

《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)Regution
and its Amendment of 2008

GENERAL

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

The Air Pollution Control (Fuel Restriction) Regulation (the "Regulation") was enacted in 1990 to impose legal control on the type of fuels 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 below), 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
- 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 new requirement under the Air Pollution Control (Fuel Restriction) (Amendment) Regulation (the "Amendment Regulation") taking 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 perlitre fuel)
Sulphur dioxide	0.864
Nitrogen oxides (expressed as Nitrogen dioxide)	2.4
Respirable suspended particulates	0.12

For complying 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. As they help to reduce SO₂ emissions from the industrial and commercial sectors by 99%, we would expect to have a reduction of Hong Kong's SO₂ emissions by some 2,480 tonnes, which is equivalent to about 3.4 % of our total SO₂ emission in 2006. 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, 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 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?

- 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.
- 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.
- 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.

Environmental Protection Department

33/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong

Email : enquiry@epd.gov.hk Website : www.epd.gov.hk

一般資料

《空氣污染管制（燃料限制）規例》是什麼？

《空氣污染管制（燃料限制）規例（下稱「規例」）於1990年訂立，對工商業工序容許使用的燃料種類及其含硫量作出法例管制，以減少二氧化硫的排放量。

當局於2008年6月修訂規例，收緊對液體燃料的管制要求。如你會在任何工商業工序中使用液體燃料，便應特別留意本指南有關「使用液體燃料」的部分。

沙田區因地形獨特，自1989年，區內可使用的燃料便僅限於氣體燃料。由於當局會繼續沿用這項安排，因此如你在該區有任何使用燃料的設備，請參閱本指南有關「沙田燃料限制區」的部分。

該「規例」不適用於在只作住宅用途的處所，或在船隻、汽車、鐵路機車或飛機內使用或操作的任何使用燃料的設備。

為何需要管制二氧化硫的排放？

二氧化硫是一種空氣污染物，源自燃燒含硫的燃料，可引致呼吸系統疾病、肺功能衰退，在高濃度時會引致發病率和死亡率增加。二氧化硫更可與空氣中其他的化學物品結合並轉化為微細的硫酸鹽粒子。這些粒子會促進煙霧的形成，使能見度下降。

規例的主要規定為何？

除沙田區外（請參閱「沙田燃料限制區」的部分），當局容許使用的燃料只限於符合下列規定的燃料：

- a) 氣體燃料；
- b) 含硫量（以重量計）不超過1%的傳統固體燃料；以及
- c) 含硫量（以重量計）不超過0.005%及在攝氏40度時黏度不超過6釐斯托克斯的液體燃料，如超低硫柴油。

上述第c)項是《空氣污染管制（燃料限制）（修訂）規例》（下稱「修訂規例」）的新規定，該「修訂規例」於2008年10月1日生效。

儘管如此，如所排放的空氣污染物水平並不超過相關的排放限度，即使所使用的液體燃料不符合上文第C)項的規定或「修訂規例」所指的「受限制液體燃料」，當局仍可准許使用有關的液體燃料。有關詳情，請參閱「使用液體燃料」的部分。

使用液體燃料

對液體燃料的管制規定為何？

除沙田區外（請參閱「沙田燃料限制區」的部分），使用應首選使用如超低硫柴油等液體燃料。但若使用選擇使用「受限制液體燃料」，他們便應確保使用液體燃料的設備獲簽發合格證明書證明符合有關條件，包括有關設備排放污染物的水平不超過下列指明排放限度—

指明污染物	排放限度 (每公升燃料的污染物(以克計算))
二氧化硫	0.864
氮氧化物(以二氧化氮計)	2.4
可吸入懸浮粒子	0.12

一般來說，要符合上述排放限度，有關裝置必須裝有操作正常的管制排放物器件。

哪種液體燃料可符合「修訂規例」的規定？其環境效益為何？

液體燃料如超低硫柴油的含硫量（以重量計）並不超過0.005%，在攝氏40度時黏度亦不超過6釐斯托克斯，因此可獲准使用。由於這些液體燃料有助減少工商業的二氧化硫排放量達99%，因此我們預期本港的二氧化硫排放總量可減少約2,480公噸，數量等同在2006年全港二氧化硫排放總量約3.4%。此外，使用超低硫柴油更可減少煙塵和粒子的排放。

如我有意使用「受限制液體燃料」，應怎樣辦？

如你正考慮使用「受限制液體燃料」，你必須首先委聘合資格檢驗師為使用燃料的設備進行排放測試，以確定設備完全符合上文提及的排放限度。合資格檢驗師指《工程師註冊條例》（第409章）所指屬於屋宇設備、氣體、化學、環境、輪機及造船，或機械界別的註冊專業工程師。

除非你持有由合資格檢驗師發出的有效合格證明書，否則便不得在使用燃料的設備使用任何「受限制液體燃料」。請注意，如你亦屬《空氣污染管制條例》所訂的指明工序牌照持牌人，並有意更改設備如加裝管制排放物器件，以使用「受限制液體燃料」，便須申請更改指明工序牌照的條件。根據《空氣污染管制（火爐、烘爐及煙囪）（安裝及更改）規例》，其他燃料使用者如需修改設備，而有關設備的燃料使用總量超過每小時25公升，亦必須取得當局批准，才可使用其他燃料。

除此以外，作為使用「受限制液體燃料」的設備擁有人，你必須在有關設備獲發合格證明書後保存該證明書三年，並在該三年內，按監督的要求出示該證明書，以供查閱。至於有關設備的擁有人或使用者必須履行的其他責任，包括妥善操作和維修保養設備及所安裝的任何管制排放物器件，以及確保「受限制液體燃料」的含硫量和黏度不會超過合格證明書所訂的最高限度等。

沙田燃料限制區

當局對沙田區內使用燃料的設備有何燃料限制？

除在建築工地及緊急情況外，在「沙田燃料限制區」內只可使用氣體燃料。凡在「沙田燃料限制區」的建築工地、或在緊急情況下使用或操作任何使用燃料的設備，所用的液體燃料須為超低硫柴油。

「沙田燃料限制區」覆蓋甚麼範圍？

「沙田燃料限制區」的覆蓋範圍，已劃定於1988年10月27日由當任衛生福利司簽署及存放在土地註冊處編號為FR/50/4的圖則上，以藍色界線標明，涵蓋沙田區議會負責的所有地區。

罪行與罰則

「規例」的罰則如何？

- a) 任何人如違反「規例」有關燃料限制的規定，即屬違法，可處罰款不超過20,000元及監禁6個月，並可在該罪行持續期間，另處每天罰款不超過5,000元。
- b) 使用燃料的設備如使用「受限制液體燃料」，有關設備的擁有人必須保存合格證明書3年，並按監督的要求，出示該證明書，以供查閱。不遵從這項規定，即屬違法，可處罰款不超過50,000元及監禁3個月。
- c) 合資格檢驗師如就使用燃料的設備簽發合格證明書時，沒有按照該「規例」的規定辦理，即屬違法，可處罰款不超過50,000元及監禁3個月。

資料查詢

如對上述資料有任何疑問、或欲就「規例」作進一步查詢，請聯絡環境保護署

電話熱線2838 3111

環境保護署

香港灣仔告士打道5號稅務大樓33樓

電郵：enquiry@epd.gov.hk 網頁：www.epd.gov.hk