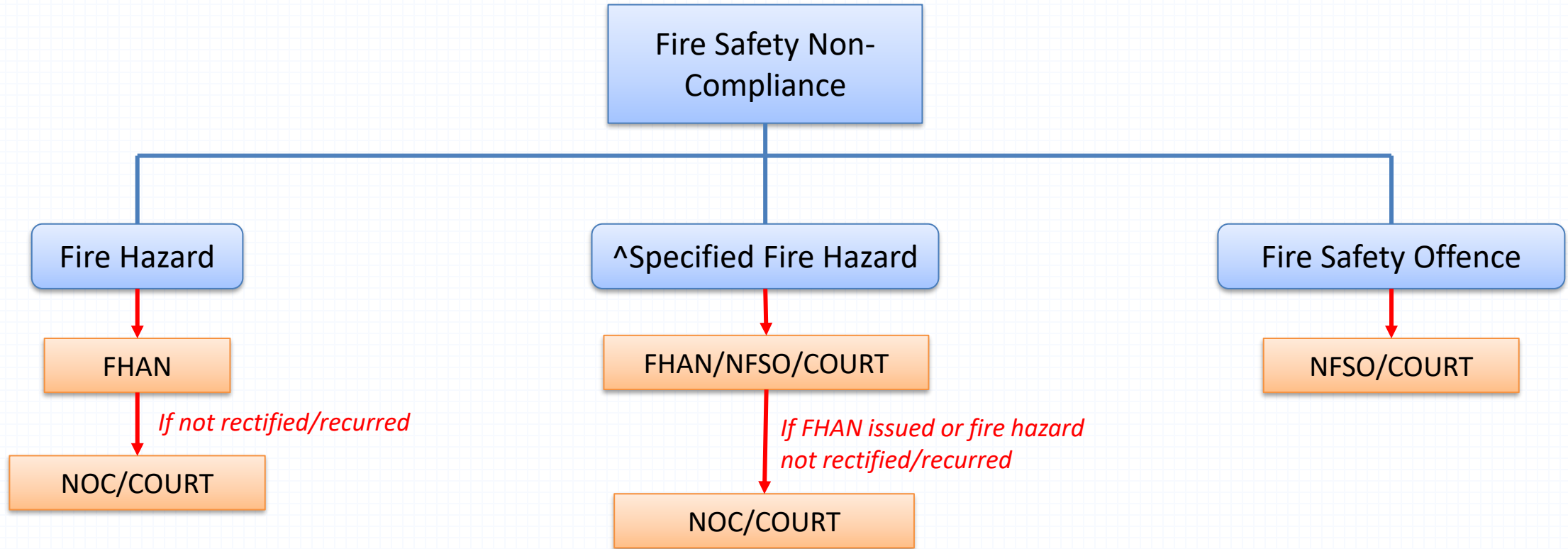
- Came into effect on 14 September 2020
- Enhance deterrence against serious fire safety non-compliances where FHAN needs to be issued first against errant parties for fire hazard related non-compliance, and can only take prosecutorial action if they fail to comply with the FHAN.
- The Act empowers SCDF to take immediate prosecutorial action against persons who cause fire hazards with serious fire safety risks.



FHAN: Fire Hazard Abatement Notice
NFSO: Notice of Fire Safety Offence
NOC: Notice of Composition



Past Enforcement Framework



^ such as

- (i) Overcrowding*
- (ii) Fire safety measures not in order*
- (iii) Obstruction to escape route*

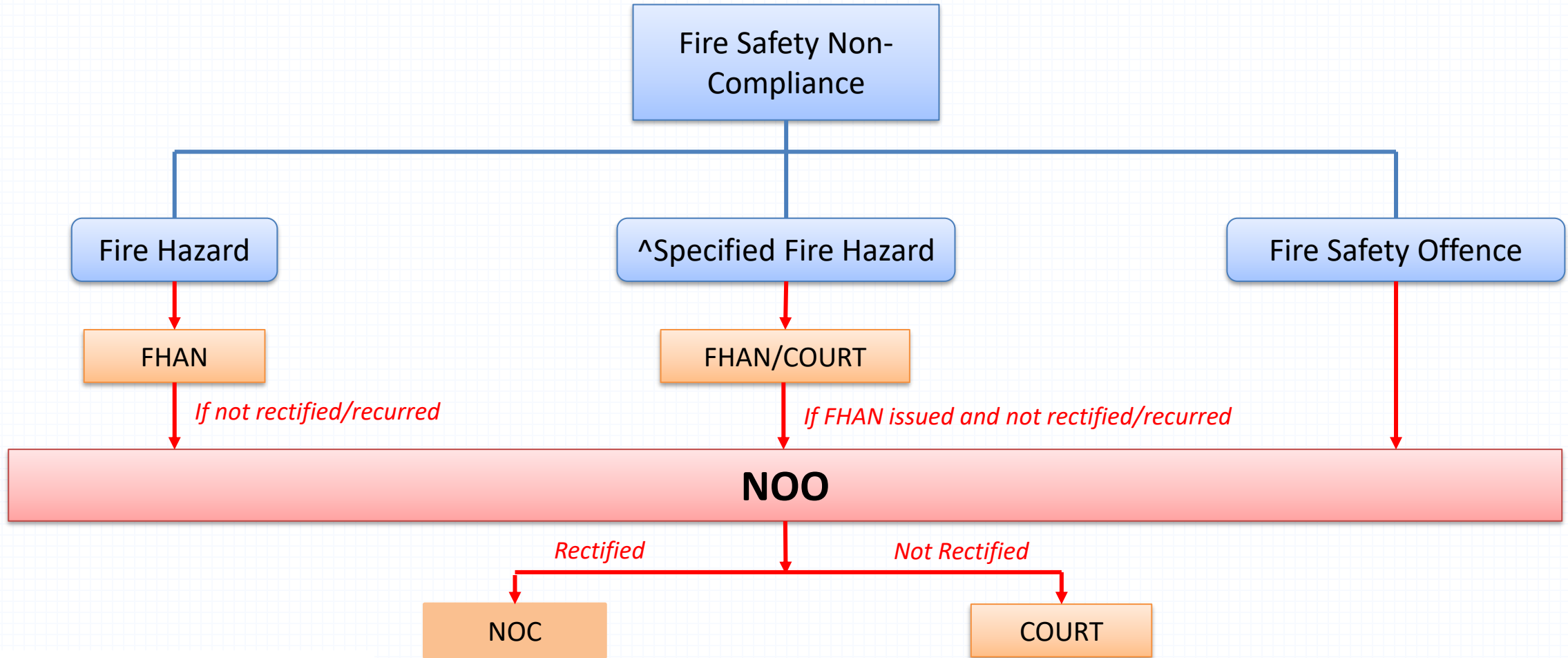
FHAN: Fire Hazard Abatement Notice

NFSO: Notice of Fire Safety Offence

NOC: Notice of Composition



Revised Enforcement Framework



FHAN: Fire Hazard Abatement Notice

NOO: Notice of Offence

NOC: Notice of Composition

^ such as

(i) Overcrowding

(ii) Fire safety measures not in order

(iii) Obstruction to escape route



Common Fire Hazards



Fire Hazards

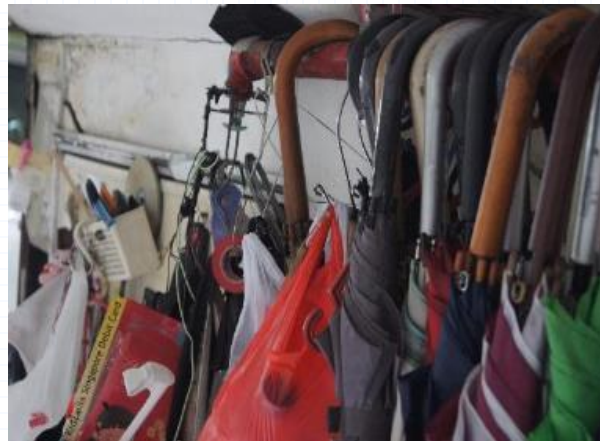
- Any matter or circumstances which materially increase the likelihood of fire or the danger to life or property that would result from the outbreak of fire which includes:
 - ✓ Obstruction to means of escape
 - ✓ Obstruction to fire safety measures
 - ✓ Non-maintenance of fire safety measures
 - ✓ Storage/placement of combustible material
 - ✓ Missing/removal of fire safety measures



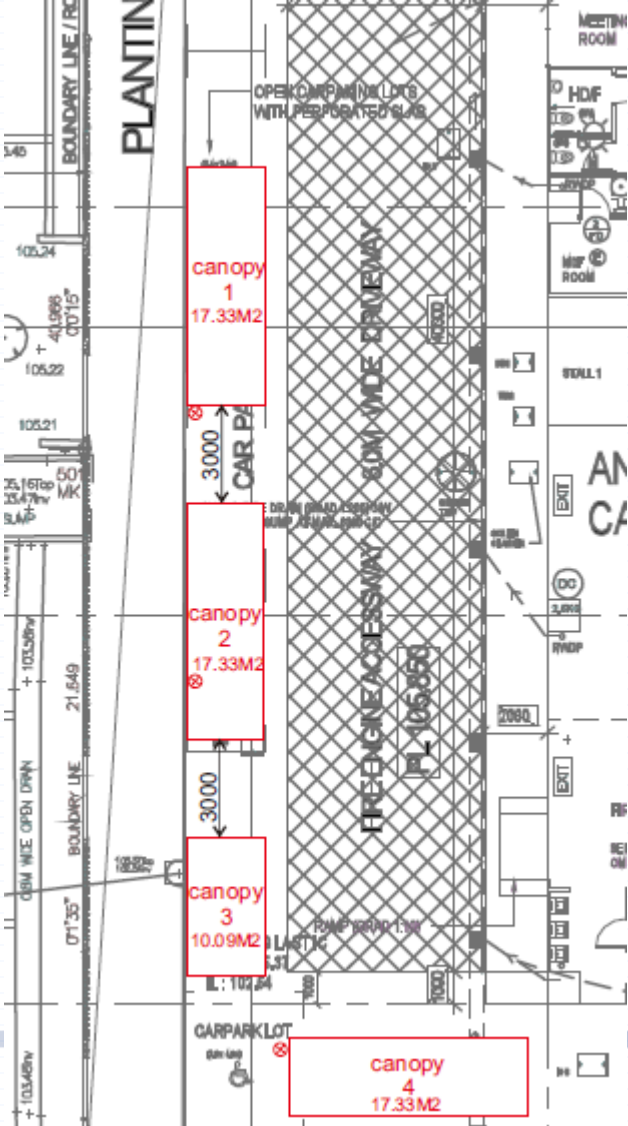
Obstruction along Means of Escape



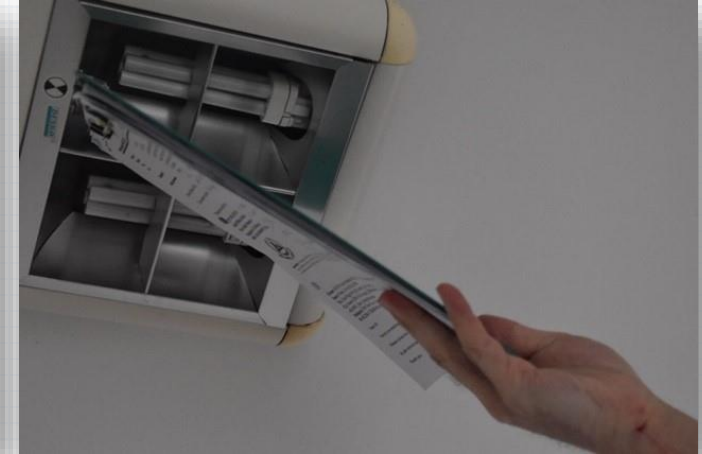
Obstruction to Fire Safety Measures



Obstruction to Fire Engine Access/Accessway



Fire Safety Measures Not in Efficient Working Order



Common Fire Safety Offences

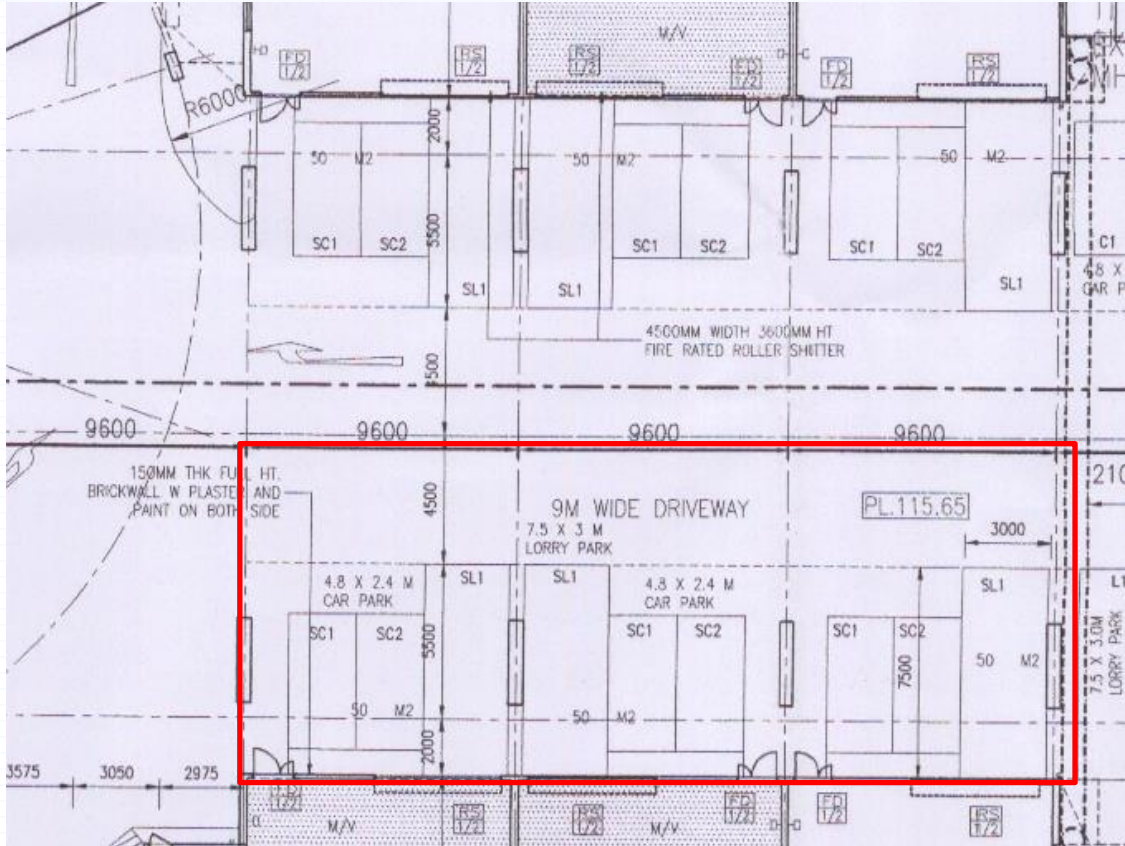


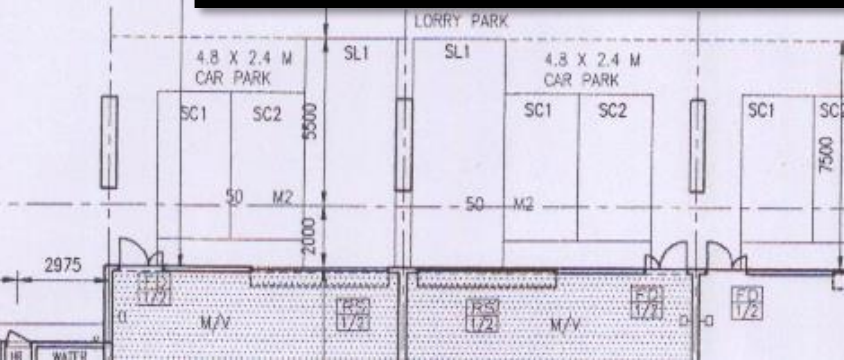
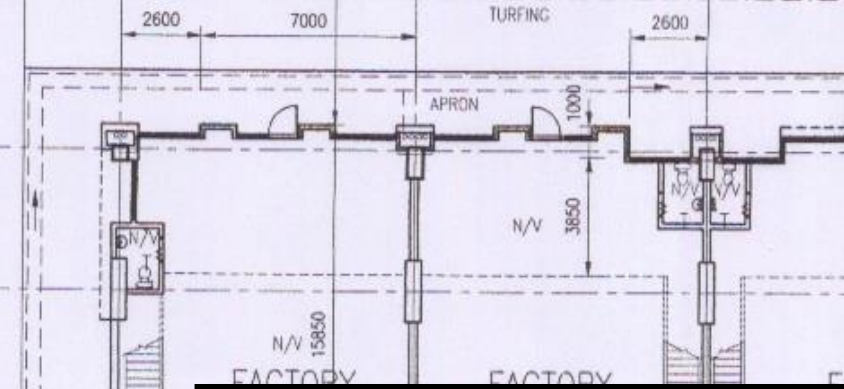
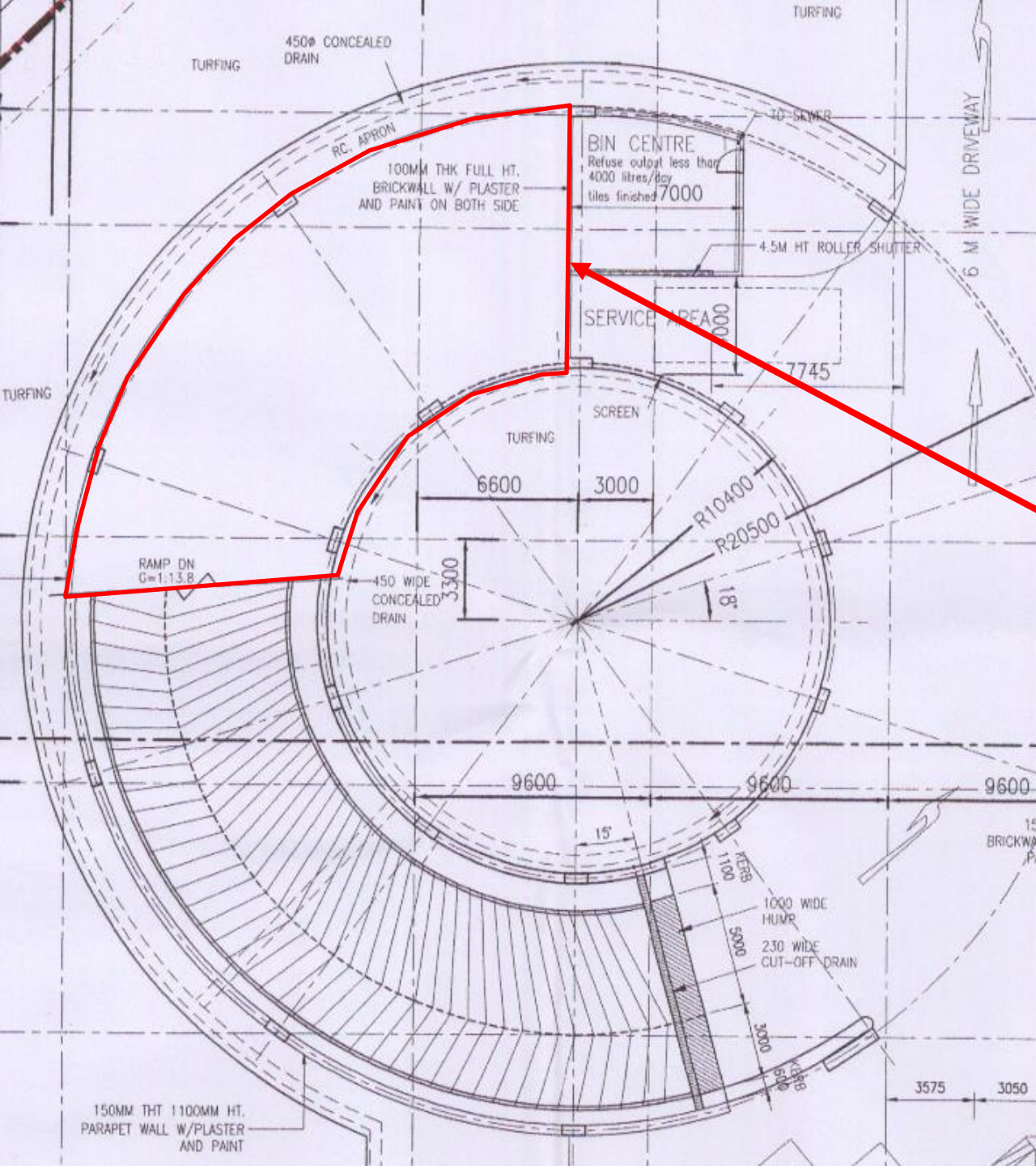
Fire Safety Offence

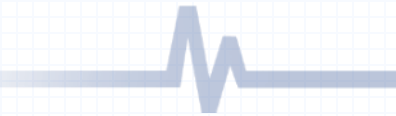
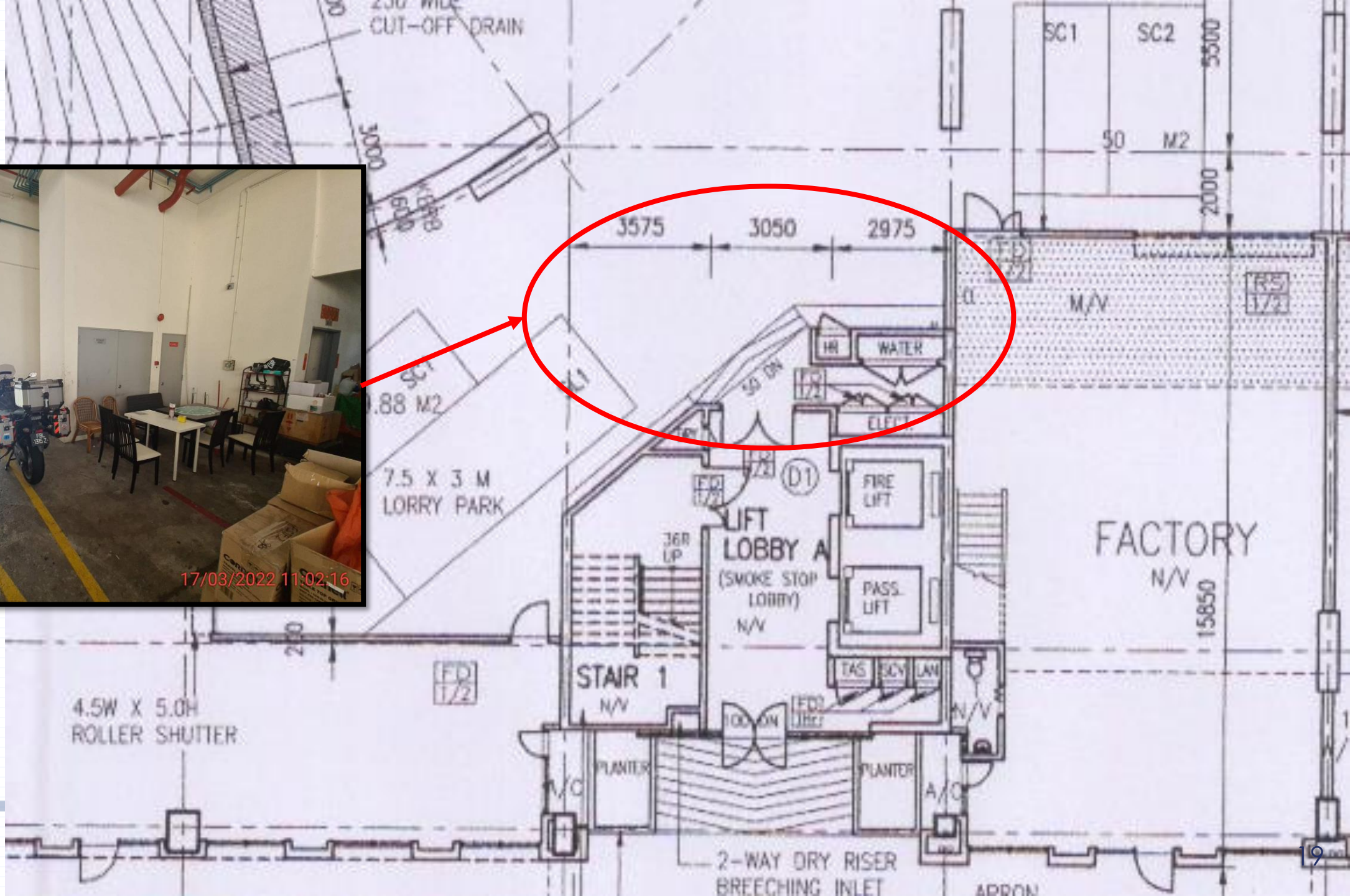
- Contravention to requirements in Fire Safety Act and its regulations such as:
 - ✓ Change of use of premises
 - ✓ Carrying out fire safety works without approval of plans
 - ✓ Storage of Petroleum and Flammable Material (P&FM) without a valid storage license



Unauthorised Change of Use







Unauthorised Change of Use to Dormitory



Unauthorised Fire Safety Works

Fire Safety Works (partition and mezzanine floor) without approval of plan



Unauthorised Fire Safety Works

Fire Safety Works (LPG manifold system) without approval of plan



Unauthorised Fire Safety Works

Fire Safety Works (kitchen exhaust duct) without approval of plan



Storage of P&FM Without a Valid Storage Licence

- All storage of P&FM (Petroleum and Flammable Material), regardless of quantity stored, have to comply with the fire safety requirements.
- All storage of P&FM must be indicated in building plans submitted to SCDF for approval.
- Storage licence is required if the quantity stored is above the exemption quantity or if there is a **mixed state** (eg. 10kg acetylene (gas), 800 litres of diesel (liquid)) of P&FM in a factory.

P&FM Mixtures

Mixed storage or keeping of any petroleum and flammable material, or more than one flammable material, in separate containers or compartments within any premises shall be exempted from the requirement of a licence if:

i. Where all the substances are solids, their aggregate weight does not exceed 20 kg;

- Eg. If you store several kinds of petroleum/flammable materials of which all are solids, for instance, aluminum powder, calcium carbide and calcium silicate, you are required to have a storage licence if the overall quantity of all such solids together exceeds 20 kg.

ii. Where all the substances are liquids, their aggregate volume does not exceed 40 L:

- Eg. If you store several kinds of petroleum/flammable materials of which all are liquids, for instance, butanol, chlorobutane and acetone, you are required to have a storage licence if the overall quantity of all such liquids together exceeds 40 L.

iii. Where all the substances are gaseous, their aggregate weight does not exceed 10 kg; or

- Eg. If you store several kinds of petroleum/flammable materials of which all are gases, you are required to have a storage licence if the overall quantity of all such gases together exceeds 10 kg.

iv. Where the substances are in mixed states, their aggregate weight does not exceed 20 kg.

- Eg. If you store several kinds of petroleum/flammable materials of which consist of solids, liquids and gases, for instance, calcium carbide, acetone and acetylene, you are required to have a storage licence if the overall quantity of all such solids, liquids and gases together exceeds 20 kg.

Storage of P&FM Without a Valid Storage Licence

Flammable Materials

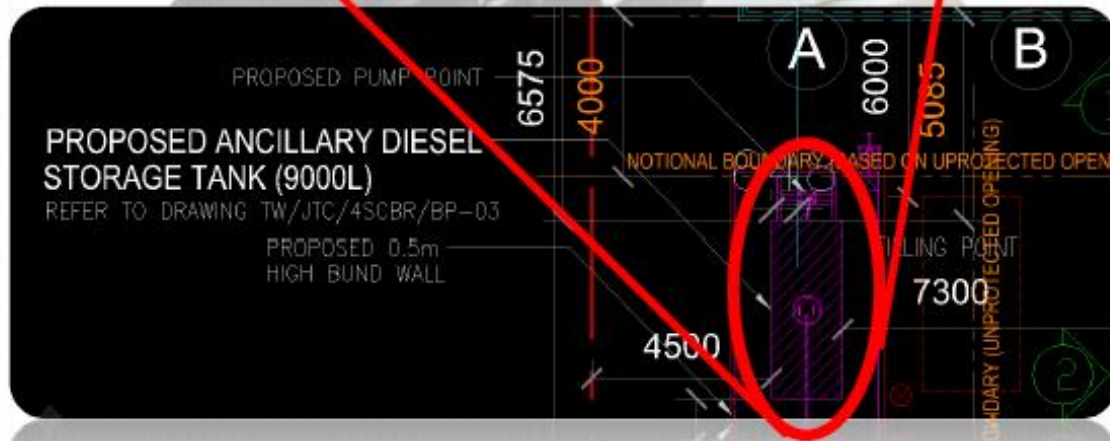
The exemption quantities for the 366 classes of Flammable Materials are in the following folder.

Click on the link to download [the Exemption quantities for flammable materials](#).
(58.50 KB)



Second Schedule (New)			
S/N	Flammable Materials	General manufacturing, etc., purpose	Medical or laboratory purpose
1	Acetal	20 L	20 L
2	Acetaldehyde diethylacetal	20 L	20 L
3	Acetoin (3-Hydroxybutanone)	20 L	20 L
4	Acetone	20 L	20 L
5	Acetyl chloride	20 L	20 L
6	Acetyl methyl carbinol (Butanolone)	20 L	20 L
7	Acetylene (gas)	10 kg	10 kg

Storage of P&FM Without a Valid Storage Licence



Any Other Classes of Petroleum

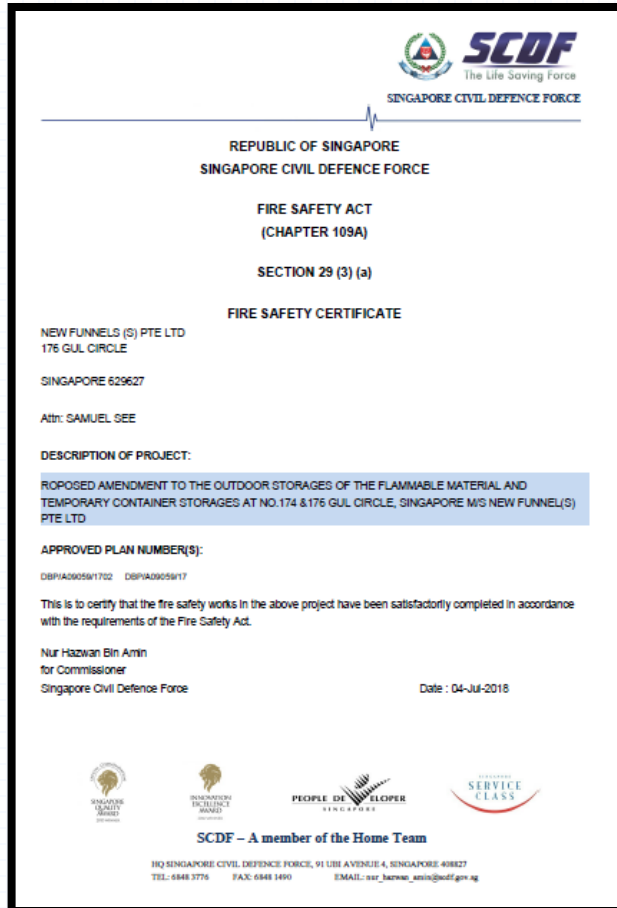
Purpose	Exemption Quantity					
	Class	I	Class	II	Class	III
	Petroleum		Petroleum		Petroleum	
For private use in a private dwelling house or for use in any business other than in a factory	Not more than 20 L		Not more than 200 L		Not more than 1,500 L	
For use in a factory	Not more than 400 L		Not more than 1,000 L		Not more than 1,500 L	



Storage of P&FM Without a Valid Storage Licence

P&FM Storage Licence Application

1. Engage a Qualified Person (QP) to prepare and submit plan to SCDF
2. Submit plan(s) that incorporate with the fire safety works in accordance with the Fire Code and other accepted codes
3. A registered inspector (RI) will apply Fire Safety Certificate (FSC) after he has certified that fire safety works are completed and in accordance with the approved building plans.
4. The applicant can apply for P&FM storage licence on-line via GoBusiness Portal.



SCDF
The Life Saving Force
SINGAPORE CIVIL DEFENCE FORCE

REPUBLIC OF SINGAPORE
SINGAPORE CIVIL DEFENCE FORCE

FIRE SAFETY ACT
(CHAPTER 109A)

SECTION 29 (3) (a)

FIRE SAFETY CERTIFICATE

NEW FUNNELS (S) PTE LTD
176 GUL CIRCLE

SINGAPORE 629627

Attr: SAMUEL SEE

DESCRIPTION OF PROJECT:

PROPOSED AMENDMENT TO THE OUTDOOR STORAGE OF THE FLAMMABLE MATERIAL AND TEMPORARY CONTAINER STORAGE AT NO.174 & 176 GUL CIRCLE, SINGAPORE M/S NEW FUNNEL(S) PTE LTD

APPROVED PLAN NUMBER(S):
DBPIA090591702 DBPIA0905917

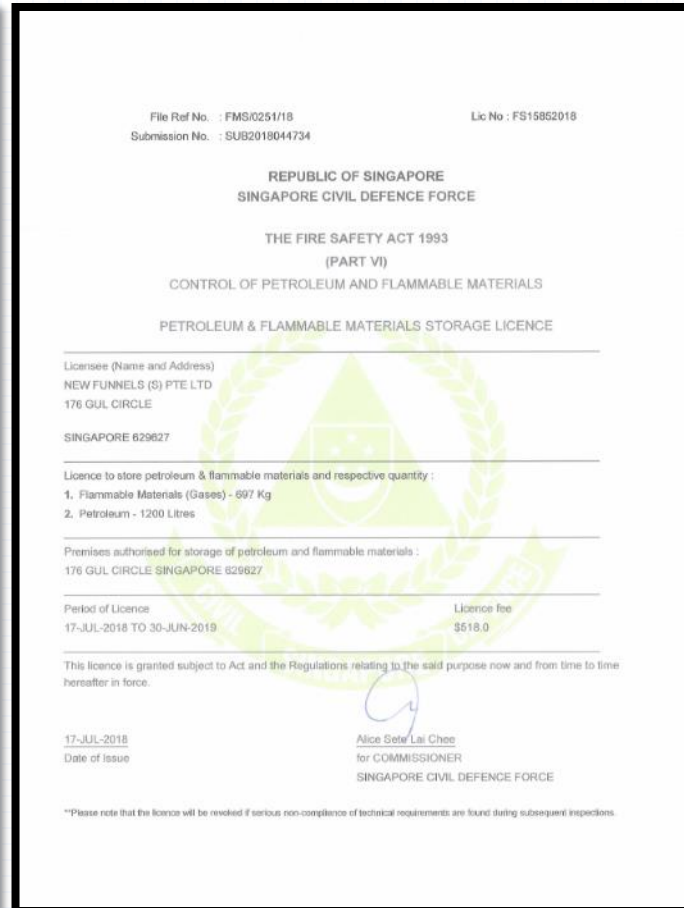
This is to certify that the fire safety works in the above project have been satisfactorily completed in accordance with the requirements of the Fire Safety Act.

Nur Hazwan Bin Amin
for Commissioner
Singapore Civil Defence Force

Date : 04-Jul-2018

SCDF - A member of the Home Team

HQ SINGAPORE CIVIL DEFENCE FORCE, 91 UBI AVENUE 4, SINGAPORE 408827
TEL: 6848 3776 FAX: 6848 1400 EMAIL: ocr_barneo_amin@scdf.gov.sg



File Ref No. : FMS/0251/18 Lic No : FS15852018
Submission No. : SUB2018044734

REPUBLIC OF SINGAPORE
SINGAPORE CIVIL DEFENCE FORCE

THE FIRE SAFETY ACT 1993
(PART VI)

CONTROL OF PETROLEUM AND FLAMMABLE MATERIALS

PETROLEUM & FLAMMABLE MATERIALS STORAGE LICENCE

Licencee (Name and Address)
NEW FUNNELS (S) PTE LTD
176 GUL CIRCLE
SINGAPORE 629627

Licence to store petroleum & flammable materials and respective quantity :
1. Flammable Materials (Gases) - 697 Kg
2. Petroleum - 1200 Litres

Premises authorized for storage of petroleum and flammable materials :
176 GUL CIRCLE SINGAPORE 629627

Period of Licence
17-JUL-2018 TO 30-JUN-2019 Licence fee
\$518.0

This licence is granted subject to Act and the Regulations relating to the said purpose now and from time to time hereafter in force.

17-JUL-2018
Date of Issue

Alice Siew Lai Chee
for COMMISSIONER
SINGAPORE CIVIL DEFENCE FORCE

*Please note that the licence will be revoked if serious non-compliance of technical requirements are found during subsequent inspections.

Fire Hazard Mitigation Plan (FHMP)



Fire Hazard Mitigation Plan (FHMP)

- To engage FSM arising from a feedback for swifter alleviation of the fire safety non-compliances.
- To encourage self-help and greater ownership by building management.
- It is also FSM's main roles and responsibilities to detect fire hazards by conducting daily checks and implement fire prevention measures for the building management/owners to prevent recurrence.
- SCDF will engage FSM to investigate into the fire safety feedback received by SCDF.
- FSM will be notified via email and SMS. Details of feedback provider will not be shared to ensure confidentiality of the feedback provider.
- FSM to investigate into the feedback and to take necessary actions to alleviate the fire safety non-compliances promptly, before any intervention from SCDF.



Fire Hazard Mitigation Plan (FHMP)

Date of Investigation: *DD MMM YYYY*

Time of Investigation: *HH:MM*

Location of Fire Hazard(s): *(e.g. Staircase B, Level 1)*

Action Taken:

E.g. Storage of combustible material at Staircase B, Level 1 has been cleared.

E.g. To engage a contractor in rectifying the issue

Actions/Strategies to Prevent Recurrence of Fire Safety Non-compliances:

E.g. To engage a 3rd party enforcement officers to patrol the area twice weekly

Implementation Schedule:

E.g.

DD MMM YYYY: Sourcing for contractor

DD MMM YYYY: Quotation from contractor

DD MMM YYYY: Engagement of contractor

DD MMM YYYY: Rectification of issue by contractor

DD MMM YYYY: Submission of Mitigation Plan to SCDF

Photographic Evidences (you may insert before and after pictures here, where applicable):

FSM will then have to fill up the FHMP accordingly.

FSM will have to implement measures to ensure the fire hazards do not recur.



Positive Examples

- FSM responding to SCDF within 1 working day.
- Rectification photos.
- Carrying out mitigation plan (e.g. removing the storage placed along the fire engine accessway and to conduct daily inspection to ensure recurrence etc.).

RE: SCDF seeking FSM assistance for potential fire hazard at [REDACTED]

[REDACTED]

FSM_FHMP - NC2 21.05.2021.pdf
pdf File

Service Report for March, April, May 2021.pdf
pdf File

Incident Report - 12 May 2021.pdf
pdf File

Dear WO2 Izhar

Please refer to attached for the investigation on the latest fire alarm incident occurred [REDACTED]. Also attached the service report for fire protection system.

Photographic Evidences:

Before: Photos (Provided by SCDF)



After: Photos after removal of fire hazards



DF information

Feedback: (SIC) numerous feedback regarding the fire hydrant being block, hydrant being chain up but temper with and place with working debris daily, located at [REDACTED]

MA/FSM update (with photos, to show front view and side view of affected area)

[REDACTED]

There was no obstruction to the fire hydrant. Please refer to the attached photos, front view and side view.



Thank You

