



環境保護署

Environmental Protection Department

《空氣污染管制（燃料限制）規例》 及其2008年的修訂規例指南

A Guide to Air Pollution Control (Fuel Restriction) Regulation and its Amendment of 2008



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GENERAL

What is the Air Pollution Control (Fuel Restriction) Regulation about?

The Air Pollution Control (Fuel Restriction) Regulation (Cap. 311I) (the Regulation) was enacted in 1990 to impose legal control on the types of fuel allowed for use and their sulphur contents in commercial and industrial processes to reduce sulphur dioxide (SO₂) emissions.

In June 2008, the Regulation was amended to tighten the control requirements of liquid fuels. If you use liquid fuels in any commercial or industrial process, you are advised to pay special attention to the Section on Use of Liquid Fuels.

Due to the unique topographic features, only gaseous fuel is permitted in Sha Tin district since 1989. This arrangement will continue. Please refer to the Section on Sha Tin Fuel Restriction Area for details if you have any fuel-using equipment in this district.

The Regulation does not apply to any fuel-using equipment that is used or operated in premises used solely as a dwelling, or is used or operated in or on a vessel, motor vehicle, railway locomotive or aircraft.

Why do we need to control the emissions of SO₂?

SO₂ is an air pollutant resulting from combustion of fuels containing sulphur. It can cause respiratory illness, reduce lung function, and increase morbidity and mortality at high concentration levels. It also reacts with other chemicals in the atmosphere and transforms into fine sulphate particles which impair visibility and contribute to smog formation.

What are the major requirements of the Regulation?

With the exception of Sha Tin district (please refer to the Section on Sha Tin Fuel Restriction Area), only fuels complying with the following respective requirements are permitted to be used:

- a) gaseous fuel;
- b) conventional solid fuel with a sulphur content not exceeding 1% by weight;
and
- c) liquid fuel with a sulphur content not exceeding 0.005% by weight and a viscosity not more than 6 centistokes at 40°C, such as Ultra Low Sulphur Diesel (ULSD).

Item c) above is a requirement under the Air Pollution Control (Fuel Restriction) (Amendment) Regulation (the Amendment Regulation) which took effect on 1 October 2008.

Notwithstanding the above, the use of liquid fuel not complying with item c) above or what is referred to as the "restricted liquid fuel" in the Amendment Regulation, may be allowed if the level of air pollutant emissions does not exceed the respective prescribed limit. For details, please refer to the Section on Use of Liquid Fuels.

USE OF LIQUID FUELS

What are the control requirements of liquid fuels?

With the exception of Sha Tin district (please refer to the Section on Sha Tin Fuel Restriction Area), users should preferably use liquid fuel such as ULSD. However, in the event that they choose to use "restricted liquid fuel", the users shall ensure that the equipment using liquid fuel has been issued with a certificate of compliance certifying that, among others, the level of pollutants emitting from the equipment does not exceed the following specified emission limits-

| Specified Pollutant | Emission Limit (gram pollutant per litre fuel) |
|--|---|
| Sulphur dioxide | 0.864 |
| Nitrogen oxides (expressed as nitrogen dioxide) | 2.4 |
| Respirable suspended particulates | 0.12 |

To comply with these emission limits, emission control device will usually be required to be provided and operated properly.

Which liquid fuels will be in compliance with the requirements of the Amendment Regulation? What are their environmental benefits?

Liquid fuels such as ULSD which contain not more than 0.005% sulphur by weight and have a viscosity not more than 6 centistokes at 40°C are acceptable for use. They help reduce SO₂ emissions from the industrial and commercial processes. Moreover, the use of ULSD will have the additional benefit of reducing smoke and particulate emissions.

What should I do if I wish to use "restricted liquid fuel"?

If you are considering using "restricted liquid fuel", you must first commission a competent examiner to conduct emission testing on your fuel-using equipment to ascertain full compliance with the emission limits mentioned above. A competent examiner means a registered professional engineer in the building services, gas, chemical, environmental, marine and naval architecture or mechanical discipline under the Engineers Registration Ordinance (Cap. 409).

Unless you hold a valid certificate of compliance from the competent examiner, you must not allow any use of "restricted liquid fuel" in the fuel-using equipment. If you are also a licence holder of any Specified Process defined under the Air Pollution Control Ordinance (Cap. 311), please note that you would need to apply for variation of licence conditions if you have to modify your equipment, e.g. by adding emission control device, to enable the use of "restricted liquid fuel". For other fuel users, you would also be required to obtain approval under the Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations (Cap. 311A) if modification to your fuel-using equipment is required and the total fuel using capacity of your equipment exceeds 25 litres per hour.

In addition to the above, as owner of the equipment using "restricted liquid fuel", you are required to keep the certificate of compliance for 3 years after issue and produce the certificate for inspection upon request by the Authority during the period of 3 years. Other continuing duties imposed on the owner or user of the equipment would include proper operation and maintenance of the equipment and any emission control device so installed, the sulphur content and viscosity of the "restricted liquid fuel" not exceeding their respective maximum limit set out in the certificate, etc.

SHA TIN FUEL RESTRICTION AREA

What fuel restriction requirements are imposed on fuel-using equipment in Sha Tin?

Except for construction site or during emergency, only gaseous fuel is allowed to be used in the Sha Tin Fuel Restriction Area. For any fuel-using equipment that is used or operated in construction site or during emergency in Sha Tin Fuel Restriction Area, ULSD is practically the liquid fuel to be used.

What are the areas covered by Sha Tin Fuel Restriction Area?

Sha Tin Fuel Restriction Area covers the areas delineated and edged blue on a plan numbered FR/50/4, signed by the then Secretary for Health and Welfare on 27 October 1988 and deposited in the Land Office. It includes all areas of the Sha Tin District Council.



OFFENCE AND PENALTY

What are the penalties under the Regulation?

- a) Any person who contravenes the fuel restriction requirements of the Regulation commits an offence and is liable to a fine not exceeding \$20,000 and imprisonment for 6 months, and in addition to a daily fine not exceeding \$5,000 if the offence continues.
- b) For those owners using "restricted liquid fuel" in fuel-using equipment, they must also keep the certificates of compliance issued for 3 years and produce for inspection upon request by the Authority. Failure to do so is an offence and is liable to a fine up to \$50,000 and imprisonment for 3 months.
- c) If a competent examiner issues a certificate of compliance in respect of a fuel-using equipment not according to the stipulated requirements, he/she commits an offence and is liable to a fine up to \$50,000 and imprisonment for 3 months.

FURTHER INFORMATION

Please call the Environmental Protection Department's hotline **2838 3111** if you have any queries on the above or require any further information on the Regulation.

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