

Registered Fire Engineer Scheme

Requirements for various fuels used in food premises

1. Scope

This document specifies the various fuels that may be used in food premises and prescribes the relevant fire safety requirements.

2. Restriction

2.1 Liquefied Petroleum Gas (LPG) is not permitted :

2.1.1 In any quantity if the kitchen of the food premises is located on any floor below ground level.

2.2 The following fuels may be used in kitchens of food premises without any restriction :

2.2.1 Electricity;

2.2.2 Towngas or Towngas (SNG).

2.3 The following fuels may be used in kitchens of food premises subject to the conditions stipulated for fire safety. There may be other requirements related to smoke emission control in which respect the approval of Director of Environmental Protection should be obtained.

2.3.1 Solid fuels such as wood and coal;

2.3.2 Liquid fuels such as diesel (with a flash point of or above 66°C) and kerosene.

3. Solid Fuels

3.1 If the provision of chimney is required by the licensing authority or Director of Environmental Protection, the chimney shall be provided with:

3.1.1 an inspection door at the bottom; and

3.1.2 a spark arrestor constructed of wire gauze having an aperture size not greater than 1.25mm.

In addition, subject chimney shall comply with the following requirements:

3.1.3 the construction of the chimney shall meet the requirements of Environmental Protection Department and the approval and consent from Buildings Department are required; and

3.1.4 the position of the chimney(s) shall be clearly indicated on the layout plans.

3.2 Without prejudice to the other provisions of this fire safety requirement, additional fire safety requirements will be issued separately for compliance subject to the result of on-site assessment by the Fire Services Department.

4. Diesel (with a flash point of or above 60°C)

4.1 The service tank shall not be more than 500 litres maximum capacity.

4.2 The service tank should preferably be located in open air. Where this is not practicable it shall be contained in separate room constructed of 100mm brick or 75mm cement concrete to give a fire resisting period (FRP) of one hour and provided with a sill, a bund wall or metal tray forming a retaining space of sufficient capacity to hold the entire contents in the event of a leakage or fire.

4.3 A robust gauge shall be provided for measuring the contents of the service tank. Glass type gauges shall not be used.

4.4 The oil supply pipe to the burner(s) shall be fitted with a remote control valve at an easily accessible location outside the kitchen, clearly indicated in English and Chinese and in capital letters and characters as large as practicable.

4.5 A catchment of metal tray shall be provided under each burner.

4.6 A chimney shall be erected and provided with :

4.6.1 an inspection door at the bottom; and

4.6.2 sufficient access to the ducting for regular removal of the accumulated grease.

5. Kerosene

5.1 The capacity of this system shall not exceed the respective general exempt quantity (GEQ), i.e. 25 Liters. Licence is needed for any additional supply in excess of this quantity.

5.2 If the system incorporates a pressure vessel :

5.2.1 The pressure vessel shall be provided with:

5.2.1.1 a pressure gauge;

5.2.1.2 a pressure release valve; and

5.2.1.3 a safety valve.

5.2.2 The pressure vessel shall be separated from the burners;

5.2.3 Only copper piping shall be used to connect the pressure vessel and the burner(s). The piping shall be:

5.2.3.1 fixed to the walls except the length of 600mm from the burner which shall be arranged in a flexible coil to allow cleaning;

5.2.3.2 fitted with a stop valve at either end.

5.2.4 The pressure vessel and all burners shall be installed in fixed positions to prevent accidental overturning when in use;

5.3 If the system incorporates an electric pump :

5.3.1 The kerosene container shall be:

5.3.1.1 bunded or placed in a metal tray so as to form a retaining space of sufficient cubic capacity to hold the entire contents.

5.3.1.2 provided with 3mm self-closing lid.

5.3.2 The electric pump shall be:

5.3.2.1 separated from the burners;

5.3.2.2 provided with an independent switch at an easily accessible location. The “ON/OFF” positions shall be clearly identified in English and Chinese and by capital letters and characters as large as practicable.

5.3.3 Only copper piping shall be used to connect the electric pump and the burner(s). The piping shall be:

5.3.3.1 fixed to the walls except the length of 600mm from the burner which shall be arranged in a flexible coil to allow cleaning.

5.3.3.2 fitted with on/off tap on either end.

5.3.4 A catchment or metal tray shall be provided under the burner(s).

6. Fuel for food warming and water boiling outside kitchen

Cooking activities shall be carried out inside kitchen. However, limited scale of food warming and water boiling outside kitchen would be permitted.