

**L.N. 123 of 2008****AIR POLLUTION CONTROL (FUEL RESTRICTION)  
(AMENDMENT) REGULATION 2008****CONTENTS**

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## AIR POLLUTION CONTROL (FUEL RESTRICTION) (AMENDMENT) REGULATION 2008

(Made by the Secretary for the Environment under section 43 of the Air Pollution Control Ordinance (Cap. 311) after consultation with the Advisory Council on the Environment)

### 1. Commencement

This Regulation shall come into operation on 1 October 2008.

### 2. Interpretation

(1) Regulation 2 of the Air Pollution Control (Fuel Restriction) Regulations (Cap. 311 sub. leg. I) is amended, in the definition of “conventional liquid fuel” and “conventional solid fuel”—

- (a) by repealing ““conventional liquid fuel” (常規液體燃料) and”;
- (b) by repealing “have the same meanings” and substituting “has the same meaning”.

(2) Regulation 2 is amended by adding—

““competent examiner” (合資格檢驗師) 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);

“restricted liquid fuel” (受限制液體燃料) means any liquid fuel that has—

- (a) a sulphur content of more than 0.005% by weight; or
- (b) a viscosity of more than 6 centistokes at 40°C;

“specified emission limit” (指明排放限度), in relation to a specified pollutant, means the emission limit specified in column 2 of Schedule 1 opposite the pollutant;

“specified pollutant” (指明污染物) means sulphur dioxide, nitrogen oxides or respirable suspended particulates;”.

### 3. Fuel restrictions

(1) Regulation 4 is amended by repealing the heading and substituting “**Restriction on use of liquid fuel and solid fuel in Sha Tin fuel restriction area**”.

(2) Regulation 4(1) is amended by repealing “conventional liquid fuel or conventional solid fuel in any furnace, oven or industrial plant” and substituting “liquid fuel or solid fuel in any relevant plant”.

(3) Regulation 4(2) and (3) is repealed.

(4) Regulation 4(5) is amended by repealing “Subregulation (1) shall not apply to any furnace, oven or industrial plant” and substituting “A person may use any liquid fuel other than restricted liquid fuel in any relevant plant”.

#### **4. Regulations added**

The following are added—

##### **“4A. Restriction on use of restricted liquid fuel in relevant plants outside Sha Tin fuel restriction area**

Subject to regulation 4B, no person shall use restricted liquid fuel in a relevant plant outside the Sha Tin fuel restriction area.

##### **4B. Restricted liquid fuel may be used in relevant plants issued with certificates of compliance**

(1) A person may use restricted liquid fuel in a relevant plant outside the Sha Tin fuel restriction area if—

- (a) a competent examiner has issued a certificate of compliance in respect of the plant within the preceding 12 months, and the certificate is valid;
- (b) the certificate is displayed at a conspicuous position of the plant;
- (c) the plant is located at the premises set out in the certificate pursuant to subregulation (3)(a);
- (d) the plant is of the type, and bears the identification number, set out in the certificate pursuant to subregulation (3)(b); and
- (e) as stated in the certificate pursuant to subregulation (3)(c)—
  - (i) the plant is not installed or used with an emission control device; or
  - (ii) the plant is installed or used with an emission control device that is of the type, bears the identification number, and complies with the working principle, set out in the certificate.

(2) A competent examiner shall not issue a certificate of compliance in respect of a relevant plant unless—

- (a) the examiner has carried out a test on the level of each specified pollutant emitted from the plant when the plant was operating at maximum operating capacity using restricted liquid fuel;
- (b) the level of each specified pollutant emitted from the plant during the test did not exceed the specified emission limit for it; and
- (c) the test was carried out—
  - (i) in accordance with the test methods and measurement requirements set out in Schedule 2; and
  - (ii) within 14 days before the date on which the certificate is issued.

(3) Subject to subregulation (4), a certificate of compliance issued in respect of a relevant plant is required to include the following information—

- (a) the address of the premises where the plant is located;
- (b) the type and identification number of the plant;
- (c) whether an emission control device is installed in or used with the plant and, if so, the type, identification number, working principle and operation and maintenance requirements of the device;
- (d) the means of determining the fuel consumption rate of the plant during the test;
- (e) the removal efficiency for each specified pollutant at maximum fuel consumption rate of the plant during the test;
- (f) the maximum sulphur content and viscosity of the restricted liquid fuel that may be used if the level of each specified pollutant emitted from the plant at maximum fuel consumption rate of the plant is not to exceed the specified emission limit for it;
- (g) the date of issue and the validity period of the certificate; and
- (h) the name and contact details of the competent examiner.

(4) For the purposes of ascertaining whether an emission control device installed in or used with a relevant plant will function properly during the validity period of a certificate of compliance issued in respect of the plant, a competent examiner may require that the removal efficiency for each specified pollutant at maximum fuel consumption rate of the plant is to be measured during that period at the frequency, and in accordance with the means, specified by the examiner. In that case, the

certificate is also required to state the requirement, and the frequency and means so specified.

(5) A competent examiner shall not issue a certificate of compliance that contains any statement or information which he knows or reasonably ought to know to be false or misleading in a material particular.

#### **4C. Duties of persons using restricted liquid fuel in relevant plants and owners of relevant plants**

(1) A person who uses restricted liquid fuel in a relevant plant under regulation 4B(1) shall ensure that—

- (a) the plant is properly operated and maintained;
- (b) the emission control device installed in or used with the plant, if any—
  - (i) complies with the operation and maintenance requirements of the device set out in the certificate of compliance pursuant to regulation 4B(3)(c); and
  - (ii) is properly operated and maintained;
- (c) if the certificate states that the removal efficiency for each specified pollutant at maximum fuel consumption rate of the plant is required to be measured during its validity period—
  - (i) the removal efficiency is measured at the frequency, and in accordance with the means, set out in the certificate pursuant to regulation 4B(4); and
  - (ii) the removal efficiency from the measurement is not lower than that set out in the certificate pursuant to regulation 4B(3)(e); and
- (d) the sulphur content and viscosity of the restricted liquid fuel used do not exceed their respective maximum limit set out in the certificate pursuant to regulation 4B(3)(f).

(2) The owner of a relevant plant shall—

- (a) keep, or cause to be kept, a certificate of compliance issued in respect of the plant for a period of 3 years after issue; and
- (b) produce, or cause to be produced, the certificate for inspection on request by the Authority during the period of 3 years.

**4D. Restriction on use of conventional solid fuel in relevant plants outside Sha Tin fuel restriction area**

No person shall use conventional solid fuel that has a sulphur content of more than 1% by weight in a relevant plant outside the Sha Tin fuel restriction area.”.

**5. Offence**

(1) Regulation 5 is amended by renumbering it as regulation 5(1).

(2) Regulation 5(1) is amended by repealing “(2) or (3)” and substituting “4A, 4C(1) or 4D”.

(3) Regulation 5 is amended by adding—

“(2) A competent examiner who contravenes regulation 4B(2) or (5) commits an offence and is liable—

(a) on a first conviction, to a fine at level 5; and

(b) on a subsequent conviction, to a fine at level 5 and to imprisonment for 3 months.

(3) The owner of a relevant plant who contravenes regulation 4C(2) commits an offence and is liable—

(a) on a first conviction, to a fine at level 5; and

(b) on a subsequent conviction, to a fine at level 5 and to imprisonment for 3 months.”.

**6. Schedules 1 and 2 added**

The following are added—

“SCHEDULE 1

[reg. 2]

SPECIFIED EMISSION LIMIT

Specified pollutant	Emission limit (gram pollutant per litre fuel)
Sulphur dioxide	0.864
Nitrogen oxides*	2.4
Respirable suspended particulates	0.12

\*expressed as nitrogen dioxide

## SCHEDULE 2

[reg. 4B]

## TEST METHODS AND MEASUREMENT REQUIREMENTS

1. The actual volumetric flow rate of flue gas in cubic metres per hour ( $\text{m}^3/\text{hr}$ ) and the actual concentration of specified pollutants in grams per cubic metre ( $\text{g}/\text{m}^3$ ) are required to be tested and measured at the same time using the following methods (which are listed in Appendix M to Part 51 and Appendix A to Part 60 of Title 40 of the Code of Federal Regulations published in the Federal Register of the United States Government)—

- (a) determination of the actual volumetric flow rate of flue gas—  
Method 2—Determination of stack gas velocity and volumetric flow rate (Type S pitot tube);
- (b) determination of the actual concentration of sulphur dioxide—  
Method 6—Determination of sulfur dioxide emissions from stationary sources; or  
Method 6C—Determination of sulfur dioxide emissions from stationary sources (instrumental analyzer procedure);
- (c) determination of the actual concentration of nitrogen oxides—  
Method 7—Determination of nitrogen oxide emissions from stationary sources; or  
Method 7E—Determination of nitrogen oxides emissions from stationary sources (instrumental analyzer procedure);
- (d) determination of the actual concentration of respirable suspended particulates—
  - (i) if water droplets do not exist in emissions from the relevant plant—  
Method 201—Determination of  $\text{PM}_{10}$  Emissions (Exhaust Gas Recycle Procedure); or  
Method 201A—Determination of  $\text{PM}_{10}$  Emissions (Constant Sampling Rate Procedure);
  - (ii) if water droplets exist in emissions from the relevant plant—  
Method 5—Determination of particulate matter emissions from stationary sources.

2. The flow rate of fuel consumption in litres per hour (L/hr) is required to be measured at the same time when the actual volumetric flow rate of flue gas and the actual concentration of each specified pollutant are measured.
3. The level of each specified pollutant emitted from the relevant plant is required to be determined using the following formula—  
actual volumetric flow rate of flue gas (m<sup>3</sup>/hr) × actual concentration of specified pollutant (g/m<sup>3</sup>) ÷ flow rate of fuel consumption (L/hr).”.

Edward YAU  
Secretary for the Environment

13 May 2008

### **Explanatory Note**

This Regulation amends the Air Pollution Control (Fuel Restriction) Regulations (Cap. 311 sub. leg. I) (the “principal Regulations”) to impose more stringent control on the use of fuel in relevant plants.

2. Section 1 provides for the commencement of the Regulation.
3. Section 2 repeals the definition of “conventional liquid fuel” and adds various new definitions. One of the new definitions is “restricted liquid fuel”, which covers any liquid fuel that has a sulphur content of more than 0.005% by weight or a viscosity of more than 6 centistokes at 40°C.
4. Section 3 amends regulation 4 of the principal Regulations. Under the amendments, the use of liquid fuel and solid fuel (whether of conventional type or not) in relevant plants in the Sha Tin fuel restriction area is prohibited. The prohibition, however, does not apply where non-restricted liquid fuel is used in relevant plants that are used or operated on a construction site, or for emergency purpose.
5. Section 4 adds 4 new regulations to the principal Regulations.
6. The restriction on the use of liquid fuel in relevant plants outside the Sha Tin fuel restriction area, currently provided in regulation 4(2) of the principal Regulations, is set out in new regulation 4A. The current provision permits the use of conventional liquid fuel that has a sulphur content of not more than 0.5% by weight. The new provision tightens the sulphur content requirement so that only liquid fuel (whether of conventional type or not) that has a sulphur content of not more than 0.005% by weight may be used.



7. To provide greater flexibility to fuel users, new regulations 4B and 4C introduce a new mechanism under which restricted liquid fuel may be used in a relevant plant outside the Sha Tin fuel restriction area. Regulation 4B(1) sets out the conditions that must be met before restricted liquid fuel may be used in a relevant plant, and one of the conditions is that the plant has been issued with a certificate of compliance by a competent examiner within the preceding 12 months. Regulation 4B(2) sets out the conditions for the issue of a certificate of compliance, and regulation 4B(3) and (4) specifies the information to be included in a certificate of compliance. Regulation 4B(5) provides that a competent examiner shall not issue a certificate of compliance that contains any statement or information which he knows or reasonably ought to know to be false or misleading in a material particular. Regulation 4C sets out the continuing duties that fuel users and owners of relevant plants are required to carry out if restricted liquid fuel is used in the plants.

8. The restriction on the use of conventional solid fuel in relevant plants outside the Sha Tin fuel restriction area, currently provided in regulation 4(3) of the principal Regulations, is set out in new regulation 4D.

9. Section 5 amends regulation 5 of the principal Regulations to provide for offence provisions relating to the amendments introduced by this Regulation.

10. Section 6 adds 2 new Schedules to the principal Regulations. The new Schedules set out the technical details for the test to be carried out by a competent examiner for the issue of a certificate of compliance. New Schedule 1 specifies the emission limit permitted in respect of certain pollutants emitted from a relevant plant during the test. New Schedule 2 specifies the test methods and measurement requirements to be adopted and complied with by a competent examiner when he carries out the test.