

1997 375

S.I. No. 375 of 1997.

AIR POLLUTION ACT, 1987 (PETROLEUM VAPOUR EMISSIONS) REGULATIONS, 1997

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S.I. No. 375 of 1997.

Air Pollution Act, 1987 (Petroleum Vapour Emissions) Regulations, 1997.

The Minister for the Environment and Local Government in exercise of the powers conferred on him by Sections 10 of the Air Pollution Act, 1987 (No. 6 of 1987) and for the purposes of giving effect to the provisions of Directive 94/63/EC(1) on the control of volatile organic compound emissions resulting from the storage of petrol and its distribution between terminals or from terminals to service stations, hereby makes the following Regulations.

(1)O.J. No L 365/24 of 31 December, 1994

PART I

1. These Regulations as they be cited as the Air Pollution Act, 1987, (Petroleum Vapour Emissions) Regulations, 1997.

2. These Regulations shall come into operation on the 1st day of October, 1997.

3. (1) In these Regulations, any reference to an article or schedule which is not otherwise identified is a reference to an article or schedule of these Regulations.

(2) In these Regulations, any reference to a sub-article or paragraph which is not otherwise identified is a reference to the sub-article or paragraph of the provision in which the reference occurs.

4. In these Regulations a word or phrase which has been assigned a meaning by Council Directive 94/63/EC, on the control of volatile organic compound emissions resulting from the storage of petrol and its distribution from terminals to service stations, has that meaning except where otherwise indicated;

"approved assessor" means a person approved by a competent authority in accordance with article 6;

"carrier" means:

(a) in relation to mobile containers carried by road, a person who is the registered owner of a composite vehicle, articulated vehicle, tank-trailer, or tank semi-trailer, comprising one or more fixed or demountable tanks or of any other vehicle used for the conveyance or delivery of petrol to or from a storage installation at a terminal or a storage tank at a service station, and,

(b) in relation to mobile containers carried otherwise than by road, every person carrying petrol in a tank by rail or by waterway;

"certificate of testing" means a certificate issued, as appropriate:

(a) in respect of a mobile container by an approved assessor in accordance with article 8 of these Regulations, or,

(b) in respect of a service station by a competent authority in accordance with article 13 of these Regulations,

and "certificate" shall be construed accordingly;

"competent authority" means:

(a) for the purposes of the enforcement of those articles regulating loading of petrol into, and unloading of petrol from, storage tanks at service stations, the local authority in whose functional area a service station is located, and,

(b) for the purposes of the enforcement of those articles regulating mobile containers, the local authority in whose functional area a carrier's chief place of business is located;

"the Directive" means Council Directive 94/63/EC;

"existing petrol storage installations, loading installations, service stations, mobile containers and terminals" means such installations, service stations, mobile containers and terminals which were in operation before the coming into operation of these Regulations;

"harbour authority" has the same meaning as in the Harbours Act, 1946; "local authority" means for the purposes of these Regulations:

(a) the council of a county, or,

(b) the corporation of a county or other borough;

"manager" means the person having the general control and management of a service station;

"mobile container" means:

(a) any tank used, solely or in part, for the transfer of petrol from one terminal to another or from a terminal to a service station by road by a composite vehicle, articulated vehicle, tank-trailer, or tank semi-trailer, comprising one or more fixed or demountable tanks or by other vehicle used for the conveyance or delivery of petrol to or from a storage installation at a terminal or a storage tank at a service station, and,

(b) any tank used, solely or in part, for the transfer of petrol from one terminal to another or from a terminal to a service station by rail or by waterway;

"new petrol storage installations, loading installations, service stations, mobile containers and terminals" means, such installations, service stations, mobile containers and terminals other than existing installations, service stations, mobile containers and terminals;

"petrol" means any petroleum derivative, with or without additives, having a Reid vapour pressure of 27.6 kilopascals or more, which is intended for use as a fuel for motor vehicles except liquefied petroleum gas (LPG);

"road tanker" means a mobile container used solely, or in part, for the transport of petrol by road;

"throughput" means the largest total annual quantity of petrol loaded from a storage installation at a terminal into mobile containers or vice versa, or from mobile containers into storage tanks at a service station or vice versa, during the three preceding years before the appropriate dates for compliance with the requirements of articles 5 and 10, as appropriate.

PART II

5. (1) Mobile containers shall be designed so that residual vapours are retained in the container after the unloading of petrol.

(2) It shall be the duty of a carrier to ensure that his or her mobile containers are operated and maintained to comply with the requirements of sub-article (1) of this article.

(3) Carriers shall ensure that mobile containers which deliver petrol to service stations are so designed, operated and maintained as to accept and retain return vapours from storage installations at terminals and storage tanks at service stations.

(4) Sub-article (3) shall apply to rail tankers only if they supply petrol to service stations or to terminals where intermediate storage of vapours is used.

(5) Vapours mentioned at sub-articles (1) and (3) shall be retained in the mobile container until reloading takes place at a terminal except for release through pressure relief valves.

(6) Insofar as vapour-recovery or the intermediate storage of vapours is not possible, ventilation of vapours is permissible if, after the unloading of petrol, the mobile container is subsequently used for products other than petrol.

(7) Sub-articles (1) to (6) shall apply from:

(i) the first day of January, 1998 in the case of all new mobile containers;

(ii) from the thirty first day of December, 1998 in the case of existing mobile containers transported by rail or by waterway and loaded at a terminal;

(iii) in the case of existing mobile containers transported by road when being retrofitted for bottom loading in accordance with the requirements of the Fourth Schedule.

(8) In this article, unless otherwise stated, "existing" means a service station which first came into operation on a day prior to that mentioned in the provision in which that expression occurs.

(9) The requirements of sub-articles (1) to (6) shall not apply to losses of vapours resulting from measuring operations using dipsticks in relation to:

(a) existing mobile containers, being mobile containers which first came into operation on a day prior to the coming into operation of these Regulations, and

(b) new mobile containers which come into operation before the thirty first day of December, 1999.

6. (1) A competent authority shall approve such person or persons as it considers possesses the appropriate knowledge, training and experience to perform the functions of an approved assessor under these Regulations.

(2) An approved assessor shall not perform any functions under these Regulations . where the same concern any person or body with which the said assessor has had any professional, business or commercial relationship within the period of five years commencing on the day of the termination of any such relationship.

7. (1) It shall be the responsibility of a carrier to, ensure that testing is carried out, in conformity with this article and the Fourth Schedule, by an approved assessor for vapour tightness of a mobile container transported by road and for correct functioning of vacuum/pressure valves of any mobile container in respect of which a carrier is defined as a person to whom article 5 applies.

(2) Sub-article (1) shall be complied with and a certificate of testing shall be obtained in compliance with the appropriate dates set out in article 5(7), and thereafter in any event not later than three years from the date of the issue of the latest certificate of testing.

8. (1) Where, following a test for the purposes of article 7, an approved assessor is satisfied as to the adequacy of vapour tightness and correct functioning of vacuum/pressure valves he or she shall issue a certificate to that effect.

(2) The particulars to be contained in a certificate issued under sub-article (1) are set out in the First Schedule.

9. (1) It shall be the duty of a carrier to keep available the certificate issued under article 8 for inspection at his/her place of business.

(2) It shall be the duty of a carrier to ensure that a mobile container is fitted with a corrosion-resistant metal plate permanently affixed to it, located in a place readily accessible for inspection, and that the following particulars are clearly marked on the plate by stamping into the metal or by other similar permanent method:

(a) the tank serial number,
(b) the day, month and year of the most recent vapour tightness and correct functioning of vacuum/pressure valves test and the identification mark of the approved assessor who carried out the test.

(3) Periodic inspection of the certificate issued under article 8 and the metal plate required under sub-article (2) shall be a matter for the competent authority.

PART III

10. (1) It shall be the duty of the owner of a service station with regard to its design and the duty of the manager of a service station with regard to its operation, to ensure that petrol loading and storage equipment at a service station shall be designed and operated in accordance with the provisions of the Third Schedule.

(2) Sub-article (1) shall apply:

(i) from the first day of January, 1998 in the case of new service stations;
(ii) from the thirty first day of December, 1998 in the case of:
(a) existing service stations with a throughput greater than 1,000 cubic metres per year, and,
(b) all existing service stations regardless of their throughput which are located under permanent living quarters or working areas;
(iii) from the thirty first day of December, 2001 in the case of existing service stations with a throughput greater than 500 cubic metres per year;
(iv) from the thirty first day of December, 2004 for all other existing service stations.

(3) In this article "existing" means a service station which first came into operation on a day prior to that mentioned in the provision in which that expression occurs.

11. (1) It shall be the duty of a manager to ensure that testing is carried out by an approved assessor so as to ensure compliance with the requirements of article 10(1).

(2) Sub-article (1) shall be complied with, and a first certificate of testing, shall be obtained in compliance with the appropriate dates set out in article 10(2), and thereafter in any event not later than three years from the date of issue of the latest certificate.

12. (1) Where, following a test carried out in pursuance of article 11, an approved assessor is satisfied as to a service station's compliance with the requirements of article 10 he or she shall submit a report to that effect to the competent "authority.

(2) The particulars to be contained in a report submitted under sub-article (1) are set out in Section 1 of the Second Schedule.

13. (1) Where a competent authority is satisfied that a report submitted under article 12 discloses that the requirements of the Regulations with regard to testing of a service station have been fulfilled it shall duly notify the manager of the relevant service station and shall, upon payment by the manager

of the fee prescribed in article 15, issue a certificate to that effect in the form set out in Section 2 of the Second Schedule.

(2) A competent authority may carry out such investigations as it considers necessary in order to satisfy itself as to the fulfilment of the Regulations by a service station in relation to which a report has been submitted under article 12.

14. It shall be the duty of a manager to keep available a certificate issued under article 13 for inspection at the relevant service station.

15. (1) The fee payable to a competent authority for the purposes of obtaining a certificate in accordance with article 13 shall be £50.

(2) A certificate shall not be issued by a competent authority under article 13 until payment under sub-article (1) has been made to the competent authority by the manager.

16. Where a competent authority is of the opinion that a report does not fulfil the requirements of the Regulations it shall inform the owner and the manager of the service station to which the report relates as soon as is practicable of its refusal to issue a certificate under article 13 and shall require the owner and the manager, as appropriate, to comply with the requirements of article 10.

17. A competent authority shall record in the register kept pursuant to section 17 of the Air Pollution Act, 1987:

(a) the date of receipt of each report submitted under article 12 and such contents of the report as it deems relevant,

(b) the date of issue of each certificate issued under article 13 and such contents of the certificate as it deems relevant.

18. Where on any occasion for technical reasons, or by reason of mechanical failure or human error, it is not possible for petrol to be loaded from a mobile container into a storage tank at a service station, or unloaded from a storage tank at a service station into a mobile container in compliance with the Fourth Schedule, the manager shall convey the following particulars to the competent authority in whose functional area the service station is located within one week of any such occasion:

(a) the date of such occasion,

(b) the amount of petrol loaded or unloaded on such occasion,

(c) the particulars of the carrier and his/her mobile container on such occasion,

(d) the reason for non-compliance with the Third Schedule on such occasion.

PART IV

19. It shall be the duty of a carrier

(a) to satisfy himself or herself that a current certificate has been issued under article 13 prior to loading petrol from his or her mobile container into, or unloading petrol from, a storage tank at a service station, and,

(b) to keep a record of the date, time and quantity of all deliveries of petrol made to all service stations regulated under this article from the date of such delivery for a period of not less than one month for production upon the request of an authorised person.

20. (1) It shall be the duty of a manager to produce a certificate issued under article 13 upon request to do so by a carrier prior to the loading of petrol into, or the unloading of petrol from, a storage tank at a service station.

(2) It shall be the duty of a manager to display a copy of the certificate issued under article 13 in a prominent place for public inspection within the curtilage of the service station.

21. Alternative technical measures for the reduction of losses of petrol other than those provided for in the Fourth Schedule, may be adopted following consultation with the competent authority if such alternative measures are demonstrated to have at least the same efficiency as the appropriate articles of those Regulations giving effect to the provisions of the Third Schedule.

22. (1) These Regulations shall be enforced by a competent authority within its functional area.

(2) A competent authority may authorise in writing any person, hereinafter referred to as an "authorised person", for the purposes of examination, investigation and enforcement of these regulations.

(3) Every authorised person shall be furnished with a certificate of this authorisation and when exercising any power provided by or under these Regulations the authorised person shall, if requested by any person affected, produce the certificate to that person.

(4) An authorised person may, in respect of any service station or mobile container:

(a) inspect any mobile container or service station, and such records or such documents, as the authorised person, having regard to all the circumstances, considers necessary for the purposes of these Regulations,

(b) require from a carrier or a manager, such information as the authorised person, having regard to all the circumstances, considers necessary for the purposes of these Regulations.

FIRST SCHEDULE

Particulars to be included in a certificate of testing for vapour tightness and correct functioning of vacuum/pressure valves of a MOBILE CONTAINER under article 8 of the Air Pollution Act, 1987 (Petroleum Vapour Emissions) Regulations, 1997.

1. Name. of carrier

2. Name of registered owner (if different from carrier)

3. Vehicle Registration Mark, or where the certificate is required in respect of a trailer or tank semi-trailer, the Chassis Number, or in the case of a rail tanker or vessel an appropriate identification mark

4. Date of testing

5. Brief description of tests carried out

6. Is this a first test for the purposes of these Regulations? If not, state day, month and year of most recent test

Declaration

I, -----, hereby certify that I have tested the above mobile container on ----- (insert date) ----- for vapour tightness and correct functioning of vacuum/pressure valves and to the best of my knowledge and belief this mobile container complies with the requirements of the Air Pollution Act, 1987 (Petroleum Vapour Emissions) Regulations, 1997.

Signed

Qualification/Profession and Company

Address

Date

SECOND SCHEDULE

SECTION 1 - APPROVED ASSESSOR'S REPORT

Particulars to be included in a certificate of testing by an approved assessor that a SERVICE STATION complies with the requirements of article 10 of the Air Pollution Act, 1987 (Petroleum Vapour Emissions) Regulations, 1997.

1. Name of service station manager
2. Address/registered office of manager
3. Address of service station
4. Service station throughput (largest total annual quantity loaded/unloaded at service station in three years preceding this test)
5. Date of testing
6. Brief description of tests carried out
7. Is this a first test for the purposes of these regulations? If not, state day, month and year of most recent test.

Declaration

I, -----, hereby confirm that I have tested the above service station on ----- (insert date) ----- for compliance with the provisions of the Air Pollution Act, 1987 (Petroleum Vapour Emissions) Regulations, 1997 and to the best of my knowledge and belief this service station is in compliance with the said provisions.

Signed.

Qualification/Profession and Company

Address Date

SECTION 2 - CERTIFICATE OF TESTING ISSUED

BY A COMPETENT AUTHORITY IN RESPECT OF A SERVICE STATION UNDER THE AIR POLLUTION ACT, 1997 (PETROLEUM VAPOUR EMISSIONS) REGULATIONS, 1997

1. Date of receipt of approved assessor's report
2. Register Number
3. Fee (£50) received (Tick)

4. Is the certificate signed by an approved assessor?

(Name of local authority) today ----- (date) ----- hereby certifies that the service station at -----
----- managed by ----- complies with the provisions of the Air Pollution Act, 1987
(Petroleum Vapour Emissions) Regulations, 1997 and this certificate shall be valid for a period of not
more than three years until _____ (date) _____.

Stamp of Local Authority to be affixed here

Signature of Authorised Person

Date of return of stamped certificate to applicant

THIRD SCHEDULE

REQUIREMENTS FOR LOADING AND STORAGE AT TERMINALS AND SERVICE STATIONS WHERE THE INTERMEDIATE STORAGE OF VAPOURS IS CARRIED OUT

Vapours displaced by the delivery of petrol into storage installations at terminals and into storage tanks at service stations and in fixed roof tanks used for the intermediate storage of vapours must be returned through a vapour-tight connection line to the mobile container delivering the petrol.

Loading operations may not take place unless these arrangements are in place and properly functioning.

FOURTH SCHEDULE

SPECIFICATIONS FOR BOTTOM-LOADING, VAPOUR COLLECTION AND OVERFILL PROTECTION OF EUROPEAN ROAD TANKERS

1. Couplings

1.1 The liquid coupler on the loading arm must be a female coupler which must mate with a 4 inch API (101.6mm) male adapter located on the vehicle as defined by:

API Recommended Practice 1004 Seventh Edition, November, 1988.

Bottom loading and vapour-recovery for MC-306 tank motor vehicles (Section 2.1.1.1 Type of adapter used for bottom loading).

1.2 The vapour-collection coupler on the loading gantry vapour-collection hose must be a cam-and-groove female coupler which must mate with a 4 inch (101.6mm) cam-and-groove male adapter located on the vehicle as defined by:

API Recommended Practice 1004

Seventh Edition, November, 1988.

Bottom loading and vapour-recovery for MC-306 tank motor vehicles (Section 4.1.1.2 Vapour-recovery adapter).

2 Loading Conditions

2.1 The normal liquid-loading rate must be 2,300 litres per minute (maximum 2,500 litres per minute) per loading arm.

2.2 When the terminal is operating at peak demand, its loading gantry vapour collection system, including the vapour-recovery unit, is allowed to generate a maximum counter-pressure of 55 millibar on the vehicle side of the vapour-collection adapter.

2.3 All approved bottom-loading vehicles will carry an identification plate which specifies the maximum permitted number of loading arms which must be operated simultaneously whilst ensuring that no vapours are released via the compartment P and V valves, when the maximum plant back pressure is 55 millibar as specified in 2.2.

3. Connection of vehicle earth/overflow detection

The loading gantry must be equipped with an overflow-detection control unit which, when connected to the vehicle, must provide a failsafe permission signal to enable loading, providing no compartment-overflow sensors detect a high level.

3.1 The vehicle must have connected to the control unit on the gantry via a 10-pin industry-standard electrical connector. The male connector must be mounted on the vehicle and the female connector must be attached to a flying lead connected to the gantry mounted control unit.

3.2 The high-level detectors on the vehicle must be either 2—wire thermistor sensors, 2-wire optical sensors, 5-wire optical sensors or a compatible equivalent, provided the system is failsafe. Thermistors must have a negative temperature coefficient.

3.3 The gantry control unit must be suitable for both 2-wire and 5-wire vehicle systems.

3.4 The vehicle must be bonded to the gantry via the common return wire of the overflow sensors, which must be connected to pin 10 on the male connector via the vehicle chassis. Pin 10 on the female connector must be connected to the control unit enclosure which must be connected to the gantry earth.

3.5 All approved bottom-loading vehicles must carry an identification plate (see 2.3) which specifies the type of overflow-detection sensors installed (i.e. 2-wire or 5-wire).

4. Location of the connections

4.1 The design of the liquid-loading and vapour collection facilities on the loading gantry must be based on the following vehicle connection envelope.

4.1.1 The height of the centre line of the liquid adapters must be; maximum 1.4 metres (unladen); minimum 0.5 metres (laden), the preferred height being 0.7 to 1.0 metres.

4.1.2 The horizontal spacing of the adapters must be not less than 0.25 metres (preferred maximum spacing is 0.3 metres).

4.1.3 All liquid adapters must be located within an envelope not exceeding 2.5 metres in height.

4.1.4 The vapour-collection adapter should be located preferably to the right of the liquid adapters and at a height not exceeding 1.5 metres (unladen) and not less than 0.5 metres (laden).

4.2 The earth/overflow connector must be located to the right of the liquid and vapour-collection adapters and at a height not exceeding 1.5 metres (unladen) and not less than 0.5 metres (laden).

4.3 The above connections must be located on one side of the vehicle only.

5. Safety interlocks

5.1. Earth/Overfill detection

Loading must not be permitted unless a permissive signal is provided by the combined earth/overfill control unit.

In the event of an overfill condition or a loss of vehicle earth, the control unit on the gantry must close the gantry-loading control valve.

5.2. Vapour-collection detection

Loading must not be permitted unless the vapour-collection hose has been connected to the vehicle and there is a free passage for the displaced vapours to flow from the vehicle into the plant vapour-collection system.

Given under the Official Seal of the Minister for the Environment

and Local Government this 10th, day of September 1997.

Noel Dempsey

Minister for the Environment and Local Government

EXPLANATORY NOTE

These Regulations transpose elements of Directive 94/63/EC into Irish law to introduce controls on petroleum vapour emissions (volatile organic compounds) resulting from the storage and distribution of petrol which is intended for use as a fuel for motor vehicles. The Regulations provide for the monitoring of compliance of service station and mobile container operators by relevant local authorities. Other provisions of Directive 94/63/EC are transposed by the ENVIRONMENTAL PROTECTION AGENCY ACT, 1992 (CONTROL OF VOLATILE ORGANIC COMPOUND EMISSIONS RESULTING FROM PETROL STORAGE AND DISTRIBUTION) REGULATIONS, 1997. (S.I. No. 374 of 1997).

Source: Irish Statute Book Database

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