

COMMISSION REGULATION (EC) No 303/2008

of 2 April 2008

establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, minimum requirements and the conditions for mutual recognition for the certification of companies and personnel as regards stationary refrigeration, air conditioning and heat pump equipment containing certain fluorinated greenhouse gases

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases ⁽¹⁾, and in particular Article 5(1) thereof,

Whereas:

- (1) For the purposes of the requirements of Regulation (EC) No 842/2006, it is necessary to lay down rules on the qualification of personnel carrying out activities, at the location of the operation of equipment containing certain fluorinated greenhouse gases, which potentially affect their leakage.
- (2) Different categories of certified personnel should be provided for, in order to ensure that personnel are qualified for the activities which they undertake while avoiding disproportionate costs.
- (3) Personnel not yet certified but enrolled in a training course for the purpose of obtaining a certificate should be, for a limited time, allowed to undertake activities for which such certification is required to gain the practical skills needed for the examination, provided that they are supervised by certified personnel.
- (4) Personnel qualified to undertake brazing, soldering or welding should be allowed to undertake those specialised activities in the context of one of the activities for which certification is required, provided that they are supervised by certified personnel.
- (5) Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE) ⁽²⁾ sets out technical requirements for companies undertaking treatment and storage of waste appliances in treatment plants,

including, *inter alia*, refrigeration, air conditioning and heat pump equipment. The level of qualification needed for personnel recovering refrigerant in such plants is lower compared to that needed by personnel carrying out on-site recovery, because of the types of automated recovery equipment available in fridge decommissioning treatment plants.

- (6) A number of Member States do not currently have qualification or certification systems in place. A limited period should therefore be allowed for personnel and companies to obtain a certificate.
- (7) For the purpose of avoiding undue administrative burden, it should be allowed to build a certification system on existing qualification schemes provided that the skills and knowledge covered and the relevant qualification system are equivalent to the minimum standards envisaged by this Regulation.
- (8) Examination is an effective means of testing the ability of a candidate to carry out properly the actions which can directly cause leakage, as well as those that can indirectly cause leakage.
- (9) To enable training and certification of personnel currently active in the areas covered by this Regulation without interrupting their professional activity, an adequate interim period is required during which certification should be based on existing qualification schemes and professional experience.
- (10) Officially designated evaluation and certification bodies should ensure compliance with the minimum requirements set out in this Regulation and thereby contribute to the effective and efficient mutual recognition of certificates throughout the Community.
- (11) Mutual recognition should not apply to interim certificates since the requirements for obtaining those certificates may be significantly lower than existing requirements in some Member States.

⁽¹⁾ OJ L 161, 14.6.2006, p. 1.

⁽²⁾ OJ L 37, 13.2.2003, p. 24. Directive as amended by Directive 2003/108/EC (OJ L 345, 31.12.2003, p. 106).

- (12) Information on the certification system issuing certificates subject to mutual recognition should be notified to the Commission in the format established by Commission Regulation (EC) No 308/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, the format for notification of the training and certification programmes of the Member States ⁽¹⁾. Information on interim certification systems should be notified to the Commission.
- (13) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 18(1) of Regulation (EC) No 2037/2000 of the European Parliament and of the Council ⁽²⁾,

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation establishes minimum requirements for the certification referred to in Article 5(1) of Regulation (EC) No 842/2006 in relation to stationary refrigeration, air conditioning and heat pump equipment containing certain fluorinated greenhouse gases as well as the conditions for mutual recognition of certificates issued in accordance with those requirements.

Article 2

Scope

1. This Regulation shall apply to personnel carrying out the following activities:
 - (a) leakage checking of applications containing 3 kg or more of fluorinated greenhouse gases and of applications containing 6 kg or more of fluorinated greenhouse gases with hermetically sealed systems, which are labelled as such;
 - (b) recovery;
 - (c) installation;
 - (d) maintenance or servicing.
2. It shall also apply to companies carrying out the following activities:
 - (a) installation;
 - (b) maintenance or servicing.

⁽¹⁾ See page 28 of this Official Journal.

⁽²⁾ OJ L 244, 29.9.2000, p. 1. Regulation as last amended by Commission Decision 2007/540/EC (OJ L 198, 31.7.2007, p. 35).

3. This Regulation shall not apply to any manufacturing and repairing activity undertaken at manufacturer's sites for stationary refrigeration, air conditioning or heat pump equipment containing fluorinated greenhouse gases.

Article 3

Definitions

For the purposes of this Regulation the following definitions shall apply:

1. 'installation' means joining two or more pieces of equipment or circuits containing or designed to contain fluorinated greenhouse gas refrigerant, with a view to assembling a system in the location where it will be operated, including the action by which refrigerant conductors of a system are joined together to complete a refrigerant circuit irrespective of the need to charge the system after assembly;
2. 'maintenance or servicing' means all activities, excluding recovery and checks for leakage as defined in Articles 2(14) and 3(2) of Regulation (EC) No 842/2006 respectively, that entail breaking into the circuits containing or designed to contain fluorinated greenhouse gases, in particular supplying the system with fluorinated greenhouse gases, removing one or more pieces of circuit or equipment, re-assembling two or more pieces of circuit or equipment, as well as repairing leakages.

Article 4

Certification of personnel

1. Personnel carrying out the activities referred to in Article 2(1) shall hold a certificate as referred to in Article 5 or Article 6 for the corresponding category as set out in paragraph 2 of this Article.
2. Certificates attesting that the holder fulfils the requirements to undertake one or more of the activities referred to in Article 2(1) shall be granted for the following categories of personnel:
 - (a) Category I certificate holders may carry out all the activities provided for in Article 2(1);
 - (b) Category II certificate holders may carry out the activities provided for in point (a) of Article 2(1) provided that it does not entail breaking into the refrigeration circuit containing fluorinated greenhouse gases. Category II certificate holders may carry out the activities in points (b), (c) and (d) of Article 2(1) in relation to refrigeration, air conditioning and heat pump equipment containing less than 3 kg, or, if hermetically sealed systems which are labelled as such are concerned, less than 6 kg of fluorinated greenhouse gases;

(c) Category III certificate holders may carry out the activity provided for in point (b) of Article 2(1) in relation to refrigeration, air conditioning and heat pump equipment containing less than 3 kg, or, if hermetically sealed systems which are labelled as such are concerned, less than 6 kg of fluorinated greenhouse gases;

(d) Category IV certificate holders may carry out the activity provided for in point (a) of Article 2(1) provided that it does not entail breaking into the refrigeration circuit containing fluorinated greenhouse gases.

3. Paragraph 1 shall not apply:

(a) for a maximum period of two years, to personnel undertaking one of the activities referred to in Article 2(1) and enrolled in a training course for the purpose of obtaining a certificate covering the relevant activity, provided that they carry out the activity under the supervision of a person holding a certificate covering this activity;

(b) to personnel undertaking brazing, soldering or welding of parts of a system or piece of equipment in the context of one of the activities referred to in Article 2(1), which hold the qualification required under national legislation to undertake such activities, provided that they are supervised by a person holding a certificate covering the relevant activity;

(c) to personnel undertaking recovery of fluorinated greenhouse gases from equipment covered by Directive 2002/96/EC with a fluorinated greenhouse charge of less than 3 kg, in premises covered by a permit in accordance with Article 6(2) of that Directive, provided that they are employed by the company holding the permit and have completed a training course on the minimum skills and knowledge corresponding to Category III as set out in the Annex to this Regulation verified by an attestation of competence issued by the permit holder.

4. Member States may decide that paragraph 1 shall not apply for a period which shall not exceed the date referred to in Article 5(4) of Regulation (EC) No 842/2006, to personnel undertaking one or more of the activities provided for in Article 2(1) of this Regulation before the date referred to in Article 5(2) of Regulation (EC) No 842/2006.

Such personnel shall, for the period referred to in the first subparagraph, be deemed certified as regards those activities for the purposes of the requirements of Regulation (EC) No 842/2006.

Article 5

Personnel certificates

1. A certification body as referred to in Article 10 shall issue a certificate to personnel who have passed a theoretical and practical examination organised by an evaluation body as referred to in Article 11, covering the minimum skills and knowledge set out in the Annex, for the category concerned.

2. The certificate shall contain at least the following:

(a) the name of the certification body, the full name of the holder, a certificate number, and the date of expiry if any;

(b) the category of personnel certification as specified in Article 4(2) and the associated activities which the holder of the certificate is entitled to perform;

(c) issuing date and issuer's signature.

3. Where an existing examination-based certification system covers the minimum skills and knowledge set out in the Annex for a particular category and meets the requirements of Articles 10 and 11, but the related attestation does not contain the elements laid down in paragraph 2 of this Article, a certification body referred to in Article 10 may issue a certificate to the holder of this qualification for the corresponding category without repeating examination.

4. Where an existing examination based certification system meets the requirements of Articles 10 and 11 and partially covers the minimum skills of a particular category as set out in the Annex, certification bodies may issue a certificate for the corresponding category provided that the applicant passes a supplementary examination of the skills and knowledge not covered by the existing certification by an evaluation body referred to in Article 11.

Article 6

Interim certificates for personnel

1. Member States may apply a system of interim certification for personnel referred to in Article 2(1) in accordance with paragraphs 2 or 3, or paragraphs 2 and 3, of this Article.

The interim certificates referred to in paragraphs 2 and 3 shall expire on 4 July 2011 at the latest.

2. Personnel holding an attestation issued under existing qualification schemes for activities referred to in Article 2(1) shall be deemed holders of an interim certificate.

Member States shall identify attestations qualifying as interim certificates for the corresponding category referred to in Article 4(2).

3. Personnel with professional experience in the activities corresponding to the categories referred to in Article 4(2), acquired before the date referred to in Article 5(2) of Regulation (EC) No 842/2006, shall be issued with an interim certificate by an entity designated by the Member State.

The interim certificate shall indicate the category referred to in Article 4(2) and the expiry date.

Article 7

Certification of companies

1. Companies referred to in Article 2(2) shall hold a certificate as referred to in Article 8 or Article 9.
2. Member States may decide that paragraph 1 shall not apply for a period which shall not exceed the date referred to in Article 5(4) of Regulation (EC) No 842/2006, to companies involved in one or more of the activities provided for in Article 2(2) of this Regulation before the date referred to in Article 5(2) of Regulation (EC) No 842/2006.

Article 8

Company certificates

1. A certification body as referred to in Article 10 shall issue a certificate to a company for one or more of the activities referred to in Article 2(2) provided that it fulfils the following requirements:
 - (a) employment of personnel certified in accordance with Article 5, for the activities requiring certification, in a sufficient number to cover the expected volume of activities;
 - (b) proof that the necessary tools and procedures are available to the personnel engaged in activities for which certification is required.
2. The certificate shall contain at least the following:
 - (a) the name of the certification body, the full name of the holder, a certificate number, and the date of expiry if any;
 - (b) the activities which the holder of the certificate is entitled to perform;
 - (c) issuing date and issuer's signature.

Article 9

Interim certificates for companies

1. Member States may apply an interim certification system for companies referred to in Article 2(2) in accordance with paragraphs 2 or 3, or paragraphs 2 and 3, of this Article.

The interim certificates referred to in paragraphs 2 and 3 shall expire on 4 July 2011 at the latest.

2. Companies certified under existing certification schemes for activities referred to in Article 2(2) shall be deemed holders of an interim certificate.

Member States shall identify attestations qualifying as interim certificates for the activities referred to in Article 2(2) which the holder is entitled to carry out.

3. Companies employing personnel holding a certificate for the activities for which certification is required for the purposes of Article 2(2) shall be issued with an interim certificate by an entity designated by the Member State.

The interim certificate shall indicate the activities which the holder is entitled to carry out and the expiry date.

Article 10

Certification body

1. A certification body shall be provided for by a national law or regulation, or designated by the competent authority of a Member State or other entities entitled to do so, as being allowed to issue certificates to personnel or companies involved in one or more of the activities referred to in Article 2.

The certification body shall be independent and impartial in carrying out its activities.

2. The certification body shall establish and apply procedures for the issuance, suspending and withdrawing of certificates.

3. The certification body shall maintain records that allow verifying the status of a certified person or company. The records shall demonstrate that the certification process has been effectively fulfilled. Records shall be kept for a minimum period of five years.

*Article 11***Evaluation body**

1. An evaluation body designated by the competent authority of a Member State or other entities entitled to do so, shall organise examinations for the personnel referred to in Article 2(1). A certification body as referred to in Article 10 may also qualify as an evaluation body.

The evaluation body shall be independent and impartial in carrying out its activities.

2. Examinations shall be planned and structured in a manner which ensures that the minimum skills and knowledge set out in the Annex are covered.

3. The evaluation body shall adopt reporting procedures and keep records to enable the documentation of the individual and overall results of the evaluation.

4. The evaluation body shall ensure that examiners assigned to a test have due knowledge of the relevant examination methods and examination documents as well as an appropriate competence in the field to be examined. It shall also ensure that the necessary equipment, tools and materials are available for the practical tests.

*Article 12***Notification**

1. By 4 July 2008, Member States shall notify the Commission of their intention to apply an interim certification system according to Articles 6 or 9, or both.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 2 April 2008.

2. By 4 January 2009, Member States shall notify the Commission, where applicable, of designated entities entitled to issue interim certificates and of enacted national provisions according to which documents issued by existing certification systems are deemed as interim certificates.

3. By 4 January 2009, Member States shall notify the Commission of the names and contact details of certification bodies for personnel and companies covered by Article 10 and of the titles of certificates for personnel complying with the requirements of Article 5 and companies complying with the requirements of Article 8, using the format established by Regulation (EC) No 308/2008.

4. Member States shall update the notification submitted pursuant to paragraph 3, with relevant new information, and submit it to the Commission without delay.

*Article 13***Conditions for mutual recognition**

1. Mutual recognition of certificates issued in other Member States shall only apply to certificates issued in accordance with Article 5 for personnel and Article 8 for companies.

2. Member States may require holders of certificates issued in another Member State to provide a translation of the certificate in another official Community language.

*Article 14***Entry into force**

This Regulation shall enter into force on the 20th day following that of its publication in the *Official Journal of the European Union*.

For the Commission

Stavros DIMAS

Member of the Commission

ANNEX

Minimum requirements as to the skills and knowledge to be covered by the evaluation bodies

1. The examination for each of the Categories referred to in Article 4(2) shall comprise the following:
 - (a) a theoretical test with one or more questions testing that skill or knowledge, as indicated in the Category columns by (T);
 - (b) a practical test where the applicant shall perform the corresponding task with the relevant material, tools and equipment, as indicated in the Category columns by (P).
2. The examination shall cover each of the skill and knowledge groups 1, 2, 3, 4, 5 and 10.
3. The examination shall cover at least one of the skill and knowledge groups 6, 7, 8 and 9. The candidate shall not know in advance of the examination which of these four components will be examined.
4. If there is one single box in the categories columns that corresponds to several boxes (several skills and knowledge) in the skills and knowledge column it means that not necessarily all skills and knowledge have to be tested during the examination.

SKILLS AND KNOWLEDGE		CATEGORIES			
		I	II	III	IV
1	Basic thermodynamics				
1.01	Know the basic ISO standard units as for temperature, pressure, mass, density, energy	T	T	—	T
1.02	Understand basic theory of refrigeration systems: basic thermodynamics (key terms, parameters and processes such as Superheat, High Side, Heat of Compression, Enthalpy, Refrigeration Effect, Low Side, Sub-cooling), properties and thermodynamic transformations of refrigerants including identification of zeotropic blends and fluid states.	T	T	—	—
1.03	Use relevant tables and diagrams and interpret them in the context of indirect leakage checking (including checking of the good operation of the system): log p/h diagram, saturation tables of a refrigerant, diagram of a single compression refrigeration cycle.	T	T	—	—
1.04	Describe the function of the main components in the system (compressor, evaporator, condenser, thermostatic expansion valves) and the thermodynamic transformations of the refrigerant.		T	—	—
1.05	Know the basic operation of the following components used in a refrigeration system and their role and importance for refrigerant leakage prevention and identification: (a) valves (ball valves, diaphragms, globe valves, relief valves), (b) temperature and pressure controls, (c) sight glasses and moisture indicators, (d) defrost controls, (e) system protectors, (f) measuring devices as manifold thermometer, (g) oil control systems, (h) receivers, (i) liquid and oil separators	T	—	—	—
2	Environmental impact of refrigerants and corresponding environmental regulations				
2.01	Have a basic knowledge of climate change and the Kyoto Protocol	T	T	T	T
2.02	Have a basic knowledge of the concept of Global Warming Potential (GWP), the use of fluorinated greenhouse gases and other substances as refrigerants, the impact of the emissions of fluorinated greenhouse gases on the climate (order of magnitude of their GWP) and relevant provisions of Regulation (EC) No 842/2006 and relevant Regulations implementing provisions of this Regulation.	T	T	T	T

SKILLS AND KNOWLEDGE		CATEGORIES			
		I	II	III	IV
3	Checks before putting in operation, after a long period of non-use, after maintenance or repair intervention, or during operation				
3.01	Carry out a pressure test to check the strength of the system	P	P	—	—
3.02	Carry out a pressure test to check the tightness of the system				
3.03	Use a vacuum pump				
3.04	Evacuate the system to remove air and moisture according to standard practice				
3.05	Fill in the data in the equipment records and fill in a report about one or more tests and checks carried out during the examination.	T	T	—	—
4	Checks for leakage				
4.01	Know potential leakage points of refrigeration, air-conditioning and heat pump equipment	T	T	—	T
4.02	Check equipment records prior to a check for leakage and identify the relevant information on any repeating issues or problem areas to pay special attention to	T	T	—	T
4.03	Make a visual and manual inspection of the whole system in accordance with the Commission Regulation (EC) No 1516/2007 of 19 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, standard leakage checking requirements for stationary refrigeration, air conditioning and heat pump equipment containing certain fluorinated greenhouse gases ⁽¹⁾	P	P	—	P
4.04	Carry out a check for leakage of the system using an indirect method in accordance with the Commission Regulation (EC) No 1516/2007 and the instruction manual of the system	P	P	—	P
4.05	Use portable measuring devices such as manometer sets, thermometers and multi-meters for measuring Volt/Amp/Ohm in the context of indirect methods for leakage checking, and interpret the measured parameters.	P	P	—	P
4.06	Carry out a check for leakage of the system using one of the direct methods referred to in Commission Regulation (EC) No 1516/2007	P	—	—	—
4.07	Carry out a check for leakage of the system using one of the direct methods which does not entail breaking into the refrigeration circuit, referred to in Commission Regulation (EC) No 1516/2007	—	P	—	P
4.08	Use an electronic leak detection device	P	P	—	P
4.09	Fill in the data in the equipment records	T	T	—	T
5	Environment-friendly handling of the system and refrigerant during installation, maintenance, servicing or recovery				
5.01	Connect and disconnect gauges and lines with minimal emissions	P	P	—	—
5.02	Empty and fill a refrigerant cylinder in both liquid and vapour state	P	P	P	—
5.03	Use a recovery set to recover refrigerant and connect and disconnect recovery set with minimal emissions	P	P	P	—
5.04	Drain F-gas contaminated oil out of a system	P	P	P	—
5.05	Identify refrigerant state (liquid, vapour) and condition (subcooled, saturated or superheated) prior to charging, to ensure correct method and volume of charge. Fill the system with refrigerant (both in the liquid and vapour phase) without loss of refrigerant	P	P	—	—

SKILLS AND KNOWLEDGE		CATEGORIES			
		I	II	III	IV
5.06	Use scales to weight refrigerant	P	P	P	—
5.07	Fill in the equipment records with all relevant information concerning the refrigerant recovered or added	T	T	—	—
5.08	Know requirements and procedures for handling, storage and transportation of contaminated refrigerant and oils	T	T	T	—
6	Component: installation, putting into operation and maintenance of reciprocating, screw and scroll compressors, single and two-stage				
6.01	Explain the basic functioning of a compressor (including capacity control and lubricating system) and risks of refrigerant leakage or release associated to it.	T	T	—	—
6.02	Install a compressor properly, including control and safety equipment, so that no leak or major release occur once the system is put into operation	P	—	—	—
6.03	Adjust the safety and control switches	P	—	—	—
6.04	Adjust the suction and discharge valves				
6.05	Check the oil return system				
6.06	Start up and shut down a compressor and check the good working conditions of the compressor, including by making measurements during operation of compressor	P	—	—	—
6.07	Write a report about the condition of the compressor which identifies any problems in the functioning of the compressor that could damage the system and eventually lead to refrigerant leakage or release should no action be taken	T	—	—	—
7	Component: installation, putting into operation and maintenance of air cooled and water cooled condensers				
7.01	Explain the basic functioning of a condenser and risks of leakage associated to it	T	T	—	—
7.02	Adjust a discharge pressure control of the condenser	P	—	—	—
7.03	Install a condenser, properly, including control and safety equipment, so that no leak or major release occur when the system has been put into operation	P	—	—	—
7.04	Adjust the safety and control switches	P	—	—	—
7.05	Check the discharge and liquid lines				
7.06	Purge non condensable gases out of the condenser using a refrigeration purging device	P	—	—	—
7.07	Start up and shut down a condenser and check the good working condition of the condenser including by making measurements during operation	P	—	—	—
7.08	Check the surface of the condenser	P	—	—	—
7.09	Write a report about the condition of the condenser which identifies any problems in the functioning that could damage the system and eventually lead to refrigerant leakage or release should no action be taken	T	—	—	—
8	Component: installation, putting into operation and maintenance of air cooled and water cooled evaporators				
8.01	Explain the basic functioning of an evaporator (including defrosting system) and risks of leakage associated to it	T	T	—	—

SKILLS AND KNOWLEDGE		CATEGORIES			
		I	II	III	IV
8.02	Adjust an evaporating pressure control of the evaporator	P	—	—	—
8.03	Install an evaporator including control and safety equipment, so that no leak or major release occur when the system has been put into operation	P	—	—	—
8.04	Adjust the safety and control switches	P	—	—	—
8.05	Check the liquid and suction pipelines in the correct position				
8.06	Check the hot gas defrost pipeline				
8.07	Adjust evaporation pressure regulation valve				
8.08	Start up and shut down an evaporator and check the good working condition of the evaporator, including by making measurement during operation	P	—	—	—
8.09	Check the surface of the evaporator	P	—	—	—
8.10	Write a report about the condition of the evaporator which identifies any problems in the functioning that could damage the system and eventually lead to refrigerant leakage or release should no action be taken	T	—	—	—
9	Component: installation, putting into operation and servicing of Thermostatic Expansion Valves (TEV) and other components				
9.01	Explain the basic functioning of different kinds of expansion regulators (thermostatic expansion valves, capillary tubes) and risks of leakage associated to it	T	T	—	—
9.02	Install valves in the correct position	P	—	—	—
9.03	Adjust a mechanical/electronic TEV	P	—	—	—
9.04	Adjust mechanical and electronic thermostats				
9.05	Adjust a pressure regulated valve				
9.06	Adjust mechanical and electronic pressure limiters				
9.07	Check the functioning of an oil separator	P	—	—	—
9.08	Check the condition of a filter dryer				
9.09	Write a report about the condition of these components which identifies any problems in the functioning that could damage the system and eventually lead to refrigerant leakage or release should no action be taken	T	—	—	—
10	Piping: building a leak tight piping system in a refrigeration installation				
10.01	Weld, braze and/or solder leak free joints on metallic tubes and pipes that can be used in refrigeration, air-conditioning or heat pump systems	P	P	—	—
10.02	Make/check pipe and component supports	P	P	—	—

(¹) OJ L 335, 20.12.2007, p. 10.