The Flemish Government

# Decree of the Flemish Government amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene as regards plastic granules, fuels and flammable liquids, the storage of dangerous products and private fuel oil tanks, and adapting an entry-into-force provision

## Legal basis

This Decree is based on:
- the Decree of 5 April 1995 laying down general provisions concerning environmental policy, Article 5.4.1, 5.4.7 and 5.4.10, inserted by the Decree of 25 April 2014.

## Formal requirements

The following formal requirements have been met:
- The Inspectorate of Finance gave its opinion on 3 October 2023.
- The preliminary draft of this Decree of the Flemish Government was published on the website of the Department of the Environment from 8 August 2022 to 22 September 2022 and was also available for inspection during that period. During the aforementioned period, anyone was able to submit comments.
- The Environment and Nature Council of Flanders provided Opinion 24/405 on 25 January 2024.
- On 2 January 2024, a request was submitted to the Social and Economic Council of Flanders for an opinion. On 15 January 2024, SERV announced that it would not issue an opinion.
- On 2 January 2024, a request was submitted to the Strategic Advisory Council on Agriculture and Fisheries for an opinion. On 18 January 2024, SALV announced that it would not issue an opinion.
- The Flemish Supervisory Committee for the Processing of Personal Data provided Opinion 2024/011 on 16 January 2024.
- The Data Protection Authority provided Opinion 65/2023 on 19 January 2024.
- The Environmental Effects team made a decision on the EIA screening plan on 22 March 2024.
- This draft was notified to the European Commission with Notification No 2023/0746/BE on 21 December 2023, pursuant to Article 5 of Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.
- Pursuant to Article 84(1)(1), 2° of the Council of State Acts, coordinated on 12 January 1973, the Council of State issued Opinion 76.315/16 on 29 May 2024.

## Promoters

This Decree is proposed by the Flemish Minister of Justice and Enforcement, Environment, Energy and Tourism.

After deliberations,

THE FLEMISH GOVERNMENT HEREBY DECREES THE FOLLOWING:

Chapter 1. Amendments to the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental health

**Article 1.** In Article 1.1.2 of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene, last amended by the Decree of the Flemish Government of 7 July 2023, the following definition is added to GENERAL DEFINITIONS:

'- plastic granules: an umbrella term for granulate, granules, pellets, nurdles, flakes, fluff and powder, made of plastic.'.

**Article 2.** In Part 4, Chapter 4.2, Section 4.2.3bis of the same Decree, inserted by the Decree of the Flemish Government of 3 May 2019, an Article 4.2.3bis.5 is added, which reads as follows:

'Article 4.2.3bis.5. The hydrocarbon separator shall comply with the provisions set out in Annex 5.17.7, attached to this Decree.'.

**Article 3.** In Part 4 of the same Decree, last amended by the Decree of the Flemish Government of 23 June 2023, a Chapter 4.11, consisting of Articles 4.11.1 to 4.11.4, is added, which reads as follows:

'Chapter 4.11. Monitoring contamination by plastic granules

Article 4.11.1. The provisions of this Chapter shall apply to classified establishments or activities in which the loss of plastic granules may occur. These conditions shall not apply to the operation of artificial turf pitches.

Article 4.11.2. § 1. The operator shall apply the best available techniques to prevent or limit the spread of plastic granules to the environment.

§ 2. On the classified establishment or activity, there is sufficient adapted cleaning material to clean up spilled plastic granules.

Spilled plastic granules as referred to in paragraph 1 shall be disposed of at the latest after the end of the operation and collected in a container intended for that purpose. If possible, the spilled plastic granules will be reused as raw material. If the spilled plastic granulate cannot be reused as raw material, it is collected and disposed of in accordance with the regulations on waste.

Article 4.11.3. § 1. The operator shall have procedures and instructions to control contamination by plastic granules. The above procedures are intended for in-

house personnel and third parties carrying out activities on the classified establishment or activity leading to possible emissions of plastic granules.

The operator shall provide a clear explanation of the procedures and instructions set out in paragraph 1 for the control of contamination by plastic granules.

The operator shall ensure that the procedures and instructions set out in paragraph 1 are meticulously complied with by their in-house personnel and third parties.

The procedures, instructions referred to in paragraph 1 and an overview of personnel training shall be retained for inspection by the supervisor.

§ 2. For establishments authorised before 1 January 2025 or noted before 1 January 2025, the obligations referred to in section 1 shall apply from 1 January 2026.

Article 4.11.4. § 1. The operator shall supervise the loading and unloading activities of plastic granules on the classified establishment or activity and ensure that when leaving the classified establishment or activity:

1° the loading area of the container or trailer of the vehicle is wiped clean after unloading;

2° the loading compartment of the vehicle is properly sealed to prevent losses;

3° the exterior of the vehicle is free of plastic granules.

The operator shall collect the residual loads of plastic granules and the sweeping waste in a container which is intended for that purpose. If possible, the residual loads of plastic granules and the sweeping waste shall be reused as raw material. If the residual loads of plastic granulate and the sweeping waste cannot be reused as raw material, they are collected and disposed of in accordance with the regulations on waste.

**Article 4.** In Article 5.6.1.1.10 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following amendments are made:

1° point 4° is replaced with the following:

‘4° in order to avoid overfilling, the fixed containers shall be equipped with one of the following anti-refill systems in accordance with Annex 5.17.7, attached to this Decree:

a) an overfill warning system with an acoustic signal gives a warning as soon as the container to be filled is 95 % filled, and which is audible to the supplier. The aforementioned system can be mechanical or electronic. A container positioned before 1 January 2025, with only an alarm whistle as a warning system but sufficient until 31 December 2027 to comply with this provision;

b) a refill protection system where the liquid supply is automatically closed once the container to be filled is filled to a maximum of 98 %. The aforementioned system may be mechanical or electronic;’;

2° point 6° is replaced with the following:

‘6° the position of the tanker or wagon, the areas in which the filling and unloading points of the fixed containers are grouped, and the filling areas at the distribution plant are always located on the site of the establishment, are sufficiently load-bearing and resistant to the liquids being loaded there. In order to be able to absorb and dispose of leaked liquids, and to prevent the spread of fire, the aforementioned zones are equipped as follows:

a) the position of the tank lorry or wagon for filling the fixed containers is equipped with a fixed liquid-proof zone of at least 8 m² above which the pumps of the tank lorry or wagon and the connections between the tank lorry or wagon and the pipes to the filling and unloading points must be located. The above fixed liquid-tight zone shall be clearly and indelibly marked, except if the entire position of the tanker or wagon is liquid-tight. The aforementioned solid liquid-proof zone shall be provided with the necessary slopes and, if necessary, raised edges, so that all leaked liquids drain to a collection system, taking into account the provisions mentioned in Annex 5.17.7, attached to this Decree;

b) the entire position of the tanker or wagon for filling the tanker or wagon is equipped with a fixed liquid-tight zone. The aforementioned solid liquid-proof zone shall be provided with the necessary slopes and, if necessary, raised edges, so that all leaked liquids drain to a collection system, taking into account the provisions mentioned in Annex 5.17.7, attached to this Decree;

c) if the filling and unloading points of the fixed containers are located outside the cockpit and outside the solid liquid-tight zone, that zone shall be provided with a solid liquid-tight device around the filling and unloading points;

d) any pipe connections between the tanker or wagon and the filling and unloading points are provided with a liquid-tight device, if they are located outside the containment and outside the solid liquid-tight zone;

e) the filling areas at the distribution plant are liquid-tight;

f) the collected liquids are disposed of in accordance with regulatory provisions, in particular on waste disposal;

g) depending on the characteristics of the products stored and the manner and frequency of loading, the operator shall determine the capacity and layout of the collection system, and shall take the necessary additional measures to protect humans and the environment, taking into account the provisions set out in Annex 5.17.7, which is attached to this Decree;’;

3° point 8° is replaced with the following:

‘8° a container may not be filled with a liquid other than the liquid for which the container is designed, unless, following an examination in accordance with Annex 5.17.2, attached to this Decree, by an environmental expert in the discipline containers for gases or hazardous substances, or has been proven by a competent expert that the container is fit and that the installation complies with the requirements set out in this Decree.’;

4° a second and a third paragraph are added, which read as follows:

‘By way of derogation from paragraph 1, 6°, equivalent facilities or measures may be permitted in the environmental permit.

Paragraph 1, 6°, shall not apply to:
1° storage sites intended exclusively for the heating of buildings;
2° storage sites of flammable liquids classified in Class 3.’.

**Article 5.** Article 5.6.1.1.11 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, is replaced by the following:

‘Article 5.6.1.1.11. The overfill system shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.7, attached to this Decree.

Monitoring the construction of a separate built overfill system shall be carried out in accordance with Annex 5.17.7, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.7, attached to this Decree.

Inspecting the construction of series overfill systems may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.7, attached to this Decree. An operator shall have a declaration of conformity in accordance with Annex 5.17.7, which is attached to this Decree, for each series of refilling system.

An identification plate shall be affixed to each refill system in accordance with Annex 5.17.7, attached to this Decree.’.

**Article 6.** In Part 5, Chapter 5.6.1, Subsection 5.6.1.1 of the same Decree, as amended by the Decrees of the Flemish Government of 16 May 2014, 27 November 2015 and 3 May 2019, an Article 5.6.1.1.14 is added, which reads as follows:

‘Article 5.6.1.1.14. The permanent leak detection system shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.3, attached to this Decree.

Inspecting the construction of a separately-constructed leak detection system shall be carried out in accordance with Annex 5.17.3, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.3, attached to this Decree.

Inspecting the construction of series-built leak detection systems may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.3, attached to this Decree. An operator shall have a declaration of conformity in accordance with Annex 5.17.3 to this Decree for each leak detection system built in series.

Each leak detection system shall be fitted with an identification plate in accordance with Annex 5.17.3, attached to this Decree.’.

**Article 7.** In Article 5.6.1.2.2 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, section 1 is replaced by the following:

‘§ 1. The fixed container shall be fitted with a clearly visible identification plate in accordance with Annex 5.17.2 to this Decree in addition to the manhole or at the level of the filling line.’.

**Article 8.** In Article 5.6.1.2.4 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 27 November 2015, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. Containers directly buried in the ground shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.2, attached to this Decree.

An identification plate shall be affixed to each container in accordance with Annex 5.17.2, attached to this Decree.’;

2° in section 2, paragraph 1, between the words ‘stainless steel’ and the words ‘located’, the phrase ‘built before 1 January 2025’ is inserted;

3° in section 2, paragraph 2, the word ‘new’ shall be deleted.

**Article 9.** In Article 5.6.1.2.5 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 27 November 2015, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. Containers placed in a quarry shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.2, attached to this Decree.

An identification plate shall be affixed to each container in accordance with Annex 5.17.2, attached to this Decree.’;

2° in section 2, paragraph 1, between the words ‘stainless steel’ and the words ‘located’, the phrase ‘built before 1 January 2025’ is inserted;

3° in section 2, paragraph 2 is removed.

**Article 10.** Article 5.6.1.2.6 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, is replaced by the following:

‘Article 5.6.1.2.6. Inspecting the construction of a separately constructed container shall be carried out in accordance with Annex 5.17.2, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.2 attached to this Decree.

Inspecting the construction of series-built containers may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.2, attached to this Decree. An operator shall have a declaration of conformity in accordance with Annex 5.17.2 to this Decree for each container built in series.’.

**Article 11.** In Article 5.6.1.2.7 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following amendments are made:

1° paragraph 2 shall be replaced with the following:

‘After the installation, but before the container is put into service, it shall be verified that the following items comply with the requirements set out in this Decree:
1° the container;
2° the pipes and accessories;
3° the overfill warning or overfill protection system;
4° the leak detection system;
5° where appropriate, the cathodic protection;
6° where appropriate, the liquid-tight slope;
7° where appropriate, the KWS separator or collection system;
8° where appropriate, the vapour recovery devices present.’;

2° between paragraphs 2 and 3, two paragraphs are inserted, which read as follows:

‘The pipework placed shall be subjected to a density test as specified in Article 5.6.1.2.8(2)(3), 5°.

The operator shall allow inspection of the applicable environmental permit for the operation of the classified establishment or activity or the deeds or application for the environmental permit or notification.’.

**Article 12.** The following amendments are applied to Article 5.6.1.2.8 of the same Decree, inserted in the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 27 November 2015 and 3 May 2019:

1° in section 1, the phrase ‘, including where relevant:’ is replaced by the following introductory sentence:

‘That limited examination shall include the following elements if they are relevant:’;

2° in section 1, 1°, between the word ‘conformity’ and the phrase ‘, in the attestation’, the words ‘or the report of construction inspection’ shall be inserted;

3° in section 1, 2°, the words ‘good state of overfill protection’ are replaced by the words ‘effectiveness and proper functioning of the system against overfilling’;

4° in section 1, 7°, between the words ‘effectiveness’ and the phrase ‘of the leak detection system;’ the words ‘and proper operation’ shall be inserted;

5° in section 1, 9°, the words ‘in good condition’ are replaced by the words ‘to the effectiveness and proper functioning’;

6° section 2 is replaced with the following:

‘§ 2. Except for containers made of reinforced thermoset plastics, the installation shall be subject to a general examination within one of the following periods:
1° at least every 10 years for containers located in water extraction areas or protection zones;

2° at least every 15 years for containers located in areas other than the areas and zones specified in point 1°.

By way of derogation from paragraph 1, the installation shall be subject to a general examination during the shortest of the following periods for all containers constructed from 1 January 2025:

1° at least every 10 years for containers located in water extraction areas or protection zones;

2° at least every 15 years for containers located in areas other than the areas and zones specified in point 1°;

3° at least every 50 % of the calculated or expected lifetime of the container listed in Annex 5.17.2, attached to this Decree.

The general examination referred to in paragraphs 1 and 2 shall include all of the following:

1° the limited examination referred to in section 1;

2° the state of the inner wall in the case of a determined significant presence of water or sludge. If an internal inspection is required, the container is cleaned internally. Where technically possible, the inner wall and the internal parts of the container shall be examined and, where necessary, a non-destructive examination shall be carried out to determine the wall thickness of the container;

3° the condition of the outer covering, if technically possible and without the container having to be exposed to it;

4° in the case of the situation referred to in Article 5.6.1.2.4(3), the detection of any corrosion occurring by means of a potential measurement and a measurement of the corrosivity of the adjacent soil;

5° a density test on single-walled containers and non-accessible single-walled pipes directly buried in the ground, maximising the search for non-tight tanks or determining the quality condition and the remaining minimum lifespan, carried out in accordance with a code of good practice and accepted by the Environment Department responsible for the environmental permit;

6° if the density test on single-walled containers directly buried in the ground does not permit the assessment of the quality condition and the remaining minimum lifespan of the container, the application of an additional inspection method which determines the quality condition and the remaining minimum lifespan of the container. For underground, double-walled containers, a control method is also used that determines the quality and the remaining minimum life of the container. The above control method shall be accepted by the Environment Department responsible for the environmental permit.';

7° in section 3, the words 'quality and service life' are replaced by the words 'quality condition and residual minimum life';

8° a paragraph 2 and 3 are added to section 3, which read as follows:

'Containers shall be permanently removed from service in accordance with Article 5.6.1.2.13 on one of the following dates reached at the first:

1° the date on which the calculated or expected lifetime of the container, as set out in Annex 5.17.2, attached to this Decree, has expired;

2° the date on which the remaining minimum lifetime of the container has expired. The above-mentioned service life shall be determined by the inspection method referred to in section 2, paragraph 3, 6°.

Notwithstanding paragraph 2, the service life may be extended after the calculated or expected service life or the minimum remaining service life has been reached, provided that a monitoring method is used that allows the quality condition and the minimum remaining service life to be estimated and that is accepted by the Environment Department, competent for the environmental permit. The expert shall draw up a certificate of the container's life extension. On the date of expiry of the extended service life, the container shall be permanently removed from service in accordance with Article 5.6.1.2.13.'.

**Article 13.** The following amendments are made to Article 5.6.1.2.9(1) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 18 March 2016:

1° the phrase ', referred to in Article 5.6.1.2.7, at the time of placement' shall be replaced by the phrase 'at the time of the placement referred to in Article 5.6.1.2.7';

2° the words 'certificate of conformity' shall be replaced by the words 'the attestation referred to above';

3° the following sentence is added:

'The expert or authorised technician shall sign the above certificate.'.

**Article 14.** The following amendments are applied to Article 5.6.1.2.10 of the same Decree, inserted in the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 18 March 2016 and 21 May 2021:

1° in paragraph 5, the words 'the operator or at their request' are deleted;

2° in paragraph 5, the words 'the entity of the Flemish Environment Agency competent for groundwater consultancy' are replaced by the phrase 'the supervisor and, in the case of containers located in water extraction areas or in a type I, II or III protection zone of groundwater extraction intended for the public water supply, including the drinking water company concerned.'.

**Article 15.** The following amendments are applied to Article 5.6.1.2.11 of the same Decree, inserted in the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 27 November 2015 and 3 May 2019:

1° in section 4, 1°, the words 'overfill warning or protection system' are replaced by the words 'overfill warning or overfill protection system';

2° in section 4, 2°, the words 'leak detection which' are replaced by the words 'leak detection system that';

3° in section 5, paragraph 1, the word ‘leak detection’ is replaced by the word ‘leak detection system’;

4° in section 5, paragraph 2, the words ‘The leak detection’ are replaced by the words ‘The leak detection system’.

**Article 16.** In Article 5.6.1.2.12 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 10 February 2017, the following amendments are made:

1° in section 2, 1°, the words ‘the overfill warning or protection system’ are replaced by the words ‘an overfill warning or overfill protection system’;

2° in section 2, 2°, the words ‘the leak detection which’ shall be replaced by the words ‘a leak detection system that’;

3° in section 3, paragraph 1, the word ‘leak detection’ is replaced by the word ‘leak detection system’;

4° in section 3, paragraph 2, the words ‘The leak detection’ shall be replaced by the words ‘The leak detection system’.

**Article 17.** In Article 5.6.1.2.13(3)(3), of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following sentence is added:

‘The Flemish Minister may determine the further minimum required content and the form of the certificate.’.

**Article 18.** The following sentence is added to Article 5.6.1.3.1(2) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014:

‘The aforementioned leak detection system shall comply with the provisions set out in Annex 5.17.3, attached to this Decree.’.

**Article 19.** Article 5.6.1.3.3 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, is replaced by the following:

‘Article 5.6.1.3.3. Inspecting the construction of a separately constructed container shall be carried out in accordance with Annex 5.17.2, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.2 attached to this Decree.

Inspecting the construction of series-built containers may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.2, attached to this Decree. An operator shall have a declaration of conformity in accordance with Annex 5.17.2 to this Decree for each container built in series.

An identification plate shall be affixed to each container in accordance with Annex 5.17.2 to this Decree.’.

**Article 20.** In Article 5.6.1.3.4 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following amendments are made:

1° paragraph 2 shall be replaced with the following:

'After the installation, but before the container is put into service, it shall be verified that the following items comply with the requirements set out in this Decree:
1° the container;
2° the pipes and accessories;
3° the overfill warning or overfill protection system;
4° the leak detection system;
5° fire-fighting equipment;
6° where appropriate, the containment;
7° where appropriate, the liquid-tight slope;
8° where appropriate, the KWS separator or collection system;
9° where appropriate, the vapour recovery devices present.';

2° a fourth paragraph is added, reading as follows:

'The operator shall allow inspection of the applicable environmental permit for the operation of the classified establishment or activity or the deeds or application for the environmental permit or notification.'.

**Article 21.** In Article 5.6.1.3.5 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, section 1 is replaced by the following:

'§ 1. The fixed container shall be fitted with a clearly visible identification plate in accordance with Annex 5.17.2 to this Decree in addition to the manhole or at the level of the filling line.'.

**Article 22.** In Article 5.6.1.3.11(1) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 3 May 2019, the words 'local water distribution company or an EIA expert' are replaced by the words 'local water distribution company and an EIA expert'.

**Article 23.** In Article 5.6.1.3.14 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 27 November 2015 and 3 May 2019, the following amendments are made:

1° in section 1, paragraph 2, 1°, between the word 'conformity' and the words ', in the attestation', the words 'or the report of construction inspection' shall be inserted;

2° in section 1, paragraph 2, 2°, the words 'monitoring of the good condition of the overfill protection' are replaced by the words 'monitoring of the effectiveness and proper functioning of the overfill system and the leak detection system';

3° in section 1, paragraph 2, 4°(j), the words 'of good condition' shall be replaced by the words 'to their effectiveness and proper functioning';

4° to section 2, a paragraph shall be inserted between paragraphs 1 and 2, which reads as follows:

‘By way of derogation from paragraph 1, for containers constructed from 1 January 2025, the installation shall be subject to a general survey at least every twenty years or at least every 20 years or at least every period covering 75 % of the calculated or expected lifetime of the container set out in Annex 5.17.2 attached to this Decree, whichever is the shorter.’;

5° in the existing section 2, paragraph 2, which is changed to section 2, paragraph 3, the phrase ‘This examination shall include:’ is replaced by the phrase ‘General examination shall include:’.

**Article 24.** In Article 5.6.1.3.15(1) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 18 March 2016, the following amendments are made:

1° the phrase ‘, referred to in Article 5.6.1.3.4, at the time of placement’ shall be replaced by the phrase ‘at the time of the placement referred to in Article 5.6.1.3.4,’;

2° the phrase ‘, shall the experts or approved fuel oil technician’ be replaced by the phrase ‘said the expert or approved fuel oil technician’;

4° the following sentence is added:

‘The expert or authorised technician shall sign the above certificate.’.

**Article 25.** The following amendments are made to Article 5.6.1.3.16(5) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 21 May 2021:

1° the words ‘the operator or at their request’ are deleted;

2° the words ‘the entity of the Flemish Environment Agency competent for groundwater consultancy’ are replaced by the phrase ‘the supervisor and, in the case of containers located in water extraction areas or a type I, II or III protection zone of groundwater extraction intended for the public water supply, including the drinking water company concerned’.

**Article 26.** In Article 5.6.1.3.19(3)(3), of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following sentence is added:

‘The Flemish Minister may specify the minimum content required and determine the form of the certificate.’.

**Article 27.** In Article 5.16.8 of the same Decree, inserted by the Decree of the Flemish Government of 23 December 2011 and last amended by the Decree of the Flemish Government of 3 May 2019, section 1/1 is deleted.

**Article 28.** Article 5.16.9.2 of the same Decree, inserted by the Decree of the Flemish Government of 3 May 2019, is deleted.

**Article 29.** In Article 5.17.4.1.16 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following amendments are made:

1° point 4° is replaced with the following:

'4° in order to avoid overfilling, the fixed containers shall be equipped with one of the following anti-refill systems in accordance with Annex 5.17.7, attached to this Decree:

a) an overfill warning system with an acoustic signal that warns as soon as the container to be filled is 95 % filled and that is audible to the supplier. This system can be mechanical or electronic. A container placed before 1 January 2025, with only an alarm whistle as a warning system but sufficient until 31 December 2027 to comply with this provision;

b) a refill protection system where the liquid supply is automatically closed once the container to be filled is filled to a maximum of 98 %. This system can be mechanical or electronic. In the case of storage sites forming part of a fuel distribution system for motor vehicles, the above-mentioned overfill protection system shall be provided;';

2° point 6° is replaced with the following:

'6° the position of the tanker or wagon, the areas in which the filling and unloading points of the fixed containers are grouped, and the filling areas at the distribution plant are always located on the site of the establishment, are sufficiently load-bearing, resistant to the liquids that are loaded there, and fire resistant in the event of the loading of hazardous liquids of Group 1 or Group 2. In order to be able to absorb and dispose of leaked liquids, and to prevent the spread of fire, the aforementioned zones are equipped as follows:

a) the position of the tank lorry or wagon for filling the fixed containers is equipped with a fixed liquid-proof zone of at least 8 m² above which the pumps of the tank lorry or wagon and the connections between the tank lorry or wagon and the pipes to the filling and unloading points must be located. The above fixed liquid-tight zone shall be clearly and indelibly marked, except if the entire position of the tanker or wagon is liquid-tight. The zone shall be fitted with the necessary slopes and, where appropriate, raised edges, so that all leaked liquids flow into a collecting system, taking into account the provisions set out in Annex 5.17.7, attached to this Decree;

b) the entire position of the tanker or wagon for filling the tanker or wagon is equipped with a fixed liquid-tight zone. The above zone shall be fitted with the necessary slopes and, where appropriate, raised edges, so that all leaked liquids flow to a collecting system, taking into account the provisions set out in Annex 5.17.7, attached to this Decree;

c) if the filling and unloading points of the fixed containers are located outside the cockpit and outside the solid liquid-tight zone, the zone around those points shall be provided with a solid liquid-tight device;

d) any pipe connections between the tanker or wagon and the filling and unloading points are provided with a liquid-tight device, if they are located outside the containment and outside the solid liquid-tight zone;

e) the filling areas at the distribution plant are liquid-tight;

f) the collected liquids are disposed of in accordance with the regulatory provisions, especially on waste disposal;
g) depending on the characteristics of the products stored and the manner and frequency of loading, the operator shall determine the capacity and layout of the collection system, and shall take the necessary additional measures to protect humans and the environment, taking into account the provisions of Annex 5.17.7, which is attached to this Decree.

For hazardous liquids of Group 1, the position of the tanker or wagon and the areas where the filling and unloading points of the fixed containers are grouped, and the filling areas at the distribution plant shall always be in the open air or under a canopy.

Under the above-mentioned position and areas, there shall be no quarries, crawl spaces or rooms set up. In the case of weighing bridges, effective arrangements shall be put in place to limit the spread of leaks and to prevent the risk of explosion;'

3° point 9° is replaced with the following:

'9° a container may not be filled with a liquid other than a liquid for which the container is designed, unless, following an examination in accordance with Annex 5.17.2, attached to this Decree, by an environmental expert in the discipline containers for gases or hazardous substances, or has been proven by a competent expert that the container is suitable and that the installation complies with the requirements set out in this Decree.';

4° paragraphs 2 to 4 are added, which read as follows:

'By way of derogation from paragraph 1, 6°, equivalent facilities or measures may be permitted in the environmental permit.

Paragraph 1, 6°, shall not apply to:
1° storage sites intended exclusively for the heating of buildings;
2° storage sites of hazardous liquids of Group 2 classified in Class 3.

For fixed containers for which the storage of hazardous liquids of Group 1 or Group 2 has been authorised before 1 January 2025 and is still authorised, the stricter conditions set out in paragraph 1, 6° for the fire resistance of the tanker or wagon's location, the areas where the filling and unloading points of the fixed containers are grouped, and the filling areas at the distribution plant do not apply. The aforementioned containers shall, without prejudice to the special conditions, continue to comply with the aforementioned sectoral conditions as in force before 1 January 2025.'.

**Article 30.** Article 5.17.4.1.17 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, is replaced by the following:

'Article 5.17.4.1.17. The overfill system shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.7, attached to this Decree.

Monitoring the construction of a separate built overfill system shall be carried out in accordance with Annex 5.17.7, attached to this Decree. The

operator shall have at its disposal the construction inspection report set out in Annex 5.17.7, attached to this Decree.

The inspection of the construction of series overfill systems may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.7, attached to this Decree. An operator shall have a declaration of conformity in accordance with Annex 5.17.7, which is attached to this Decree, for each series of refilling system.

An identification plate shall be affixed to each refill system in accordance with Annex 5.17.7, attached to this Decree.'.

**Article 31.** In Part 5, Chapter 5.17, Section 5.17.4, Subsection 5.17.4.1, of the same Decree, last amended by the Decree of the Flemish Government of 24 June 2022, an Article 5.17.4.1.21 is added, which reads as follows:

'Article 5.17.4.1.21. The leak detection system shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.3, attached to this Decree.

Inspecting the construction of a separately-constructed leak detection system shall be carried out in accordance with Annex 5.17.3, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.3, attached to this Decree.

The inspection of the construction of series leak detection systems may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.3, attached to this Decree. An operator shall have a declaration of conformity in accordance with Annex 5.17.3 for each serial leak detection system attached to this Decree.

Each leak detection system shall be fitted with an identification plate in accordance with Annex 5.17.3, attached to this Decree.'.

**Article 32.** In Article 5.17.4.2.2 of the same Decree, replaced by the Decree of the Flemish Government of 16 May 2014, section 1 is replaced by the following:

'§ 1. The fixed container shall be fitted with a clearly visible identification plate in accordance with Annex 5.17.2 to this Decree in addition to the manhole or at the level of the filling line.'.

**Article 33.** The following amendments are made to Article 5.17.4.2.4 of the same Decree, replaced by the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 10 February 2017 and 3 May 2019:

1° section 1 shall be replaced with the following:

'§ 1. Containers directly buried in the ground shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.2, attached to this Decree.

An identification plate shall be affixed to each container in accordance with Annex 5.17.2, attached to this Decree.';

2° in section 2, paragraph 1, between the words ‘stainless steel’ and the words ‘located’, the phrase ‘built before 1 January 2025’ is inserted;

3° in section 2, paragraph 2, the word ‘new’ shall be deleted.

**Article 34.** In Article 5.17.4.2.5 of the same Decree, inserted by the Decree of the Flemish Government of 20 April 2001, replaced with the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 10 February 2017 and 3 May 2019, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. Containers placed in a quarry shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.2, attached to this Decree.

An identification plate shall be affixed to each container in accordance with Annex 5.17.2, attached to this Decree.’;

2° in section 2, paragraph 1, between the words ‘stainless steel’ and the words ‘located’, the phrase ‘built before 1 January 2025’ is inserted;

3° in section 2, paragraph 2 is removed.

**Article 35.** Article 5.17.4.2.6 of the same Decree, inserted by the Flemish Government Decree of 23 September 2011 and replaced by the Flemish Government Decree of 16 May 2014, now reads:

‘Article 5.17.4.2.6. Inspecting the construction of a separately constructed container shall be carried out in accordance with Annex 5.17.2, attached to this Decree. The operator shall have the construction inspection report set out in Annex 5.17.2.

Inspecting the construction of series-built containers may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.2, attached to this Decree. The operator shall have a declaration of conformity in accordance with Annex 5.17.2. for each serial container.’.

**Article 36.** The following amendments are made to 5.17.4.2.7 of the same Decree, inserted by the Decree of the Flemish Government of 23 September 2011 and replaced by the Decree of the Flemish Government of 16 May 2014:

1° paragraph 2 shall be replaced with the following:

‘After the installation, but before the container is put into service, it shall be verified that the following items comply with the requirements set out in this Decree:
1° the container;
2° the pipes and accessories;
3° the overfill warning or overfill protection system;
4° the leak detection system;
5° where appropriate, the cathodic protection;

6° where appropriate, the liquid-tight slope;
7° where appropriate, the KWS separator or collection system;
8° where appropriate, the vapour recovery devices present.';

2° paragraphs 4 and 5 are added, which read as follows:

'The pipework placed shall be subjected to a density test as referred to in Article 5.17.4.2.8(2)(3), 5°.

The operator shall allow inspection of the applicable environmental permit for the operation of the classified establishment or activity or the deeds or application for the environmental permit or notification.'.

**Article 37.** In Article 5.17.4.2.8 of the same Decree, inserted by the Decree of the Flemish Government of 23 September 2011, replaced with the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 27 November 2015 and 3 May 2019, the following amendments are made:

1° in section 1, 1°, between the word 'conformity' and the words ', in the attestation', the words 'or the report of construction inspection' shall be inserted;

2° in section 1, point 2° shall be replaced with the following:

'2° control of the effectiveness and proper functioning of the system against overfilling;';

3° in section 1, 7°, the word 'effectiveness' is replaced by the words 'effectiveness and proper functioning';

4° in section 1, 10°, the words 'of the good condition of' are replaced by the words 'to the effectiveness and proper functioning of';

5° section 2 is replaced with the following:

'§ 2. Except for containers made of reinforced thermoset plastics, the installation shall be subject to a general examination within one of the following periods:
1° at least every 10 years for containers located in water extraction areas or protection zones;
2° at least every 15 years for containers located in other areas.

By way of derogation from paragraph 1, the installation shall be subject to a general survey for all containers constructed from 1 January 2025 within the following periods:
1° at least every 10 years for containers located in water extraction areas or protection zones;
2° at least every 15 years for containers located in other areas;
3° at least every period covering 50 % of the calculated or expected lifespan of the container, as set out in Annex 5.17.2, attached to this Decree.

The general examination referred to in paragraphs 1 and 2 shall include all of the following:
1° the limited examination referred to in section 1;

2° the state of the inner wall in the case of a determined significant presence of water or sludge. If an internal inspection is required, the container is cleaned internally. If technically possible, the inner wall and the internal parts of the container shall be examined and, where necessary, a non-destructive examination shall be carried out to determine the wall thickness of the container;
3° the condition of the outer covering, if technically possible and without the container having to be exposed to it;
4° in the case of the situation referred to in Article 5.17.4.2.4(3), the detection of any corrosion occurring by means of a potential measurement and a measurement of the corrosivity of the adjacent soil;
5° a density test on single-walled containers and non-accessible single-walled pipes directly buried in the ground, maximising the search for non-tight tanks or determining the quality condition and the remaining minimum lifespan, carried out in accordance with a code of good practice accepted by the Environment Department responsible for the environmental permit;
6° if the density test on single-walled containers directly buried in the ground does not permit the assessment of the quality condition and the remaining minimum lifespan of the container, the application of an additional control method which determines the quality condition and the remaining minimum lifespan of the container. For underground, double-walled containers, a control method is also used that determines the quality and the remaining minimum life of the container. The above control method shall be accepted by the Environment Department responsible for the environmental permit.';

6° in section 3, the words 'quality and service life' are replaced by the words 'quality condition and residual minimum life';

7° to section 3, a second and a third paragraphs are added, which read as follows:

'Containers shall be permanently removed from service in accordance with Article 5.17.4.2.13 on one of the following dates reached at the first:
1° the date on which the calculated or expected lifetime of the container, as set out in Annex 5.17.2, attached to this Decree, has expired;
2° the date on which the remaining minimum lifetime of the container determined by the control method referred to in section 2(3)(6°), has expired.

Notwithstanding paragraph 2, the service life may be extended after the calculated or expected service life or the minimum remaining service life has been reached, provided that a monitoring method is used that allows the quality condition and the minimum remaining service life to be estimated and that is accepted by the Environment Department, competent for the environmental permit. The expert shall draw up a certificate of the container's life extension. On the date of expiry of the extended service life, the container shall be permanently removed from service in accordance with Article 5.17.4.2.13.'.

**Article 38.** The following amendments shall be made to Article 5.17.4.2.9(1) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014:

1° the phrase ‘, referred to in Article 5.17.4.2.7, at the time of placement’ shall be replaced by the phrase ‘at the time of the placement referred to in Article 5.17.4.2.7,’;

2° the words ‘certificate of conformity’ shall be replaced by the words ‘the attestation referred to above’;

3° the following sentence is added:

‘The expert or authorised technician shall sign the above certificate.’.

**Article 39.** The following amendments are made to Article 5.17.4.2.10(4) of the same Decree, inserted by the Flemish Government Decree of 16 May 2014 and amended by the Decree of the Flemish Government of 21 May 2021:

1° the words ‘the operator or at their request’ are deleted;

2° the words ‘the entity of the Flemish Environment Agency competent for groundwater consultancy’ are replaced by the phrase ‘the supervisor and, in the case of containers located in water extraction areas or a type I, II or III protection zone of groundwater extraction intended for the public water supply, including the drinking water company concerned’.

**Article 40.** The following amendments are applied to Article 5.17.4.2.11 of the same Decree, inserted in the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 27 November 2015 and 3 May 2019:

1° in section 5, 1°, the words ‘overfill warning or protection system’ are replaced by the words ‘overfill warning or overfill protection system’;

2° in section 5, 2°, the words ‘leak detection which’ are replaced by the words ‘leak detection system that’;

3° in section 6, paragraph 1, the word ‘leak detection’ is replaced by the word ‘leak detection system’;

4° in section 6, paragraph 2, the words ‘The leak detection’ are replaced by the words ‘The leak detection system’.

**Article 41.** In Article 5.17.4.2.12 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 27 November 2015, the following amendments are made:

1° In section 2, 1°, the words ‘the overfill warning or protection system’ are replaced by the words ‘an overfill warning or overfill protection system’;

2° In section 2, 2°, the words ‘the leak detection which’ are replaced by the words ‘a leak detection system that’;

3° in section 3(1), the word ‘leak detection’ is replaced by the word ‘leak detection system’;

4° in section 3, paragraph 2, the words ‘The leak detection’ are replaced by the words ‘The leak detection system’.

**Article 42.** In Article 5.17.4.2.13(3)(3), of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following sentence is added:

‘The Flemish Minister may determine the further minimum required content and the form of the certificate.’.

**Article 43.** To Article 5.17.4.3.1(1)(2), of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following sentence is added:

‘The leak detection system shall comply with the provisions set out in Annex 5.17.3, attached to this Decree.’.

**Article 44.** Article 5.17.4.3.3 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, is replaced by the following:

‘Article 5.17.4.3.3. The container shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.2, attached to this Decree.

Inspecting the construction of a separately constructed container shall be carried out in accordance with Annex 5.17.2, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.2 attached to this Decree.

Inspecting the construction of series-built containers may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.2, attached to this Decree. An operator shall have a declaration of conformity for each serial container, taking into account the provisions set out in Annex 5.17.2, attached to this Decree.

An identification plate shall be affixed to each container in accordance with Annex 5.17.2 to this Decree.’.

**Article 45.** In Article 5.17.4.3.4 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following amendments are made:

1° paragraph 2 shall be replaced with the following:

‘After the installation, but before the container is put into service, it shall be verified that the following items comply with the requirements set out in this Decree:
1° the container;
2° the pipes and accessories;
3° the overfill warning or overfill protection system;
4° fire-fighting equipment;
5° where appropriate, the leak detection system;
6° where appropriate, the containment;
7° where appropriate, the liquid-tight slope;
8° where appropriate, the KWS separator or collection system;

9° where appropriate, the vapour recovery devices present.';

2° between paragraph 2 and paragraph 3, a paragraph shall be inserted which reads as follows:

'The operator shall allow inspection of the applicable environmental permit for the operation of the classified establishment or activity or the deeds or application for the environmental permit or notification.'.

**Article 46.** In Article 5.17.4.3.5 of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, section 1 is replaced by the following:

'§ 1. The fixed container shall be fitted with a clearly visible identification plate in accordance with Annex 5.17.2 to this Decree in addition to the manhole or at the level of the filling line.'.

**Article 47.** The following amendments are applied to Article 5.17.4.3.16 of the same Decree, inserted in the Decree of the Flemish Government of 16 May 2014 and amended by the Decrees of the Flemish Government of 27 November 2015 and 3 May 2019:

1° in section 1(2), 1°, between the word 'conformity' and the phrase ', in the attestation', the words 'or the report of construction inspection' shall be inserted;

2° in section 1(2), point 2° is replaced with the following:

'2° monitoring the effectiveness and proper functioning of the overfill and leak detection system;';

3° in section 1(2), 4°(k), the words 'of good condition' are replaced by the words 'to their effectiveness and proper functioning';

4° to section 2, a paragraph shall be inserted between paragraphs 1 and 2, which reads as follows:

'By way of derogation from paragraph 1, for containers constructed from 1 January 2025, the installation shall be subject to a general survey at least every twenty years or at least every 20 years or at least every period covering 75 % of the calculated or expected lifetime of the container as set out in Annex 5.17.2 attached to this Decree, whichever is the shorter.';

5° in section 2(2), which becomes section 2, paragraph 3, the words 'This examination includes' shall be replaced by the words 'The general inquiry includes';

6° in section 4, the words 'quality and service life' are replaced by the words 'quality condition and residual minimum service life'.

**Article 48.** The following amendments are made to Article 5.17.4.3.17(1) of the same Decree, inserted by the Flemish Government Decree of 16 May 2014 and amended by the Decree of the Flemish Government of 18 March 2016:

1° the phrase ‘, referred to in Article 5.17.4.3.4, at the time of placement’ shall be replaced by the phrase ‘at the time of the placement referred to in Article 5.17.4.3.4,’;

2° the following sentence is added:

‘The expert or authorised technician shall sign the certificate.’.

**Article 49.** The following amendments are made to Article 5.17.4.3.18(4) of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 21 May 2021:

1° the words ‘the operator or at their request’ are deleted;

2° the words ‘the entity of the Flemish Environment Agency competent for groundwater consultancy’ are replaced by the phrase ‘the supervisor and, in the case of containers located in water extraction areas or a type I, II or III protection zone of groundwater extraction intended for the public water supply, including the drinking water company concerned’.

**Article 50.** In Article 5.17.4.3.21(3)(3), of the same Decree, inserted by the Decree of the Flemish Government of 16 May 2014, the following sentence is added:

‘The Flemish Minister may determine the further minimum required content and the form of the certificate.’.

**Article 51.** In Article 6.5.1.1 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decrees of the Flemish Government of 16 May 2014 and 18 March 2016, the following amendments are made:

1° in paragraph 1, the words ‘warning or security system’ are replaced by the words ‘the overfill system’;

2° in paragraph 2, the words ‘Annex 5.17.2 and’ shall be inserted between the word ‘according to’ and the words ‘the applicable codes’.

**Article 52.** Article 6.5.1.3(1), of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decree of the Flemish Government of 16 May 2014, is replaced by the following:

‘Article 6.5.1.3. The container shall be equipped with:

1° one of the following systems in accordance with Annex 5.17.7:

a) an overfill warning system with an acoustic signal gives a warning as soon as the container to be filled is 95 % filled, and which is audible to the supplier. The aforementioned system can be mechanical or electronic. A container placed before 1 January 2025, with only an alarm whistle as a warning system but sufficient until 31 December 2035;

b) a refill protection system where the liquid supply is automatically closed once the container to be filled is filled to a maximum of 98 %. The aforementioned system may be mechanical or electronic;

2° a venting system that flows into a place in which the possible nuisance to the neighbourhood is as limited as possible. All necessary measures are taken to prevent water infiltration through the venting system;
3° a possibility of level measurement.'.

**Article 53.** In Article 6.5.1.5 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008, the following amendments are made:

1° the following sentence is added:

'Every filling operation shall be carried out under the supervision of the person, legal person or their appointee responsible for the use or maintenance of the container.';

2° a second paragraph shall be added, with the following text:

'A container with a red nameplate or a container from which the nameplate is missing cannot be filled. Before delivery, at the request of the fuel supplier, the certificate of installation or the certificate of last periodic inspection shall be presented.'.

**Article 54.** In Article 6.5.2.2(2) of the same Decree, the following sentence is added to the Decree of the Flemish Government of 19 September 2008:

'The leak detection system shall comply with the provisions set out in Annex 5.17.3, attached to this Decree.'.

**Article 55.** In Article 6.5.3.1 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decree of the Flemish Government of 7 June 2013, the words 'Without prejudice' shall be replaced by the words 'While preserving application of'.

**Article 56.** In Article 6.5.4.1 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decrees of the Flemish Government of 01 March 2013 and 18 March 2016, the following amendments are made:

1° the words 'should be placed' are replaced by the words 'to be placed';

2° the word 'certificate' shall be replaced by the word 'attestation';

3° the word 'moreover' is removed;

4° the following sentence is added:

'The Flemish Minister may determine the further minimum required content and the form of the certificate.'.

**Article 57.** In the same Decree, last amended by the Decree of the Flemish Government of 7 June 2013, an Article 6.5.4.1/1 is inserted, reading as follows:

‘Article 6.5.4.1/1 The container shall be manufactured in accordance with a code of good practice as set out in Annex 5.17.2 attached to this Decree.

Inspecting the construction of a separately constructed container shall be carried out in accordance with Annex 5.17.2, attached to this Decree. The operator shall have at its disposal the construction inspection report set out in Annex 5.17.2 attached to this Decree.

Inspecting the construction of series-built containers may be limited to one prototype inspection per model and shall be carried out in accordance with Annex 5.17.2, attached to this Decree. An operator shall have a declaration of conformity for each serial container, taking into account the provisions set out in Annex 5.17.2, attached to this Decree.’.

**Article 58.** In Article 6.5.4.2 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008, the word ‘certificate’ is replaced by the word ‘attest’.

**Article 59.** In Article 6.5.4.4 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decrees of the Flemish Government of 1 March 2013 and 18 March 2016, the word ‘certificate’ shall be replaced by the word ‘attest’ and the word ‘certificates’ is replaced by the word ‘attests’.

**Article 60.** Article 6.5.5.1 of the same Decree, replaced by the Flemish Government Decree of 19 September 2008, shall be replaced by the following:

‘Article 6.5.5.1. § 1. Storage facilities with underground containers shall be subject to a periodic check every five years from the date of placement.

The periodic inspection referred to in paragraph 1 shall be carried out by an authorised technician or an environmental expert in the discipline containers for gases or hazardous substances.

§ 2. The periodic check referred to in section 1 shall include:

1° a check of the storage facility including a check of the walls of the container if this does not require the excavation of the container or the removal of the replenishment material;
2° a check of pollution in the immediate vicinity of the storage facility;
3° a check of the system against overfilling;
4° a check for the presence of water and sludge in the container;
5° a check of the effectiveness of any leak detection system;
6° a check of the certificate for the previous check;
7° where possible, a measurement of the potential difference between the metal container directly buried in the ground and the surrounding soil or replenishment;
8° carrying out a density test on containers directly buried in the ground that are not equipped with a permanent leak detection system and the inaccessible single-walled pipes, maximising the detection of non-tight containers or classifying containers according to the quality condition. The above-mentioned density test shall be carried out in accordance with a code of good practice accepted by the Environment Department responsible for the environmental permit.’.

**Article 61.** Article 6.5.5.2(1), of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decree of the Flemish Government of 27 November 2015, is replaced by the following:

'Article 6.5.5.2. § 1. After the inspection referred to in Article 6.5.5.1, the approved technician or environmental expert in the discipline of containers for gases or hazardous substances shall issue a certificate unambiguously demonstrating whether the storage facility complies with the provisions set out in this Chapter.

The certificate referred to in paragraph 1 shall contain all of the following information:

1° the name, approval number of the approved technician or environmental expert in the discipline of containers for gases or hazardous substances who carried out the inspection;

2° the date of the inspection and the final date of the next inspection.

The Flemish Minister can determine the further minimum required content and the form of the certificate.

Depending on the result of the inspection, the container shall be marked with a clearly legible and indelible green, orange or red mark plate. The above marking plate shall bear indelibly the approval number of the approved technician or environmental expert in the discipline containers for gases or dangerous substances, the date of the inspection and the final date of the next inspection.

§ 2. A green marking plate as referred to in section 1(4), means that the storage facility complies with the provisions set out in this Chapter and may be filled, refilled and further used.

§ 3. An orange marking plate as referred to in section 1(4) means that the storage facility does not comply with the provisions set out in this Chapter, but that the defects found cannot give rise to contamination outside the container.

An orange marking plate may be issued once for the identified defects. The aforementioned means that the orange marking plate, depending on whether or not the defects previously found comply with the provisions of this chapter, is followed by a green or red marking plate.

The storage facility may be filled or refilled during a transitional period of up to 6 months, starting on the first day of the month following the month indicated on the orange marking plate. The operator shall take all necessary measures, in accordance with the report of the approved technician or environmental expert in the discipline containers for gases or hazardous substances, to restore the storage facility to good condition. Before the expiry of the transitional period, the storage facility shall be subject to a new check.

By way of derogation from paragraph 3, the six-month transitional period may exceptionally be extended by the approved technician or environmental expert in the discipline containers for gases or hazardous substances for measures which cannot be carried out within those six months. In that case, the

measures and deadlines shall be laid down in writing. The approved technician or environmental expert in the discipline of containers for gases or hazardous substances shall further monitor the implementation of the measures and decide whether more frequent interim checks of the container concerned and the installation are necessary. If the transitional period has ended and the defects initially identified have not been remedied, the container and the installation will be given a red sticker or plate.

§ 4. A red mark plate as referred to in section 1(4), means that the storage facility does not comply with the provisions set out in this chapter, or that, following a period of up to six months with orange marking plate, the same defects in the container and the installation are still detected. The operator shall take all necessary measures, in accordance with the report of the approved technician or environmental expert in the discipline of containers for gases or hazardous substances, to restore the storage facility to good condition. After that, the storage facility is again subject to a check. Within 14 days of affixing a red mark plate, the approved technician or environmental expert in the discipline of containers for gases or hazardous substances shall inform the supervisor thereof and, in the case of containers located in water extraction areas or a type I, II or III protection zone of groundwater extraction intended for the public water supply, the drinking water company concerned shall also be informed.

§ 5. In the case of a red mark plate referred to in section 1(4), or if a mark plate is missing, the container cannot be filled or cannot be made to be filled.

§ 6. The periodic checks carried out before 1 March 2009 in accordance with the provisions referred to in this Chapter shall continue to be valid even if those checks do not include a density test as referred to in Article 6.5.5.1(2), 8°.'.

**Article 62.** Article 6.5.5.3 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and last amended by the Decree of the Flemish Government of 24 June 2022, is hereby repealed.

**Article 63.** In Article 6.5.5.4 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decree of the Flemish Government of 7 June 2013, the following amendments are made:

1° in paragraph 2, the words 'cleaned and' shall be inserted between the words 'the container' and the word 'emptied', and between the word 'supervisor' and the word 'immediately', the phrase 'and, in the case of containers located in water extraction areas or a type I, II or III protection zone of groundwater extraction intended for the public water supply, including the drinking water company concerned' is added;

2° paragraph 3 is removed;

3° in the existing fourth paragraph, which becomes paragraph 3, the phrase 'as referred to in Article 6.5.5.3' shall be replaced by the phrase 'as referred to in Article 6.5.5.1(2), 8°'.

**Article 64.** Article 6.5.5.5 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decrees of the

Flemish Government of 16 May 2014 and 3 May 2019, shall be replaced by the following:

‘Article 6.5.5.5. While maintaining the application of the Decree of 23 December 2011 on the sustainable management of material cycles and waste, the containers of a storage facility which the owner permanently decommissions shall be emptied and cleaned within 36 months of decommissioning.

If the above-ground container is also removed, the approved technician or environmental expert in the discipline of containers for gases or hazardous substances shall draw up a certificate from 1 October 2019 showing unambiguously that the decommissioning has been carried out in accordance with the rules of the box. That certificate shall also indicate the name and approval number of the approved technician or environmental expert in the discipline of containers for gases or hazardous substances. The Flemish Minister can determine the further minimum required content and the form of the certificate.

Containers buried directly into the ground are removed. If it is impossible to remove the container, the container shall be filled with sand, foam or other inert material in consultation with an authorised technician or environmental expert in the discipline of containers for gases or hazardous substances. All necessary measures shall be taken to prevent environmental pollution.

Following the decommissioning of the container directly buried in the ground, the approved technician or environmental expert in the discipline of containers for gases or hazardous substances shall draw up a certificate from 1 March 2009 showing unequivocally that the decommissioning was carried out in accordance with the rules of the box. If the container is filled, the approved technician or environmental expert in the discipline shall justify containers for gases or hazardous substances on the certificate as to why the container cannot be removed. The certificate shall also indicate the name and approval number of the approved technician. The Flemish Minister may determine the further minimum required content and the form of the certificate.’.

**Article 65.** In Article 6.5.6.1 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decree of the Flemish Government of 1 March 2013, the word ‘certificate’ is replaced by the word ‘attest’.

**Article 66.** In Article 6.5.7.1 of the same Decree, as amended by the Decree of the Flemish Government of 19 September 2008, paragraph 2 is repealed.

**Article 67.** Article 6.5.7.2 of the same Decree, replaced by the Decree of the Flemish Government of 19 September 2008 and amended by the Decrees of the Flemish Government of 24 April 2009 and 18 March 2016, shall be replaced by the following:

‘Article 6.5.7.2. Storage facilities with underground containers put into service before 1 January 2025 shall, by way of derogation from Article 6.5.5.1, retain the date of the next check.

After the check referred to in paragraph 1, the periodic checks shall be carried out in accordance with the periodicity referred to in Article 6.5.5.1.'.

**Article 68.** Annex 5.17.2 to the same Decree, inserted by the Decree of the Flemish Government of 26 June 1996, replaced by the Decree of the Flemish Government of 19 January 1999 and last amended by the Decree of the Flemish Government of 18 March 2016, is replaced by the Annex attached as Annex 1 to this Decree.

**Article 69.** Annex 5.17.3 to the same Decree, inserted by the Decree of the Flemish Government of 19 January 1999 and amended by the Decree of the Flemish Government of 18 March 2016, is replaced by the Annex attached to this Decree as Annex 2.

**Article 70.** Annex 5.17.7 to the same Decree, inserted by the Decree of the Flemish Government of 19 January 1999 and last amended by the Decree of the Flemish Government of 18 March 2016, is replaced by the Annex attached to this Decree as Annex 3.

Chapter 2. Amendment to the Decree of the Flemish Government of 24 June 2022 amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene, the Decree of the Flemish Government of 12 December 2008 implementing Title XVI of the Decree of 5 April 1995 laying down general provisions on environmental policy, the Decree of the Flemish Government of 19 November 2010 laying down the Flemish regulation on environmental recognition, the Decree of the Flemish Government of 19 July 2013 regulating the obligation to inform, prevent, contain and remedy environmental damage, the request for measures and the appeal procedure, the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit, the Decree of the Flemish Government of 3 May 2019 amending various decrees on the environment and agriculture

**Article 71.** In Article 90 of the Decree of the Flemish Government of 24 June 2022 amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene, the Decree of the Flemish Government of 12 December 2008 implementing Title XVI of the Decree of 5 April 1995 laying down general provisions on environmental policy, the Decree of the Flemish Government of 19 November 2010 laying down the Flemish regulation on environmental recognition, the Decree of the Flemish Government of 19 July 2013 regulating the obligation to inform, prevent, contain and remedy environmental damage, the request for measures and the appeal procedure, the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit, the Decree of the Flemish Government of 3 May 2019 amending various decrees on the environment and agriculture, the year '2025' is replaced by the year '2027'.

Chapter 3. Final Provision

**Article 72.** This Decree shall enter into force on 1 January 2025, with the exception of Article 71, which shall enter into force on 31 December 2024.

**Article 73.** The Flemish Minister responsible for the environment and nature is in charge of the implementation of this Decree.

Brussels, (date).

The Minister-President of the Flemish Government,

Jan JAMBON

The Flemish Minister of Justice and Enforcement, Environment, Energy and Tourism,

Zuhal DEMIR

Annex 1 to the Decree of the Flemish Government amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene regarding fuels and combustible liquids, the storage of dangerous products and private fuel oil tanks

Annex 5.17.2 of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene

Annex 5.17.2. Construction and checking of fixed containers

1. General

Where reference is made to an expert in this Annex, this specifically refers to a competent expert or an environmental expert in the discipline of containers for gases and hazardous substances recognised in the relevant domains/subdomains.

Inspecting the construction of series-built containers may be limited to one prototype per model.

Separately built containers are individually checked for construction. This is a 'piece inspection'.

The construction and construction or prototype inspection of all fixed containers for storage of flammable liquids and hazardous liquids must be carried out in accordance with the applicable Belgian or European standards or another code of good practice accepted by an expert.

In any event, the following provisions shall be considered as a code of good practice in this Annex:

1° the applicable provisions in Belgian laws, Decisions and Decrees;

2° the harmonised European standards, issued by CEN at the request of the European Commission, which have been transposed into NBN standards in Belgium;

3° the European standards issued by CEN, which have been transposed into NBN standards in Belgium;

4° the standards issued by ISO;

5° the Belgian standards, issued by the NBN;

6° the guidelines (technical or otherwise) issued by the Flemish Institute for Technological Research (VITO);

7° the international codes of good practice of European Member States (including DIN and NF);

8° the international codes of good practice of non-European Member States (API, ASME);

9° the technical regulations issued in the context of product certification (e.g. Benor, KIWA, DIBt);

10° the rules issued by the manufacturers, accepted by an expert;

11° the rules, issued by an expert.

In the event of inconsistencies, the order referred to above is decisive.

Derogations from the above order can only be made after a detailed written justification from the expert carrying out the construction or prototype inspection check. The derogation results in a system of protection equivalent to the application of the above order in terms of soil and groundwater contamination. The certificate of justification shall be submitted by the expert or the operator at the request of the supervisor. The certificate of justification shall be added to the construction check report or to the prototype inspection. A copy of the certificate is provided by the operator to the Environment Department, responsible for the environmental permit.

If a cross reference is made in a current construction code to standards that have been deleted or amended, the replacement standards or the latest standards shall be applied.

Additional requirements:

1° regardless of the requirements of the construction code, the container shall be equipped with at least one manhole per compartment and two manholes as soon as the sheath length of the compartment exceeds 10 metres;

2° for a horizontal container, no point is more than 5 metres away from a manhole;

3° vertical containers with a nominal height of over 10 metres shall be provided in a manhole at the bottom of the cylindrical wall (double-walled for double-walled containers);

4° manholes have a diameter of at least 600 millimetres, unless the construction does not allow this;

5° for containers with a capacity < 3.5 $m^3$, the manhole may be replaced by an inspection opening with a diameter between 120 and 300 millimetres;

6° the additional requirements apply to containers constructed from 1 January 2025.

Furthermore, a sufficient number of pipe pieces are provided with sufficient diameter for, among other things, the emptying, the filling, the venting, the levelling, the overfill protection, the suction and feed pipe.

A double-walled container is a container that complies with the applicable code of good practice for the construction of dual-wall containers and which has a permanent leak detection system in accordance with Annex 5.17.3.

In the case of double-walled containers, all connections are made via the roof or the upper descriptive of the container. After all, it makes little sense to double-wall a container if it is not monitored pierced below the liquid level. If this is not possible (including because the container is too high or the liquid is too heavy or due to a historical arrangement), a connection below the liquid level can be used. Those connections below the liquid level must be monitored penetrations. Monitored penetrations are double-walled where the gap is connected to a leak detection system of the container or a separate leak detection system. In both cases, an alarm signal is provided and the valve in the suction pipe is automatically closed if a leak is detected.

When connecting through the roof, siphon operation must be avoided.

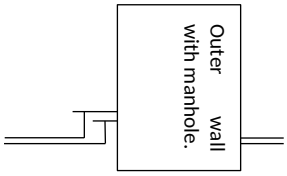
Suction pipes are preferably the only throughput below the liquid level. The number of supervised transits below the liquid level is limited.

In the case of private fuel oil tanks with a capacity of less than 5 000 kilograms, all openings and connect ainer shall be placed above the maximum level of the store above-ground containers serving for non-suction heating system

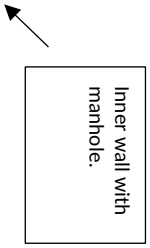
In this version, a part of the container remains single-walled (either manhole cover or manhole cover and shaft).

Some examples:

1° manhole in the side wall

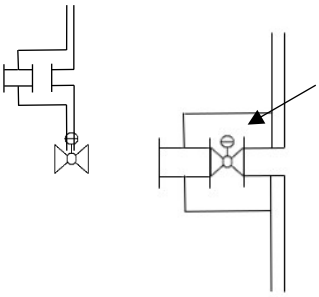



twice non-double-walled

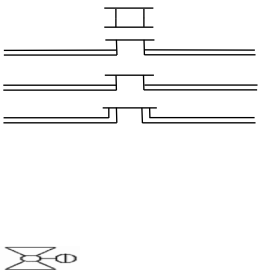



double-walled

2° throughput below liquid level



A lockable valve is placed in a closed housing on the through line. The housing is connected to the leak detection system of the container or the housing is a separate closed compartment equipped with its own leak detection system.



double-walled

three times non-double-walled

If movable containers are used as a fixed container (the container is refilled at the place of use and in a quantity exceeding daily they shall be considered as a fixed container and comply with the of this Annex.

In this version, a part of the container remains single-walled.

2. Checking a separately-built container

2.1. Preliminary examination of the implementation file of a separately-built container

The implementation file shall contain at least:

1° the name and address of the construction site;

2° the container’s particulars (total dimensions, all applicable loads);

3° the proposed construction code and the corresponding calculations;

4° the safety data sheets and technical sheets of the products to be stored, or their generic inherent chemical properties, for which the container is initially designed and calculated;

5° the calculated or expected economic lifespan;

6° the design techniques;

7° the detailed construction plan with all welding or laminate details;

8° the descriptive document indicating the welding methods, welder qualifications, welder operators and laminator certificates applicable;

9° the descriptive document containing all the materials used, including additives, seals and insulation (if applicable), to which the corresponding material certificates must be attached (standard, nuance and degree);

10° the resistance of the materials, additives, seals and insulation used in relation to the product to be stored;

11° the certificate of UV resistance (if applicable);

12° a descriptive list of at least the working pressures of the intended safety equipment, such as leak detection, overfill protection, scrubbers, relief valves, flame transfer, level measurement;

13° for containers with a covering (internal or external) the descriptive document stating:

a) the type of internal or external corrosion protection to be applied, together with the related technical guidelines;
b) the surface condition of the cover container is applied;
c) the compatibility of the external protection with the cathodic protection (if applicable);
d) the method by which the quality of adhesion and thickness of the coating is examined;

14° the possible means of anchoring the container above or below the ground (if applicable);

15° the name of the third parties carrying out certain production steps (including quality controls if applicable). A written instruction/procedure, drawn up by the third party, is attached;

16° an overview and description of all tests and the results of the inspections carried out in accordance with the standard requirements;

17° an example of the identification plate in accordance with point 4.3;

18° a copy of the model of the manual in Dutch, containing at least the following information:

a) the report of the expert’s inspection;

b) the transport, installation, assembly and maintenance instructions;
c) a level table;
d) the construction plan.

The implementation file shall be evaluated by the expert. This evaluation may include additional requirements.

2.2. Construction monitoring

After approval of the construction file, the expert at the construction site shall proceed to inspect the construction according to the submitted file.

The construction inspection shall include at least the following checks of the container:

1° the visual inspection;

2° the verification of the examinations and tests and the own measurements according to the construction code (if applicable);

3° the verification of the material certificates;

4° the inspection of the welding materials and welder qualifications;

5° thickness measurements;

6° the size control (including ovality, peaking, bending, connections);

7° the density control (or possibly resistance test);

8° for upholstery containers: the surface condition of the container is affixed before the covering;

9° for upholstery containers: the condition of the coating (attachment, smoothness, visual aspect, dielectric measurements, checking of the instruction for conformity with the manufacturer’s technical documentation);

10° the identification plate according to point 4.3.

The expert shall draw up a detailed report containing all the information on the checks, the results of the measurements and checks carried out by the expert, the location and date of the checks carried out, the manufacturer’s own checks and the area of validity of the container. These measurements and checks are traceable. The report shall be signed by the expert. The expert’s report shall be regarded as a declaration of conformity of the container.

2.3. Additional provisions

2.3.1. The construction control after change of destination of a built container

If a receptacle was not originally classified and did not undergo a construction inspection at the time of construction or construction inspection has not been requested for a classified receptacle and if the operator wants to deploy it as a classified receptacle or the necessary documents are missing, the expert may still proceed with a construction inspection in accordance with a code of good practice.

The construction inspection will be carried out as indicated in points 2.1 and 2.2. If the implementation file is incomplete, it is up to the expert to assess whether the information obtained is sufficient to assess the container.

If a container undergoes a construction check as a result of filling with a liquid other than that for which it is designed, that check shall be carried out as specified in points 2.1 and 2.2.

After such a construction inspection, a report shall be drawn up with the approval or disapproval of the container. The approved container shall be fitted with a new identification plate in accordance with the requirements of point 4.3 with a reference to the construction inspection. If the manufacturer is not known, the operator shall personally provide a distinguishing plate in accordance with the requirements of point 4.3, with the exception of a reference to the manufacturer's name and mark.

2.3.2. Inspecting the construction of a repair or modification to the construction of a container

Any repair or modification shall be submitted to the container to the expert who shall determine whether that repair or modification gives rise to a new inspection of the construction. The findings shall be communicated in writing to the manufacturer or the operator.

Important changes include replacing a part of a container due to corrosion, adding manhole(s), adding connections, adding gas washer, adjusting essential structural parts.

The construction inspection will be carried out as indicated in points 2.1 and 2.2.

The container shall be provided with an additional identification plate in accordance with the requirements of point 4.3 and reference to the inspection of the construction.

2.3.3. Inspecting the construction of the container built or assembled at the yard

The construction inspection involves complete construction supervision during construction according to the provisions of the construction code followed. In addition, the implementation file is compiled and the construction check is carried out as indicated in points 2.1 and 2.2. A final density test at the yard according to the construction code used, after completion of the construction, is part of the construction control. The approved container shall be fitted with a new identification plate in accordance with the requirements of point 4.3 with a reference to the construction inspection.

2.3.4. Containers imported into the Flemish Region

If the operator uses an imported container, it shall comply with the provisions of this Annex.

The implementation file shall be compiled and the inspection of the construction shall be carried out as indicated in points 2.1 and 2.2.

The approved container shall be fitted with a new identification plate in accordance with the requirements of point 4.3 with a reference to the construction inspection.

All documents intended for the operator (the manual and the identification plate according to point 4.3) are drawn up in Dutch. The other elements in the implementation file are provided in Dutch, French, English or German.

All inspection reports for separately built containers are drawn up in Dutch. Translations of these reports are permitted. Translations are always subordinate to the Dutch source text.

## 3. Checking of series-built containers

Checking series-built containers may be limited to one prototype per model.

Obtaining a prototype inspection does not exempt you from other legal obligations.

### 3.1. The initial inspection of a prototype container

#### 3.1.1. Preliminary examination of the prototype container's implementation file

For each model, the implementation file shall contain at least the following:

1° the name and address of the construction site;

2° the scope of validity of the container's model for which the application is submitted:

a) the construction code selected;
b) the type (horizontal or vertical, single or double walled, rectangular or cylindrical, soil and roof type, support type, upper or underground);
c) the authorised total dimensions;
d) the minimum/maximum rated water capacity;
e) the material;
f) the authorised products;
g) the layout (inside or outside);

3° the strength calculations of the model (if applicable);

4° the reports of the tests/examinations (if applicable) which are mandatory according to the construction code;

5° any approvals of containers imported into the Flemish Region;

6° the calculated or expected economic lifespan;

7° the design techniques;

8° the detailed construction plan with all welding or laminate details;

9° the descriptive document indicating the welding methods, welder qualifications, welder operators or laminator certificates applicable;

10° the descriptive document containing all the materials used, including additives, seals and insulation (if applicable), to which the corresponding material certificates must be attached (standard, nuance and degree);

11° the resistance of the materials, additives, seals and insulation used in relation to the products to be stored;

12° a certificate of UV resistance (if applicable);

13° a descriptive list of the intended safety equipment including leak detection, overfill protection, scrubber, relief valves, flame transshipment, level measurement (and the corresponding declarations of conformity if applicable);

14° for containers with a covering (internal or external) the descriptive document stating:

a) the type of internal or external corrosion protection to be applied, together with the related technical guidelines;
b) the surface condition of the cover container is applied;
c) the compatibility of the external protection with the cathodic protection (if applicable);
d) the method by which the quality of adhesion and thickness of the coating is examined;

15° the possible method of anchoring the container above or below the ground (if applicable);

16° the quality system with which the manufacturer works. This includes, inter alia, an overview and description of all tests and the results of the checks carried out by the manufacturer or third parties in accordance with the standard requirements;

17° the third parties carrying out certain production steps (including quality controls if applicable). A written instruction or procedure drawn up by that third party and approved by the manufacturer is attached;

18° an example of the identification plate in accordance with point 4.3;

19° a copy of the model of the manual in Dutch, containing at least the following information:

a) the blank model of the container’s declaration of conformity according to point 5;
b) the transport, installation, assembly and maintenance instructions;
c) a level table;
d) the construction plan.

The implementation file shall be evaluated by the expert. The evaluation may include additional requirements.

3.1.2. The prototype inspection

After approval of the implementation file, the expert at the construction site shall proceed to check the implementation of the model against the approved file. For the area of validity of the model, reference is made to the provisions in point 3.1.1. The prototype inspection on the production site shall include at least the following checks:

1° a check on the construction of the proposed model in relation to the approved implementation file with the following checks:

a) the visual inspection;
b) checking the examinations and tests and the expert’s own measurements according to the Construction Code (if applicable);
c) the verification of material certificates;
d) the verification of the welding materials and welder qualifications;
e) the thickness measurements;
f) the size checks (including ovality, peaking, bending, connections);
g) the density checks (and possibly resistance test);
h) for upholstery containers: the surface condition of the cover container is affixed;
i) for upholstery containers: the condition of the coating (attachment, smoothness, visual aspect, dielectric measurements, checking of the instruction for conformity with the manufacturer’s technical documentation);

j) the identification plate proposed by the manufacturer;
k) the declaration of conformity proposed by the manufacturer in accordance with point 5;

2° an examination of the effectiveness of the proposed quality system. The expert will carry out an evaluation of the quality system, verifying the elements relevant to the construction and checking of the containers:

a) checking of the complaints system;
b) monitoring of deviations;
c) calibration and maintenance of equipment;
d) checking of raw materials;
e) recording of the results of the checks carried out and the above checks;
f) process monitoring.

The expert shall draw up a detailed prototype inspection report containing all information on the checks, the results of the measurements and checks carried out by the expert, the location and date of the checks carried out and the area of validity of the containers. In that prototype inspection report, the expert declares that the model offered complies with all the provisions of the chosen construction code and of this annex.

A separate prototype inspection will be carried out per model and a separate prototype number will be assigned.

The expert signs the report and is then sent to the department responsible for accreditations. The period of validity of the prototype inspection report shall not exceed five years from the date of this report. This maximum period may only be maintained if an externally audited quality system is in place that remains operational throughout the prototype inspection period and covers all of the above points. Changes or discontinuation of the externally audited quality system shall be notified in advance to the expert. The expert shall determine (depending on the changes) whether interim checks must be carried out.

A declaration of conformity in accordance with the model set out in point 5 shall be drawn up. This shall ensure that the design of the container corresponds to that of the approved prototype.

3.2. Interim checks

If no external check of the quality system is carried out, the expert shall carry out an additional examination of the quality system after 1 year and after 3 years.

The expert shall draw up a detailed report containing all the information on the checks carried out, as specified in point 3.1.2.b.

If the check on the implementation of the quality system shows that it is not satisfactory or if it appears that the quality checks are not carried out, the manufacturer shall be informed in writing. If the shortcomings are not resolved within the agreed deadline, this shall lead to a temporary suspension or the cancellation of the prototype inspection by the expert. The suspension or cancellation shall be sent by the expert to the department responsible for approvals. Changes to the quality system shall be notified in advance to the expert. The expert determines (depending on the changes) whether an additional interim check is needed.

3.3. Containers imported into the Flemish Region

If the operator uses an imported container, it shall comply with the provisions of this Annex.

The implementation file shall be prepared and the conformity assessment on the construction shall be carried out as indicated in points 3.1 and 3.2 by the expert.

All documents intended for the operator (the declaration of conformity according to paragraph 5, the manual and the identification plate in accordance with point 4.3) shall be drawn up in Dutch. The other elements in the implementation file are provided in Dutch, French, English or German. All prototype inspections are drawn up in Dutch. Translations of these reports are permitted. Translations are always subordinate to the Dutch source text.

3.4. Modifications or extensions of an ongoing prototype inspection

If any changes or extensions in relation to the previously approved model are made during the period of the prototype inspection, the expert shall be informed in advance. The proposed amendment or extension shall be adequately documented. The expert shall determine whether the proposed changes or extensions give rise to an adaptation of the ongoing prototype inspection or the preparation of a new prototype inspection. If the proposed extension or amendment does not comply with the provisions of this Annex, the expert shall inform the manufacturer in writing and the modification or extension cannot be implemented. The implementation file shall be compiled and the inspection of the construction shall be carried out as indicated in points 3.1 and 3.2 by the expert.

3.5. Renewal of a prototype inspection by end date

Upon expiry of the end date of an ongoing prototype inspection, it expires automatically, including the changes and extensions.

If an extension is desired, the application for extension shall be submitted to the expert no later than 6 months before the end date.

The implementation file shall be compiled and the inspection of the construction shall be carried out as indicated in points 3.1. and 3.2 by the expert. This must show that the container has not undergone any changes.

3.6. Suspension or cancellation of a prototype inspection

If infringements are detected in relation to the use of the prototype inspection, the expert shall suspend or cancel the ongoing prototype inspection. The suspension or cancellation shall be sent by the expert to the department responsible for approvals.

In the event of rectification of the infringements identified, the expert may re-release the suspended prototype inspection.

4. Obligations for each built container

4.1. Technical file

The technical file of all containers shall contain at least the following elements:

1° the certificates of the materials used;

2° the certificates of the additives used;

3° the certificates of the welders (or laminators);

4° the strength calculations (if applicable);

5° the construction diagram;

6° the quality tests carried out.

The file and the inspection of the construction or prototype inspection for each container shall be kept in accordance with the legal provisions.

4.2. Declaration of conformity of the container with a prototype inspection

In the context of a prototype inspection, a declaration of conformity shall be drawn up in accordance with the model in point 5. A copy of the declaration of conformity shall be kept in accordance with the legal provisions.

4.3. Marking of the container (identification plate)

In a visible and easily accessible location, each container is permanently fitted with an identification plate (next to the manhole or at the level of the filling line, on the tank and not hidden under insulation) giving the following information:

1° the name and mark of the manufacturer;

2° the manufacturing number;

3° the year of construction;

4° the nominal water capacity in litres or cubic metres;

5° the total dimensions of the container (length and width and height, or diameter and length or height of the sheath body);

6° the construction code;

7° the design density in kilograms/litres;

8° the design overpressure and underpressure in mbar;

9° the design wall temperature in °C;

10° the report number of the construction or prototype inspection report.

The combination with other regulations is permitted (e.g. CE, KIWA). The identification plate is positioned in such a way that it remains present and legible throughout the life of the container.

5. Declaration of conformity

The following model of the declaration of conformity is mandatory for each container built under a prototype inspection.

Each declaration of conformity shall bear a signature and stamp of the expert who has drawn up the prototype inspection. The expert’s signature shall only be

used to confirm that the declaration of conformity submitted complies with the area of validity of the prototype verification number.

Declaration of conformity number:

Manufacturer logo Date of issue:

1. Manufacturer

address:

phone:

fax:

order number:

2. Client

order number:

construction code used:

container manufacture number:

date of manufacture of the container (month/year):

3. Data of the container

container manufacture number:

date of container manufacture:

construction standard used:

single-walled/double-walled:

nominal main container dimensions (internal):

diameter x length / height (millimetres):

length x width x height (millimetres):

nominal / useful water capacity holder: / litres

rated/useful water capacity per compartment

1: / litres;

2: / litres;

3: / litres;

4: / litres.

maximum filling rate:

number and dimensions of manholes/inspection openings:

choice of material(s) of the container:

interior wall:

outer wall:

wall thickness(s) of the container:

interior wall:

outer wall:

material and thickness (millimetres) of the internal coating against corrosion (if applicable):

dielectric test (if applicable) in volt:

material and thickness (millimetres) of the external coating against corrosion (if applicable):

dielectric test (if applicable) in volt:

list of authorised products:

type of density test or resistance test:

calculated or expected economic lifespan:

deadline for mandatory interim internal investigations (if applicable):

layout (inside or outside):

safety factor:

reduction factors:

design temperature:

design printing:

design density:

4. This container is built in accordance with the prototype inspection report No..., delivered by the competent expert or environmental expert in the discipline of containers for gases and hazardous substances (name and approval number and possibly name of control body):

original start date:

original end date:

The area of validity of the model of the container for which the prototype inspection has been granted:

construction code:

type (horizontal or vertical, single or double-walled, rectangular or cylindrical, soil and roof type, support type, upper or underground):

authorised total dimensions:

minimum/maximum nominal capacity allowed:

maximum design density:

maximum design pressure:

material:

authorised products:

layout (inside or outside):

5. Changes/renewals/extensions of the area of validity:

date of renewal from ... to

scope of validity of the extension:

date of extension from ... to

scope of validity of the extension:

date of change from ... to

scope of validity of the amendment:

6. This declaration of conformity certifies that the container, constructed and examined at the workshop in..., conforms to the following provisions of Title II of the VLAREM*:

chapter 5.6;
section 5.17.4;
chapter 6.5;
Annex 5.17.2.
*( *Delete anything that does not apply.)*

The manufacturer,
(signature)

The expert shall,
(signature)

Annexes:

- an overview list of the equipment and protective devices (leak detection ...) with their declarations of conformity (if applicable);
- an instruction manual for transport, installation, maintenance and assembly.

6. Transitional provisions and exceptions

This Annex shall apply to containers constructed from 1 January 2025.

Unless otherwise provided, containers built before 1 January 2025 shall comply with the provisions of Annex 5.17.2, as applicable before 1 January 2025.

Notwithstanding the previous paragraph, double-walled containers built before 1 January 2025 shall comply with the provisions on monitored penetrations below the liquid level from the next general survey after 1 January 2026. As an alternative to monitored drilling below the liquid level, a cockpit can be provided.

Private fuel oil tanks with a capacity of less than 5 000 kilograms do not need to comply with the provisions around monitored drilling below the liquid level.

This Annex shall apply to new prototype inspections carried out from 1 January 2025. Ongoing prototype inspections shall be adapted in accordance with the requirements of this Annex by 1 January 2026.

Seen to be annexed to the Decree of the Flemish Government of (date) amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene as regards fuels and flammable liquids, the storage of dangerous products and private fuel oil tanks.

Brussels, (date).

The Minister-President of the Flemish Government,

Jan JAMBON

The Flemish Minister of Justice and Enforcement, Environment, Energy and Tourism,

Zuhal DEMIR

Annex 2 to the Decree of the Flemish Government of (date) amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene as regards fuels and flammable liquids, the storage of dangerous products and private fuel oil tanks

Annex 5.17.3 of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene

Annex 5.17.3. Construction and control of a permanent leak detection system

## 1. General

In order to limit the damage caused by and loss of stored product, a leak must be detected as soon as possible and a permanent leak check is necessary.

A permanent leak detection system is a system that monitors the container on a continuous basis and gives a signal as soon as a leak occurs in the container. The leak signal from leak detection systems shall be acoustic and visual and can be detected in a place where persons are present or supervised.

A viewing glass and similar systems (such as floats and expansion vessels) are by definition not considered a permanent leak detection system.

Where reference is made to an expert in this Annex, this specifically refers to a competent expert or an environmental expert in the discipline of containers for gases and hazardous substances, recognised in the relevant domains or sub-domains.

The construction and inspection or prototype inspection of all leak detection systems for storage of flammable liquids and hazardous liquids must be carried out in accordance with the applicable Belgian or European standards or another code of good practice accepted by an expert.

For the codes of good practice applicable, reference is made to point 1 of Annex 5.17.2 and the order to be used there.

Obtaining a prototype inspection does not exempt the manufacturer from other legal obligations.

Given the risk of fire and explosion, the leak detection system must comply with the provisions of the General Regulation on Electrical Installations (AREI).

In addition to the ongoing supervision by the operators or their appointees, the examination of the proper functioning of the leak detection system is part of the mandatory periodic examination by the controlling experts. In the examination, they can rely on the detailed guidelines for the different systems.

It is the responsibility of the manufacturer and the installer to design and build the often hard-to-reach systems in such a way that initial and periodic examinations can be carried out in a fast, reliable and safe manner without impairing their functionality.

Leak detection systems shall not provide information on the condition of maintenance of the container or of the pipes and shall not exclude the required presence of other protective devices such as overfill protection, cathodic protection, level measurements as well as proper maintenance.

A leak detection system based on a liquid, a fluid, in the double wall of the container is only allowed under the following conditions:

1° the fluid, the type of which depends on the leak detection system, shall not affect the steel and shall not solidify, even at the lowest possible winter temperature, taking into account the depth of digging if any and the location of the reservoir and the detection system;

2° the fluid is a liquid which is considered non-hazardous by Title II of the VLAREM and does not pollute soil and groundwater;

3° the fluid must not react with the stored liquid.

When setting up a container in an area in which there is no electricity supply, a leak detection system with batteries can be used. In such a case, the leak detection system will have to be equipped with an auditory alarm if the batteries no longer provide sufficient voltage (low battery).

2. Monitoring the construction of a permanent leak detection system

2.1. Monitoring the construction of a separately built leak detection system

2.1.1. Preliminary examination of the implementation file of a separately built leak detection system

The implementation file shall contain at least:

1° the name and address of the construction site;

2° the construction code used or the code of good practice;

3° the descriptive document of all parts;

4° the construction sketch of the system;

5° the information on the chemical resistance of the components, the temperatures at which the system is used, the pressures the system can withstand, the expected or calculated economic lifespan;

6° the deployability of the system;

7° the results of a risk analysis, which must also demonstrate safety and potential functional deviations beyond suitability;

8° a standard user manual, in which the installation, use and maintenance instructions are presented in a clear manner;

9° the description of the method (test procedure) by which the expert must be able to examine the proper functioning of the system initially and periodically, as required by this legislation;

10° any technical reports drawn up by existing European institutions can support the file submitted.

The implementation file shall be evaluated by the expert. The evaluation may include additional requirements.

2.1.2. Construction inspection

After approval of the construction file, the expert at the construction site shall proceed to inspect the construction according to the submitted file.

The construction inspection shall include at least the following checks:

1° on-site check of the conformity of the leak detection system with the submitted file;
2° check of the proper functioning of the leak detection system.

The expert shall draw up a detailed report containing sufficient information on the checks, the results of the checks, the location and date of the checks carried out and the usability of the leak detection system. The approval of a separately constructed leak detection system is limited for the application for which it was requested. The report shall be signed by the expert.

The leak detection system shall be fitted with an identification plate with a reference to the approval number of the inspection report on the construction of a separately constructed leak detection system.

2.2. Control of series-built leak detection systems

The control of series-built leak detection systems may be limited to one prototype per model.

Obtaining a prototype inspection does not exempt you from other legal obligations.

2.2.1. The initial control of a prototype

2.2.1.1. Preliminary examination of the implementation file of a leak detection system

For each model, the implementation file shall contain at least the following:

1° the name and address of the construction site;

2° the construction code used or the code of good practice;

3° the descriptive document of all parts;

4° the construction sketch of the system;

5° the area of validity including information on the chemical resistance of the components, the temperatures at which the system is deployed, the pressures the system can withstand, the expected or calculated economic lifespan;

6° the deployability of the system;

7° one or more samples of the system. They will be representative of a complete series, for which the application is submitted;

8° the results of a risk analysis, which must also demonstrate safety and potential functional deviations beyond suitability;

9° a standard user manual, in which the installation, use and maintenance instructions are presented in a clear manner;

10° the description of the method (test procedure) on which the expert, the proper functioning of the system can be examined initially and periodically, as required by the legislation;

11° the technical reports, if any, drawn up by existing European institutions can support the file submitted;

12° the reports of the tests/examinations required according to the construction code (if applicable).

If physical tests have not yet been carried out on the proposed leak detection system, the expert shall draw up a test programme.

The implementation file shall be evaluated by the expert. The evaluation may include additional requirements.

2.2.1.2. The prototype inspection

After approval of the implementation file, the expert at the construction site shall proceed to check the implementation of the model against the approved file.

A model is a fixed shape with certain similar characteristics, essentially the same measurement principle, the same type of stored product and the same type of container.

The expert shall carry out an evaluation of the risk analysis.

The expert shall evaluate the quality system at the production site, verifying the elements relevant to the construction and control of the leak detection system:

1° the monitoring of procedures and instructions and their application;
2° monitoring of the complaints system;
3° monitoring of deviations;
4° the calibration and maintenance of appliances;
5° the frequency of inspection of the incoming or own produced components;
6° the recording of the results of the checks carried out and the above checks;
7° process control.

The expert shall draw up a detailed report containing sufficient information on the checks, the results of the tests and checks carried out by the expert, the location and date of the checks carried out and the area of validity for the leak detection systems. In that prototype inspection report, the expert shall declare that the model offered complies with all the provisions of the chosen construction code and the construction and checks of the leak detection system, as described in this Annex.

A separate prototype inspection will be carried out per model and a separate prototype number will be assigned.

The expert signs the report and is then sent to the department responsible for accreditations. The period of validity of the prototype inspection report shall not exceed 5 years from the date of the report. This maximum period may only be maintained if an externally audited quality system is in place that remains operational throughout the prototype inspection period and covers all of the above points. Changes or discontinuation of the externally audited quality system shall be notified in advance to the expert. The expert determines (depending on the changes) whether to carry out interim checks.

A declaration of conformity in accordance with the model set out in point 4 shall be drawn up. This shall ensure that the design of the container corresponds to that of the approved prototype.

2.2.2. Interim checks

If no external control of the quality system is carried out, the expert shall carry out an additional examination of the internal quality system after one year and after three years.

The expert shall draw up a detailed report containing all the information on the checks carried out, as set out in point 2.2.1.2.

If checking the implementation of the quality system shows that the quality system is not satisfactory or if the quality checks are not carried out, the constructor shall be notified in writing. If the shortcomings are not resolved within the agreed deadline, this shall lead to a temporary suspension or cancellation of the prototype inspection by the expert. The suspension or cancellation shall be sent by the expert to the department responsible for approvals.

2.2.3. Modification or extension of an ongoing prototype inspection

If the manufacturer wishes to make changes or extensions in relation to the model initially approved during the period of the prototype inspection, the manufacturer shall inform the expert in advance.

If any changes or extensions in relation to the previously approved model are made during the period of the prototype inspection, the expert shall be informed in advance. The proposed amendment or extension shall be adequately documented. The expert shall determine whether the proposed changes or extensions give rise to an adaptation of the ongoing prototype inspection or the preparation of a new prototype inspection. If the proposed extension or amendment does not comply with the provisions of this Annex, the expert shall inform the manufacturer in writing and the modification or extension cannot be implemented. The implementation file shall be compiled and the construction inspection carried out, as indicated in point 2.2.1.1 of this Annex.

2.2.4. Renewal of a prototype inspection by end date

Upon expiry of the end date of an ongoing prototype inspection, it expires automatically, including the changes and extensions.

If an extension is desired, the application for extension shall be submitted to the expert no later than 6 months before the end date.

The implementation file shall be compiled and the inspection of the construction shall be carried out, as indicated in point 2.2.1.1, by the expert. This must show that the leak detection system has not undergone any changes.

2.2.5. Suspension or cancellation of a prototype inspection

If infringements are detected in relation to the use of the prototype inspection, the expert shall suspend or cancel the ongoing prototype inspection. The suspension or cancellation shall be sent by the expert to the department responsible for approvals.

In the event of rectification of the infringements identified, the expert may re-release the suspended prototype inspection.

2.2.6 Leak detection systems imported into the Flemish Region

If the operator uses an imported leak detection system, it shall comply with the provisions of this Annex.

The implementation file shall be compiled and the inspection of the construction shall be carried out, as indicated in point 2.2.1.1, by the expert.

All documents intended for the operator (the declaration of conformity in accordance with point 4, the manual and the identification plate according to point 3.3) shall be drawn up in Dutch. The other elements in the implementation file are provided in Dutch, French, English or German. All prototype inspections

must be prepared in Dutch. Translations of these reports are permitted. The translations are always subordinate to the Dutch-language source text.

## 3. Obligations for each leak detection system constructed

### 3.1. Technical file and prototype sample

A copy of the implementation file and the sample that served as a model for the prototype inspection delivered shall be retained for at least 10 years.

### 3.2. Declaration of conformity of the leak detection system with a prototype inspection

In the context of a prototype inspection, a declaration of conformity shall be drawn up in accordance with the model in point 4.

A copy of the declaration of conformity shall be kept in accordance with the legal provisions.

### 3.3. Marking the leak detection system

On each leak detection system, an identification plate is affixed in a visible location with at least a reference to the applicable prototype inspection and a manufacturing number. From that information provided, it shall be unequivocally inferred that the installed leak detection system is of the same type as specified in the declaration of conformity delivered. Where applicable, the leak detection system shall also bear the CE marking. If the leak detection system is replaced, a new periodic inspection must be carried out.

If the relevant information is missing, this shall be considered a breach and shall be verified or the leak detection system replaced by a system in accordance with this Annex.

If there is insufficient space to affix the relevant information to the device, that information may be placed in its immediate vicinity.

## 4. Declaration of conformity

The following model of the declaration of conformity is mandatory for each appliance built under a prototype inspection.

Each declaration of conformity shall bear a signature and a stamp of the expert who has drawn up the prototype inspection. The expert’s signature shall only be used to confirm that the declaration of conformity submitted complies with the area of validity of the prototype approval number.

Manufacturer logo Declaration of conformity number:

Date of issue:

1. Manufacturer

address:

phone:

email:

fax:

order number:

2. Client

order number:

Other information:

3. Leak detection system data

model / type:

appliance manufacturing number:

date of manufacture (month/year):

construction code used:

construction site:

area of validity:

- chemical resistance components:
- operating temperatures (min/max in °C):
- permitted pressures (in bar or kPa):
- expected lifespan (in years):

employability:

material execution:

declaration of performance (CE) present:

4. This leak detection system has been produced in accordance with the prototype inspection report with number: ....., delivered by the competent expert or environmental expert in the discipline of containers for gases and hazardous substances (name and approval number and possibly name of monitoring body)

original starting date prototype inspection:

original end date prototype inspection:

5. Changes/renewals/extensions of the area of validity:

date of renewal: from ... to...

scope of validity extension:

date of extension: from ... to...

scope of expansion:

date of change: from ... to...

scope of change of validity:

6. This declaration of conformity certifies that the leak detection system, constructed and examined at the workshop in... (address), conforms to the following provisions of Title II of the VLAREM*:

chapter 5.6;
chapter 5.17;
chapter 6.5;
annex 5.17.3.
*( *Delete anything that does not apply.)*

| | |
|---|---|
| The constructor | The expert shall: |
| (with title, the undersigned) | (signature) |

Annexes: user manual with installation, use and maintenance instructions

5. Detection of leaks under gas or liquid form outside the container

5.1. Gas detection

The detection of gaseous products can be achieved by means of a sensor that is either placed in a well in the filling material around the storage container or is applied directly between the filling material. It is necessary that leaks of the stored product can easily spread into the porous filling material and also have a sufficiently high vapour pressure at ambient temperature. On reaching a set concentration of the gas at the sensor, the connected monitor will sound an alarm.

The proper functioning of a gas leak detection system can be tested by placing the sensor in a known concentration of the stored product. For less volatile products, a more volatile tracer substance can be added to the stored product. The added tracer should be easily soluble in the stored product and sensitive to the sensor used. Some tracers would allow the detection of a leak of approximately 0.002 litres/hour (EPA).

The speed at which a leak spreads and can therefore be detected depends on the porosity of the filling material or the filling ground. The detection rate of a leak can be increased by increasing the diameter of the wells (up to about 150

millimetres) and by increasing the number of wells. A sensitive improvement in the probability of detection is achieved by installing a slight underpressure (induction of leaks) near the sensor.

In the event of an existing contamination, false alarms may arise. In this case, the maximum concentration of background contamination shall be less than the set alarm concentration.

The problem of an existing contamination can be solved by using tracers with specific sensors.

Gauge tubes for gas detection can be made from plastic or stainless steel. Depending on the application, they are provided from a certain depth with slots or holes to make the gas supply as easy as possible.

The sieve part of the tube should preferably be surrounded by a filter surrounded by porous metal to prevent the blinding of the openings. In order to prevent the penetration of unwanted contaminants, a closed screw cap must be provided at the top of the level. To prevent damage, the tube can be sealed with a concrete lid at the top.

The location of the wells and their characteristics (depth, nature of the soil, etc.) are indicated on a plan that remains available in the establishment. The leak detection device with quantitative recording should in principle be able to indicate the difference between accidental spillage of the stored product (decreasing concentration after a peak) and a leak in the container (increasing concentration). In order to be able to locate the source of a leak as effectively as possible, the wells must be placed judiciously around each container.

### 5.2. Leak detection in groundwater

If the groundwater level is approximately equal to or higher than the soil of the excavation, any leaks of the stored product can be detected at the surface of the groundwater table.

The groundwater leak detection system consists of a level tube and a leak detection system. The diameter of the measuring tube varies from 50 to 100 millimetres and the depth in the lowest groundwater table is several tens of centimetres. The sieve part of the measuring tube reaches from the bottom to a few tens of centimetres above the groundwater table.

Any leaks of the product present in the container will collect on the groundwater table and drift to the level tube. A leak that is present in the gauge tube can be detected automatically or manually. Automatic detection alone is sufficient.

The design, construction and installation of a groundwater leak detection system can be traced back to the following six steps:

1° the soil survey of the storage site;

2° the choice of the monitoring system;

3° the design of the monitor network;

4° the construction and installation of the gauge tube;

5° the operation and maintenance of the monitor system;

6° the interpretation of the monitor data.

The following comments should be taken into account during the course of those steps:

1° the groundwater leak detection system is designated if the groundwater table is equal to at least the excavation. The measuring tube is placed in the filling area of the excavation. The system is less suitable when the groundwater table is too deep because of the risk of excessive leak spread and too long detection time. On the other hand, too high a groundwater table can prevent penetration into the level tube. The penetration of contaminants into the level tube can be prevented by closing with a screw lid. The hydraulic conductivity of the filling material between the container and the level tube should be greater than 0.01 centimetres/second (EPA) so that any leak reaches the level tube as soon as possible. Capping pipes should ideally be installed in the direction of the groundwater flow. If the direction of flow is not known, measuring tubes shall be installed on the four sides of the storer;

2° choice of sensor: the sensor is adapted to the stored product. The following principles (EPA) can be applied in the measurement system:

a) measuring systems based on the difference in density between groundwater and leakage fluid;
b) measuring systems having an element whose properties (e.g. resistance) change due to the leak;
c) systems that measure the difference in thermal conductivity;

3° network size: the number of wells shall be determined on the basis of the hydrogeological data of the storage site and the number of containers. Foreign sources and existing buried pipes that can provide an easy path for leaks should be taken into account;

4° construction and placement: the most suitable materials for a gauge tube are stainless steel or PVC (EPA). The inner diameter varies between 50 and 100 millimetres. The dimensions of the filter openings should be chosen on the basis of the filling material (0.2-3.0 millimetres). The length of the filter is determined on the basis of the highest and lowest position of the groundwater table. The filter tube is surrounded by customised clean porous material;

5° above the filter, a dense ring-shaped stop should be placed between the wall of the bore cavity and the level tube. For this stop, bentonite or cement are eligible. The space above the ring-shaped stop is supplemented with bentonite up to the ground surface. At the top, a protected lid made of steel or PVC can be applied to prevent mechanical damage;

6° operation and maintenance: regular maintenance of the monitoring system is necessary to prevent false alarm or malfunction. Calibration must be carried out by the manufacturer in the presence of the approved environmental expert;

7° interpretation of measurement results: false alarms can be caused by defects in the network, by contamination originating from spills during transhipment, by previous leaks or by leaks originating from other storage sites.

6. Transitional provisions and exceptions

This Annex shall apply to leak detection systems constructed from 1 January 2025.

Unless otherwise stipulated, leak detection systems built before 1 January 2025, with the exception of the provisions concerning the acoustic or visual signal, shall comply with the provisions of Annex 5.17.3, as applicable before 1 January 2025.

Leak detection systems built before 1 January 2025, which only provide an acoustic or visual signal, may continue to be deployed until 31 December 2027. By 1 January 2028, those leak detection systems were replaced by a permanent leak detection system with an acoustic and visual signal, in accordance with this Annex.

By way of derogation from the previous paragraph, leak detection systems in private fuel oil tanks with a capacity of less than 5 000 kilograms which provide only an acoustic or only a visual signal may continue to be deployed until 31 December 2035. By 1 January 2036, those leak detection systems shall have been replaced by a permanent leak detection system with an acoustic and a visual signal, in accordance with this Annex.

This Annex shall apply to new prototype inspections carried out from 1 January 2025. Ongoing prototype inspections shall be adapted in accordance with the requirements of this Annex by 1 January 2026.

Seen to be annexed to the Decree of the Flemish Government of (date) amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene as regards fuels and flammable liquids, the storage of dangerous products and private fuel oil tanks.

Brussels, (date).

The Minister-President of the Flemish Government,

Jan JAMBON

The Flemish Minister of Justice and Enforcement, Environment, Energy and Tourism,

Zuhal DEMIR

Annex 3 to the Decree of the Flemish Government of (date) amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene as regards fuels and flammable liquids, the storage of dangerous products and private fuel oil tanks

Annex 5.17.7 of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene

Annex 5.17.7. Construction and monitoring of a system to prevent overfilling; KWS separators and other collecting systems

1. General

Many contaminations from hazardous liquids or flammable liquids are caused by spills when filling containers. In order to prevent this, the regulation contains general precautions, such as the obligation to carry out the filling operation under the supervision of the operator or their appointed person.

When filling containers, contamination may occur as a result of, inter alia:

1° a faulty or careless connection of the supply line, resulting in spills of dangerous liquids or flammable liquids;

2° the refill of the container;

3° leakage of pumps or connections;

4° the failure of pumps or pipes.

By applying a suitable system against overfill to a container, the filling operation can be stopped in time, so that the overfill is excluded. It is emphasised that the system against overfilling is an emergency system that limits human error. The overfill system shall not be a system to obtain maximum filling of the container. Consequently, a correct filling operation will not activate the system against overfilling.

Where reference is made to an expert in this Annex, this specifically refers to a competent expert or an environmental expert in the discipline of containers for gases and hazardous substances, recognised in the relevant domains or sub-domains.

The construction and inspection of the construction of all systems against overfilling for the storage of flammable liquids and dangerous liquids must be carried out in accordance with applicable Belgian or European standards or other code of good practice, accepted by an expert.

For the codes of good practice applicable, for the purposes of this Annex, use Annex 5.17.2 and the order given therein.

Obtaining a prototype inspection does not exempt you from other legal obligations.

The above systems shall be designed and tuned in such a way that a check on the proper operation of the installation is possible before the start of the filling operation.

In view of the risk of fire and explosion, the overfill system must comply with the provisions of the General Regulation on Electrical Installations (AREI).

The maximum degree of filling (which is the useful content) of the container shall be determined by the construction code applicable or specified in the declaration of conformity of the container built in series or in the expert's report on the examination of the separately constructed container.

To prevent overfilling, the regulations provide for the installation of an anti-overfilling system that must be set at a maximum of 95 % of the nominal water capacity if it is a warning system that gives an audible signal, or at a maximum of 98 % of the nominal water capacity if it is a protection system that will automatically shut off the fluid supply, if the container has reached the maximum filling level.

The rated water capacity of a container is the calculated theoretical total content. In the case of a container with a conical or convex roof, the contents of the roof should not be taken into account in order to determine the rated water capacity in relation to which the useful content is to be calculated.

In addition, account should be taken of the fact that the useful content or rated water capacity may be limited for construction reasons or standard requirements, including for the following reasons:

1° the height of the leak detection space for double-walled containers: in some cases, the height of the outer wall is lower than the height of the inner wall and therefore the container is not fully double-walled;

2° the container is equipped with an overflow;

3° the standard allows only a maximum filling degree of 95 %;

4° the strength calculation only allows a lower filling.

Account should also be taken of the maximum authorised quantities and nominal water capacity, as included and allowed in the environmental permit.

Before filling can begin, the maximum amount of liquid to be added from a container must be determined in advance on the basis of an appropriate level measurement system and any corresponding level table. Consequently, the liquid level in the container should be available at the level of the Fill zone.

A system against overfill and a level measurement are two separate, independent systems.

The proper functioning of the overfill system shall be tested annually by the operator or their appointee.

The verification of the proper functioning of the overfill system shall form part of the periodic examination carried out by the approved environmental expert, the competent expert or the approved technician.

## 2. Overfill protection and overfill warning systems

### 2.1. The overfill warning system

The purpose of the overfill warning system is to inform the supervisor (operator or their appointed person) of the filling operation once the container to be filled is filled for a maximum of 95 % of the rated water capacity (as described in point 1).

In order to gain sufficient attention from the supervisor (operator or their appointee), an acoustic signal is chosen. Measuring the liquid's alarm level can be carried out in different ways, such as mechanical with float, hydrostatic, electric, acoustic, optical, electromagnetic, radiometric or with vibratory forks. This also applies to the transmission of the measurement signal to the acoustic signal. Adjusting the warning system to a filling rate of up to 95 % gives the supervisor (operator or their appointee) the necessary time to stop the filling operation before overfilling can occur.

The system shall be set so that a warning signal (≥ 70 dB) is audible at the filling site if the contents of the compartment or the container reach the alarm level.

The audio signal can be combined with a visual signal. The visual signal shall be extinguished only if the volume in the container falls below the filling rate of up to 95 % of the rated water capacity.

In the case of long-distance filling, it is necessary to take into account the contents of the container, the filling pipe and the filling hose of the truck. For this purpose, the level measurement system must be equipped with a system in order to be able to stop the filling operation in a timely manner.

The use of an alarm whistle, as a warning system is not sufficient. Additional devices to transmit the signal are therefore required in cases where the filling opening is relatively far away from the vent line.

When setting up a container in an area in which there is no electricity supply, systems with batteries can be used. In such a case, the overfill system will have to be equipped with an auditory alarm if the batteries no longer provide sufficient voltage (low battery).

## 2.2. The security system

The purpose of the security system is the automatic interruption of the filling operation without the intervention of the supervisor (operator or their appointee). The interruption of the filling operation will start when the container is filled for a maximum of 98 % of the rated water capacity (as described in point 1).

Measuring the liquid's alarm level can be as mentioned in paragraph 2.1. Transferring the alarm signal to a locking valve in the case of gravitational filling or to a filling pump can also be mechanical or electrical. Since the shut-off valve or filling pump as well as a signal amplifier are in practice installed on the supplying tanker, the measuring probe or limit value switch must be compatible with the installation on the supplying tanker.

Each container equipped with a limit value switch shall be capable of being connected separately to the signal amplifier.

In the case of devices that interrupt the supply directly in the filling pipe (mechanical valves) on the container, the necessary arrangements must be made

to prevent a dangerous overpressure caused by the filling pump in the filling hose.

The comments for long-distance filling, as referred to in point 2.1, on the lower setting of the alarm signal shall also apply to the automatic protection system.

2.3. Monitoring the construction of a system against overfilling

2.3.1. Monitoring the construction of a separate built system against overfilling

2.3.1.1. Preliminary examination of the implementation file of a separate built system against overfilling

The implementation file shall contain at least:

1° the name and address of the construction site;

2° the construction code used or the code of good practice;

3° the descriptive document of all parts;

4° the construction sketch of the system;

5° the information on the chemical resistance of the components, the temperatures at which the system is used, the pressures the system can withstand, the expected service life;

6° deployability of the system as a warning or protective system;

7° the safety data sheet for the supplier of the product to be stored;

8° the results of a risk analysis, which must also demonstrate safety and potential functional deviations beyond suitability;

9° a standard user manual, in which the installation, use and maintenance instructions are included in a clear manner;

10° the description of the method (test procedure) by which the expert must be able to examine the proper functioning of the system initially and periodically, as required by this legislation;

11° any technical reports drawn up by European institutions specialising in them can support the file submitted.

The implementation file shall be evaluated by the expert. This evaluation may include additional requirements.

2.3.1.2. Construction inspection

After approval of the construction file, the expert at the construction site shall proceed to inspect the construction according to the submitted file.

The construction inspection shall include at least the following checks:

1° on-site check of the conformity of the system against overfilling with the submitted file;

2° check of the proper functioning of the system against overfilling;

3° carry out the check on the height adjustment.

The expert shall draw up a detailed report containing sufficient information on the checks, the results of the checks, the location and date of the checks carried out and the suitability of the system against overfilling. The approval of a separately built overfill system is limited for the application for which it was requested.

The report shall be signed by the expert.

The system against overfilling shall be provided with an identification plate featuring a reference to the approval number of the construction inspection report of a separately built system against overfilling.

The filling point must also contain a minimum of information so that the supplier can use the system against overfill correctly, namely:

1° maximum working pressure during unloading in bar or kPa (e.g. only gravitational filling, maximum filling speed);

2° minimum and maximum flow rate in litres/minute (in case of alarm whistle and mechanical systems).

2.3.2. Monitoring series-built systems against overfilling

The control of series-built systems against overfilling may be limited to one prototype per model.

Obtaining a prototype inspection does not exempt you from other legal obligations.

2.3.2.1. The initial control of a prototype

2.3.2.1.1. Preliminary examination of the implementation file of a system against overfilling

For each model, the implementation file shall contain at least the following:

1° the name and address of the construction site;

2° the construction code used or the code of good practice;

3° the descriptive document of all parts;

4° the construction sketch of the system;

5° the area of validity including information on the chemical resistance of the components, the temperatures at which the system is deployed, the pressures the system can withstand, the expected service life;

6° the usability of the system as a warning or protective system;

7° one or more samples of the system. They will be representative of a complete series, for which the application is submitted;

8° the results of a risk analysis, which must also demonstrate safety and potential functional deviations beyond suitability;

9° a standard user manual, in which the installation, use and maintenance instructions are presented in a clear manner;

10° the description of the method (test procedure) by which the expert can examine the proper functioning of the system initially and periodically, as required by this legislation;

11° any technical reports drawn up by European institutions specialising in them may support the file submitted;

12° the reports of the tests/examinations required in the construction code (if applicable).

If no physical tests have yet been carried out on the proposed overfill system, the expert will draw up a test programme.

The implementation file shall be evaluated by the expert. The evaluation may include additional requirements.

2.3.2.1.2. The prototype inspection

After approval of the implementation file, the expert at the construction site shall proceed to check the implementation of the model against the approved file.

A model is a fixed shape with certain similar characteristics, essentially the same measurement principle, the same type of stored product and the same type of container.

The expert shall carry out an evaluation of the risk analysis.

The expert shall evaluate the quality system at the production site, verifying the elements relevant to the construction and control of the system against overfilling:

1° the control of procedures and their instructions and their application;

2° monitoring of the complaints system;

3° monitoring of deviations;

4° the calibration and maintenance of appliances;

5° the frequency of inspection of the incoming or own produced components;

6° the recording of the results of the checks carried out and the above checks;

7° process control.

The expert shall draw up a detailed report containing sufficient information on the checks, the results of the tests and checks carried out by the expert, the location and date of the checks carried out and the area of validity for the overfill systems. In that prototype inspection report, the expert shall certify that the offered model complies with all the provisions of the chosen construction code and of the construction and controls of the system against overfilling, as described in this Annex.

A separate prototype inspection will be carried out per model and a separate prototype number will be assigned.

The expert signs the report and is then sent to the department responsible for accreditations.

The period of validity of the prototype inspection report shall not exceed 5 years from the date of the report. This maximum period may only be maintained if an externally audited quality system is in place that remains operational throughout the prototype inspection period and covers all of the above points.

Changes or discontinuation of the externally audited quality system shall be notified in advance to the expert.

The expert shall determine (depending on the changes) whether interim checks must be carried out.

A declaration of conformity in accordance with the model set out in point 2.5. shall be drawn up. This shall ensure that the design of the container corresponds to that of the approved prototype.

2.3.2.2. Interim checks

If there is no external control of the quality system, the expert shall carry out an additional examination of the internal quality system after one year and after three years.

The expert shall draw up a detailed report containing all the information on the checks carried out, as specified in point 2.3.2.1.2.

If verifying the implementation of the quality system shows that it is not satisfactory or that the checks are not carried out, the manufacturer shall be informed in writing. If the shortcomings are not resolved within the agreed deadline, this shall lead to a temporary suspension or the cancellation of the prototype inspection by the expert. The suspension or cancellation shall be sent by the expert to the department responsible for approvals.

2.3.2.3. Modification or extension of an ongoing prototype inspection

If any changes or extensions in relation to the previously approved model are made during the period of the prototype inspection, the expert shall be informed in advance. The proposed amendment or extension shall be adequately documented. The expert shall determine whether the proposed changes or extensions give rise to an adaptation of the ongoing prototype inspection or the preparation of a new prototype inspection. If the proposed extension or amendment does not comply with the provisions of this Annex, the expert shall inform the manufacturer in writing and the modification or extension cannot be implemented.

The implementation file shall be compiled and the construction check shall be carried out as indicated in point 2.3.2.1. of this Annex.

2.3.2.4. Renewal of a prototype inspection by end date

Upon expiry of the end date of an ongoing prototype inspection, it expires automatically, including the changes and extensions.

If an extension is desired, the application for extension shall be submitted to the expert no later than 6 months before the end date.

The implementation file shall be compiled and the inspection of the construction shall be carried out, as indicated in point 2.3.2.1, by the expert. This should show that the system against overfilling has not undergone any changes.

2.3.2.5. Suspension or cancellation of a prototype inspection

If infringements are detected in relation to the use of the prototype inspection, the expert shall suspend the ongoing prototype inspection. In the event of rectification of the infringements identified, the expert may re-release the suspended prototype inspection. Such suspension or cancellation shall be sent by the expert to the department responsible for approvals.

2.3.2.6. Overfill systems imported into the Flemish Region

If the operator uses an overfill system imported into the Flemish Region, it shall comply with the provisions of this Annex.

The implementation file shall be compiled and the inspection of the construction shall be carried out, as indicated in point 2.3.2.1, by the expert.

All documents intended for the operator (the declaration of conformity in accordance with point 2.5, the manual and the identification plate in accordance with point 2.4.3) shall be drawn up in Dutch. The other elements in the implementation file must be provided in Dutch, French, English or German.

All prototype inspections are drawn up in Dutch. Translations of these reports are permitted. The translations are always subordinate to the Dutch-language source text.

2.4. Obligations for each built system to prevent overfilling

2.4.1. Technical file and prototype sample

A copy of the implementation file and the sample that served as a model for the prototype inspection delivered shall be retained for at least 10 years.

2.4.2. Declaration of conformity of the system against overfilling with a prototype inspection

In the context of a prototype inspection, a declaration of conformity shall be drawn up in accordance with the model in point 2.5.

A copy of the declaration of conformity shall be kept in accordance with the legal provisions.

2.4.3. Marking the system against overfilling

On each system against overfilling, an identification plate is affixed in a visible location with at least a reference to the applicable prototype inspection and a manufacturing number. From that affixed information, it must be possible to deduce unambiguously that the anti-overfilling system installed is of the same type as mentioned in the delivered declaration of conformity. Where applicable,

the overfill system shall also bear the CE marking. In case of replacement of the overfill system, a new periodic inspection must be carried out.

If the relevant information is missing, this shall be considered an infringement and shall be subject to a piece of clearance or the overfill system shall be replaced by a system in accordance with this Annex.

If there is insufficient space to affix the relevant information to the device, that information may be placed in its immediate vicinity.

2.5. Declaration of conformity

The following model of the declaration of conformity is mandatory for each appliance built under a prototype inspection.

Each declaration of conformity shall bear a signature and a stamp of the expert who has drawn up the prototype inspection. The expert’s signature shall only be used to confirm that the declaration of conformity submitted complies with the area of validity of the prototype approval number.

Manufacturer logo Declaration of conformity number:

Date of issue:

1. Manufacturer

address:

Phone:

fax:

Email:

order number:

2. Client

order number:

Other information:

3. Data from the system against overfilling

model / type:

appliance manufacturing number:

date of manufacture (month/year):

construction code used:

construction site:

area of validity:

chemical resistance components:

operating temperatures (min/max in °C):

permitted pressures (in bar or kPa):

expected lifespan (in years):

deployability (warning or safety system):

material version (parts in contact with liquid/vapours):

declaration of performance (CE) present:

4. This overfill system has been produced in accordance with the prototype inspection report numbered: ....., delivered by the competent expert or environmental expert in the discipline of containers for gases and hazardous substances (name and approval number and possibly name of control body)

original starting date prototype inspection:

original end date prototype inspection:

5. Changes/renewals/extensions of the area of validity:

date of renewal: from ... to...

scope of validity extension:

date of extension: from ... to...

scope of expansion:

date of change: from ... to...

scope of change of validity:

6. This declaration of conformity certifies that the overfill system, constructed and examined at the workshop in... (address), conforms to the following provisions of Title II of the VLAREM*:

chapter 5.6;
chapter 5.17;
chapter 6.5;
annex 5.17.7.
*( *Delete anything that does not apply.)*

The constructor The expert shall:

(with title, the undersigned) (signature)

Annexes: user manual with installation, use and maintenance instructions.

2.6. Transitional provisions and exceptions

This Annex shall apply to systems to prevent overfilling, which were built from 1 January 2025.

Unless otherwise provided, systems to prevent overfilling built before 1 January 2025 shall comply with the provisions of Annex 5.17.7, as applicable before 1 January 2025.

containers built before 1 January 2025, with only an alarm whistle as a refill system, may continue to be deployed until 31 December 2027. By 1 January 2028, the alarm whistle has been replaced by a refill system in accordance with this Annex.

By way of derogation from the previous paragraph, private fuel oil tanks with a capacity of under 5 000 kilograms built before 1 January 2025 may continue to use only an alarm whistle until 31 December 2035.

This Annex shall apply to new prototype inspections carried out from 1 January 2025. Ongoing prototype inspections shall be adapted in accordance with the requirements of this Annex by 1 January 2026.

3. KWS separators and other collecting systems

3.1. General

As leak incidents cannot be ruled out even with all these precautions, the regulation provides for specific measures to absorb and collect any leaks as effectively as possible. The most suitable means of doing so is to allow all loading operations (filling the containers, filling of the tankers and supplies at the distribution pumps) only to be carried out at a liquid-tight location. The liquid density can be obtained by applying a plastic film, a clay layer or an equivalent seal under the floor. An equivalent seal can also be achieved by making the joints between the floor tiles liquid-tight or by using liquid-tight concrete, liquid-tight asphalt or liquid-tight resistant coating. In both cases, the necessary slopes or ditches should be provided so that all spilled liquids flow to a collecting system.

The collected liquids are disposed of in accordance with the regulatory provisions, especially on waste disposal.

Rainwater that reaches the liquid-tight floors is routed and disposed of via a hydrocarbon separator or other suitable collecting system. During loading, direct connections to the public sewer system for storm water drainage or to surface water are closed. A hydrocarbon separator can also be regarded as a ‘collection system’, with generally sufficient capacity in restricted risk zones. In case of

greater risks (e.g. filling the tanker) a more extensive collection system is required, such as an emergency response. A hydrocarbon separator is also not suitable in combination with foam extinguishing. An emergency shelter is recommended for this.

An emergency shelter can (temporarily) accommodate the entire tank contents of the tank lorry or wagon, either in a remote shelter that is not in the filling and unloading zone or by setting up the filling and unloading zone itself as a sufficiently large liquid-tight shelter.

The remote reception facility is dimensioned in such a way that no overflow of liquid is possible upon any arrival in the facility. The construction and slope of the ground around the tanker or wagon is such that leaks of dangerous or flammable liquids are only directed towards the remote collection facility. The path of the accidental flow between the tanker or wagon and the remote shelter does not cross with an area of open fire or interrupt access routes to the tanks.

Another way to collect liquids in case of emergencies such as a fatal tank burst is to design the filling and unloading area itself as a sufficiently large liquid-tight containment facility. This can be done by providing the necessary ramps around the unloading or loading area or by installing a pit under the tanker loading area. This system saves space and can therefore be more appealing than the remote reception facility. However, particular attention should be paid to the risk of fire and the risk of unwanted chemical reactions.

In both instances of emergency shelter use, the space and cost must be weighed against the risk that the entire contents of the tanker will be released. The risk can be mitigated by, among other things, preventive measures. In certain instances in which large quantities are loaded very frequently (e.g. installations for filling tankers or tank wagons at storage and transhipment companies), and depending on the hazard characteristics of the product, it may be necessary to provide a calamity shelter for the entire contents of the tanker or wagon.

In covered filling and unloading areas, where rainwater cannot reach the liquid-tight slopes, the capacity of the collecting system can be reduced.

## 3.2. KWS separators

While maintaining the application of the provisions set out in Article 4.2.3.bis of this Decree on the operation and maintenance of a hydrocarbon separator, and the provisions contained in point 52 or point 53 of Annex 5.3.2 to this Decree, the following provisions shall apply to KWS separators.

A KWS separator is required to prevent the discharge of rainwater contaminated with hydrocarbons. In case of discharge to surface water, the hydrocarbon separator is also equipped with a coalescence filter or equivalent system.

The KWS separator complies with the applicable European standards, including in terms of nominal size and inspections. Only KWS separators bearing CE marking are permitted.

### 3.2.1 Nominal dimension of a KWS separator

In order to ensure the proper functioning of the KWS separator, it is adapted to the situation in which the KWS separator is used. If it is built too small, there will be a risk of contamination of surface waters or sewage. For this reason, a number of parameters are taken into account when calculating the necessary nominal dimension, such as the amount of rain, the flow rate of the effluent, the density of the hydrocarbons and the presence of substances that may delay separation (e.g. car wash detergent).

A correct calculation of the nominal dimension and class of the KWS separator is available prior to its installation.

3.2.2. Installation of a KWS separator

Besides correct nominal size, correct installation is also of utmost importance. The manufacturer’s installation instructions shall be respected.

The installation shall also take into account the following:

1° the underground pipework through which water is potentially contaminated with dangerous liquids meets the requirements of this Decree;

2° since KWS separators are often single-walled, they are examined internally for leak tightness and proper functioning of the components in accordance with the applicable standards within the time limits laid down therein. The installation is constructed in such a way that these tests can be carried out;
3° a take-off/control point is provided where a sample of the effluent can be taken at any time;
4° KWS separators are equipped with an alarm system.

3.2.3. Inspection of a KWS separator

The inspection of the KWS separator shall be carried out in accordance with Article 4.2.3.bis.4. and in accordance with the time limits for periodic checks of this Decree.

The single-walled KWS separators undergo an internal examination by an expert at least every 6 years during the limited examination to check their general condition and leak tightness in accordance with a code of good practice. Double-walled KWS separators equipped with a sonorous leak detection, an automatic valve and an alarm system are exempt from that internal examination.

The operator shall record all maintenance and interim checks for the proper functioning of the components (coalescence filter, valve and the like). A logbook shall be created in which the cleaning dates of the KWS separator are recorded, as well as the results of the effluent measurements at the point of take-off. The results of those checks shall be included in the periodic inspection reports.

The operator shall keep the calculation of the nominal dimension and the CE performance declaration at the disposal of the expert performing the commissioning inspection of the installation.

3.3. Other reception systems

KWS separators cannot be used for rainwater contaminated with substances other than hydrocarbons, or for hydrocarbons that are readily soluble in water or for hydrocarbons whose density is close to water. In such cases, alternatives to reception shall be provided.

During the loading operation, there is no direct connection to the public sewer system for the discharge of rainwater or to surface waters. The liquid-tight slope is equipped with ditches, ramps or raised edges for collecting or disposing of leak fluids. Alternatives to shelter on the slopes can be: a slope that is connected to an emergency shelter or the internal water purification. If the slope is directly connected to the public sewerage system for storm water drainage or to surface waters, that connection shall be closed before starting the filling operation, so that leakage fluids cannot enter the sewerage system. Through a closing valve, the drain to the sewer system is closed either automatically or manually with the necessary instructions to ensure that the leak fluids are collected.

After completion of the filling operation, the valve should not be reopened automatically, but only manually, after checking the presence of contamination.

3.4 Transitional provision

By 1 January 2028, KWS separators shall comply with the provisions of this Annex.

Seen to be annexed to the Decree of the Flemish Government of (date) amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene as regards fuels and flammable liquids, the storage of dangerous products and private fuel oil tanks.

Brussels, (date)

The Minister-President of the Flemish Government,

Jan JAMBON

The Flemish Minister of Justice and Enforcement, Environment, Energy and Tourism,

Zuhal DEMIR