

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, the VLAREL of 19 November 2010 and the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit, as regards water regulations

Legal bases

This Decree is based on:

- Article 20 of the Special Institutional Reform Act of 8 August 1980;
- the Decree of 24 January 1984 laying down measures relating to groundwater management Article 9, as amended by the Decrees of 20 December 1996, 1 March 2013 and 25 April 2014;
- the Decree of 5 April 1995 containing general provisions on environmental policy, Article 3.5.1, inserted by the Decree of 19 April 1995 and amended by the Decrees of 23 December 2011 and 25 April 2014, Article 5.2.1, 5.4.1, 5.4.3, 5.4.6, 5.6.2, inserted by the Decree of 25 April 2014, and Article 5.6.5, inserted by the Decree of 25 April 2014 and amended by the Decree of 8 December 2017;
- the Decree of 18 July 2003 on integrated water policy, coordinated 15 June 2018, articles 1.2.1, 1.2.2 and 2.2.1, amended by the decrees of 26 April 2019 and 24 June 2022;
- the Decree of 25 April 2014 on the single permit, Article 18, amended by the Decrees of 15 July 2016, 8 December 2017 and 26 April 2019, Article 24 and Article 68, amended by the Decrees of 18 December 2015, 15 July 2016 and 8 December 2017.

Procedural requirements

The following procedural requirements have been met:

- The Inspectorate of Finance issued a favourable opinion on 27 June 2022.
- The preliminary draft of this Flemish Government decision was published on the website of the Department of the Environment from 30 January 2023 to 1 March 2023 and was also made available for public inspection during that period. During that period, anyone could communicate comments.
- The Minaraad, the SALV and the SERV gave a joint opinion on 20 March 2023.
- The Council of State gave an opinion 74.986/16 on 4 January 2024, pursuant to Article 84(1)(1), 2° of the laws on the Council of State, coordinated on 12 January 1973.
- The draft was notified to the European Commission on 16 February 2024, applying 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 rules on information society services.

- Having regard to the recommendation of the Council of State, consultations were held with the other regional governments pursuant to Article 6(2)(3°) of the Special Act of 8 August 1980 on institutional reform.
- Following the additional opinion of the Inspection of Finance on 3 May 2024, the Flemish Minister in charge of fiscal policy gave his agreement on 27 May 2024.
- The Environmental Impacts team made a decision on the preparation of a plan EIA on 27 May 2024.

Statement of grounds

This Decree is based on the following grounds:

- This initiative implements the objectives set out in the Policy Paper of the Policy Domain Environment 2019-2024. Under the theme of water is Strategic Objective (SD) 3: 'Make and implement plans with commitments for healthy and sustainable water system'. It sets out the operational objectives (OD) 1 and 3.
- It also implements the Action Plan on Drought and Flooding.
- This Decree will also give effect to the Flemish climate adaptation plan.

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 containing general and sectoral provisions on environmental hygiene, last amended by the Decree of the Flemish Government of 23 February 2024, in DEFINITIONS SURFACE WATER AND GROUNDWATER PROTECTION (INTEGRAL WATER POLICY) (chapter 2.3, 4.2, 5.3 and 6.2 (surface water) and 2.4, 4.3, 5.52, 5.53, 5.54, 5.55 and 6.9 (groundwater)), the following amendments are made:

1 ° under 'GENERAL' the following changes shall be made:

- a) the words 'in the case of drainage' are added to the definition 'water':
inflated ground and soil water';
- b) to the definition 'waste water' means polluted water which is disposed of, required to be disposed of or intended to be disposed of, excluding rainwater that has not been in contact with pollutants', the phrase ', and water from a drainage system' is added;
- c) between the definition 'waste water' and the definition 'operational waste water', the following definition is inserted:
'rainwater which has not been in contact with pollutants' means: rainwater from:

- 1° roof surfaces and parking spaces, take-off, starting, runway or landing points and taxiways, roundabouts for motor vehicles, walking and cycling paths;
- 2° other paved surfaces, not belonging to a classified establishment or activity;
- 3° other paved surfaces belonging to a classified establishment or activity, if no pollutants are released on those surfaces as a result of the activities of that classified establishment or activity.';

- d) in the definition 'operational wastewater': all wastewater that does not comply with the provisions of domestic wastewater or cooling water', the words 'or cooling water' are replaced by the words ', cooling water or drainage water';
- e) the definition 'direct discharge into groundwater': the introduction into groundwater, without percolation through soil or subsoil, of substances listed in Annex 2B, which is annexed to this Decree' is replaced by the definition 'direct discharge into groundwater: the introduction into groundwater without percolation through soil or subsoil of substances listed in Annex 2B, annexed to this Decree, in such quantity and concentration that there is a potential risk of pollution of the receiving groundwater, by any means other than the artificial recharge of groundwater or the reintroduction of drainage water into the subsoil';
- f) the definition 'indirect discharge into groundwater': the introduction into groundwater after percolation through soil or subsoil of substances listed in Annex 2B, which is annexed to this Decree' is replaced by the definition 'indirect discharge into groundwater: the introduction into groundwater after percolation through soil or subsoil of substances listed in Annex 2B, attached to this Decree, in such quantity and concentration that there is a potential risk of pollution of the receiving groundwater, by means other than through irrigation, artificial groundwater recharge or reintroduction of drainage water into the subsoil';
- g) between the definition 'indirect discharge into groundwater' and the definition 'aquifer', the following definition is inserted:
'potentially contaminated groundwater: groundwater pumped up at a site where pollutants are potentially present in groundwater. This means: drainage water that originates from one or more filters or abstraction points located either wholly or partly on, or at a distance of less than twenty metres from, a plot that meets at least one of the following conditions:

- 1° the plot belongs to a risk soil as mentioned in the Soil Decree of 27 October 2006, unless a decree soil investigation in accordance with the VLAREBO decree of 14 December 2007 has been carried out for the risk activity in question;
- 2° a decree soil investigation in accordance with the VLAREBO decree of 14 December 2007 has been carried out for the plot;
- 3° the plot has been the site of a claim as mentioned in the Soil Decree of 27 October 2006;
- 4° conditions or restrictive measures for the use of groundwater have been promulgated by the authorities on at least part of the plot due to the suspected or proven presence of pollutants;';

2° under 'GROUND WATER', points 4° to 16° are added as follows:

4° net flow rate or net volume: the volume of inflated ground or drainage water (whether or not expressed per unit of time), minus the volume of ground or drainage water returned to the same aquifer as it was pumped up from;

5° draining: gravitational capturing and disposal of ground or soil water through an underground structure;

6° historic drainage: a drainage constructed before 1 May 1999. When the underground structure is completely renewed, it is no longer considered historical drainage;

7° existing drainage: a drainage that has been both constructed and recorded no later than 7 October 2022. When the underground structure is completely renewed, it is no longer considered as existing drainage;

8° new drainage: a drainage constructed after 7 October 2022;

9° infiltration facility: a facility for the collection of water that is emptied by the infiltration of the collected water into the soil and subsoil, where the water in the infiltration facility is not in permanent connection with surface water;

10° test drainage: pumping test specific to a pumping operation;

11° test pumping: well test or pump test;

12° pumping test: temporary abstraction from one or more wells, whether or not combined with return to the subsoil, where measurements of flow, level, quality or settlement are carried out to determine the geohydrological characteristics of the subsoil;

13° well test: temporary abstraction from an individual groundwater extraction to determine the maximum capacity of a extraction well and the specific flow rate;

14° household purposes: uses such as those encountered in normal household activities in private housing units;

15° artificially replenishing groundwater: increasing the amount of groundwater, whether or not with the intention of recovering that groundwater later, as a result of human activities which have the purpose or effect of increasing natural replenishment and infiltration. Artificially replenishing groundwater is an active replenishment through a pump, installation or other material;

16° drainage project through adjustable construction: interventions on or the use of underground or above-ground adjustable structures to achieve a seasonal or permanent level reduction. Adjustable structures include movable installations with which the level of a watercourse is controlled, such as a pumping station or a thruster;’.

Article 2. The same Decree, last amended by the Decree of the Flemish Government of 23 February 2024, repeals Section 2.4.3, which consists of Articles 2.4.3.1 to 2.4.3.5.

Article 3. In Article 4.2.1.1, first paragraph, of the same Decree, amended by the Decrees of the Flemish Government of 23 December 2011 and 3 May 2019, the phrase ‘industrial wastewater and cooling water as mentioned in headings 3.4, 3.5 and 3.7;’ shall be replaced by the phrase ‘industrial wastewater, drainage water and cooling water as mentioned in headings 3.4, 3.5, 3.7 and 3.8;’.

Article 4. In Article 4.2.1.2, of the same Decree, amended by the decrees of the Flemish Government of 23 December 2011 and 27 November 2015, the following amendments are made:

1° the words ‘unpolluted rainwater’ are replaced by the words ‘rainwater that has not been in contact with pollutants’;

2° the words 'types of wastewater' are replaced by the word 'partial flows';

3° a second paragraph is added as follows:

'The mixture of drainage water with rainwater that has not been in contact with pollutants, which is discharged together without being able to control the different sub-streams separately, is considered integrally as drainage water. In this case, the environmental permit for the operation of the classified establishment or activity may determine the emission limit values based on the ratio between the different partial flows. For a drainage operation listed in heading 53.5 of the classification list, which is necessary to enable or maintain the use or operation of structures or land that had already been built, the environmental permit or the deed of notification may establish a procedure for determining the proportion of both flows in the total daily and annual flow and emission limit values when discharging a mixed flow, of drainage water and of rainwater that has not been in contact with pollutants.'

Article 5. In Chapter 4.2 of the same Decree, last amended by the Decree of the Flemish Government of 3 May 2019, the second intertitle 'Intertitle: Measurements and monitoring when discharging industrial waste water, cooling water and influent/effluent from waste water treatment plants' replaced by intertitle: Measurements and monitoring at discharge of industrial wastewater, drainage water, cooling water and influent/effluent from wastewater treatment plants '.

Article 6. In Article 4.2.6.1, §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 23 December 2011 and 16 May 2014, a second paragraph shall be added as follows:

'When taking samples of the discharged drainage water within the framework of the technical monitoring of the discharge of wastewater, as referred to in Articles 37 to 56 of the Decree of the Flemish Government of 12 December 2008 implementing Title XVI of the Decree of 5 April 1995 containing general provisions on environmental policy, a sample shall be taken in a manner as referred to in the compendium for sampling, measurement and analysis of water, for sampling of drainage water.'

Article 7. In Chapter 4.2 of the same decree, last amended by the Decree of the Flemish Government of 3 May 2019, a Section 4.2.9 is added, which reads as follows:

'Section 4.2.9 Discharge of drainage water

Article 4.2.9.1. § 1. The provisions of this Article shall apply to the discharge of ground water which may be discharged in accordance with the steps of the drainage cascade referred to in Articles 5.53.6.1.3, 5.53.6.1/1.3 and 5.53.6.5.2.

The provisions of this Article shall apply to the discharge of drainage water as listed in heading 3.8 of the Classification List.

§ 2. The volume and quality of the discharged drainage water shall be monitored by a measurement method in accordance with Section 5.53.3 and Subsection 5.53.6.1 and 5.53.6.1/1.

§ 3. The following discharge conditions apply to the discharge of water:

- 1° without prejudice to the emission limit values laid down in this Decree, the discharge of the dangerous substances listed in Annex 2C, annexed to this Decree, shall be avoided as far as possible by applying the best available techniques;
- 2° for discharges other than discharges referred to in point 3°, the following conditions shall apply for the direct or indirect discharge of groundwater into ordinary surface waters, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity:
 - a) the pH of the discharged groundwater shall not exceed 9 or be less than 6.5. For the determination of pH limits, the natural pH of groundwater referred to in Article 2 of Annex 2.4.1, annexed to this Decree, may be adopted if that pH exceeds 9 or less than 6.5;
 - b) the biochemical oxygen demand in 5 days at 20 °C in the discharged water shall not exceed 25 milligrams of oxygen demand per litre;
 - c) the following levels shall not be exceeded in the discharged water:
 - 1) 0.5 millilitres per litre for the settling substances (during a static settling of 2 hours);
 - 2) 60 milligrams per litre for floating substances;
 - 3) 5 milligrams per litre for the perchloroethylene extractable apolar substances;
 - 4) 3 milligrams per litre for the sum of anionic, non-ionic and cationic surfactants;
- 3° in order to discharge groundwater into a public sewerage system connected to a sewage treatment plant, the following conditions apply, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity:
 - a) the pH of the discharged groundwater is between 6 and 9.5;
 - b) the following levels shall not be exceeded in the discharged water:
 - 1) 1 g/l floating substances;
 - 2) 0.5 g/l substances, extractable with petroleum ether;
 - c) the discharged water shall not contain substances meeting any of the following conditions without express authorisation:
 - 1) they pose a danger to the maintenance personnel of the sewerage and treatment plants;
 - 2) they can damage or clog the pipes;
 - 3) they prevent the proper functioning of pumping and purification plants;
 - 4) they may cause contamination of the receiving surface water, or pollute the receiving surface water into which the water is discharged from the public sewer;
 - d) in order to assess the discharge of groundwater to a sewage treatment plant, the criteria set out in Articles 2 and 3 of the Flemish Government Decree of 21 February 2014, laying down the rules on the discharge of industrial wastewater to a public sewerage treatment plant apply;

- e) volumes greater than 10 m³ per hour may only be discharged into a public sewage system connected to a sewage treatment plant after the express authorisation of the operator of that installation;
- 4° hazardous substances as listed in Annex 2C, which is attached to this Decree, shall be discharged only if the environmental permit for the operation of the classified establishment or activity lays down emission limit values in accordance with Article 2.3.6.1 of this Decree, or if the concentration is lower than the classification criterion listed in the column 'GS classification criterion (hazardous substances)' of Article 3 of Annex 2.3.1, which is attached to this Decree.

§ 4. For existing discharges of groundwater, new or updated test values as set out in section 3, 4° shall apply within an 18-month period. That period starts from the date of publication of the decision of the new or updated assessment values.

For the purposes of this paragraph, existing discharges of drainage water shall mean those discharges of drainage water which have been authorised, deeded, notified, or for which an application for an environmental permit for the operation of a classified establishment or activity has been submitted prior to the date of publication of the decision of the new or updated assessment values.

In the meantime, the test values mentioned in paragraph 3, 4° apply as guide values.

Article 8. Article 4.3.1.1 of the same decree, as amended by the Decrees of the Flemish Government of 15 July 2011 and 28 October 2016, is hereby repealed.

Article 9. The following amendments are made to Article 4.3.1.2 of the same Decree:

1° Paragraph 1 is replaced by the following:

'§ 1. The provisions of this Article shall apply to the activities listed under Heading 52 of the Classification List.';

2° a paragraph 1/1 is inserted as follows:

'§ 1/1. Discharges of substances listed in list I of Annex 2B

Any discharge into groundwater of substances listed in List I of Annex 2B shall be prohibited.

Article 10. To Section 4.3.1 of the same Decree, amended by the Decrees of the Flemish Government of 15 July 2011 and 28 October 2016, a section 4.3.1.3 is added, reading as follows:

'Article 4.3.1.3. §1. The mixture of drainage water with rainwater that has not been in contact with pollutants and that is pumped together without being able to control the different sub-streams separately is considered integrally as drainage water.

§2. If the environmental permit or deeds of notification for a drainage operation listed in heading 53.5 of the Classification List, which is necessary to enable or maintain the use or operation of structures or sites that have already been built, approves a method for determining, in the case of a mixed flow of drainage water and of stormwater that has not been in contact with pollutants, the share of both

flows in the total daily and annual flow, this may be charged to determine the daily and annual flow for the flow in question.”.

Article 11. In Article 4.3.2.1 of the same Decree, replaced by the Decree of the Flemish Government of 20 November 2009 and amended by the Decree of the Flemish Government of 27 November 2015, the following amendments are made:

1° in point 3°, introductory sentence, the phrase ‘the indirect discharge must be made through a floor drain’ is replaced by the phrase ‘unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, indirect discharge shall be carried out through an infiltration facility’;

2° in point 3°, point (b) is replaced by the following:

‘b) are located at a distance of at least 100 metres from groundwater extraction from an unsealed aquifer;’;

3° point 3°(c) shall be repealed;

4° in point 3°, point d) is replaced by the following:

‘d) the quality of the wastewater discharged is sampleable;’;

5° point 4° is replaced by the following:

‘4° a) unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the following values shall apply to the discharged wastewater for the respective parameters as emission limit values:

- 1) environmental quality standards for groundwater for undesirable substances and for toxic substances referred to in Article 2.4.1.1(2)(1) of this Decree;
- 2) the guide value for groundwater, as set out in Annex II to the VLAREBO Decree of 14 December 2007, if no environmental quality standard is defined for the substance in accordance with Article 2.4.1.1(2)(1) of this Decree;
- 3) for hazardous substances as a value for the substance is missing as specified in points (1) and (2): the reporting limit for groundwater according to the reference measurement method;
- 4) For existing classified establishments or activities, a new, more stringent value as mentioned in 4° a) 1) to 3) shall apply after 18 months. That period starts from the date of publication of those new or updated values. The aforementioned existing classified establishments or activities means those classified establishments or activities that have been authorised, deeded, notified, or for which an application for an environmental permit for the operation of a classified establishment or activity has been submitted before the date of publication of that new value;

b) unless otherwise specified in the environmental permit for the operation of the classified establishment or activity:

- 1) wastewater with conductivity at 20 °C exceeding 1 600 µS/cm shall be indirectly discharged only if the receiving groundwater has the same or higher conductivity;

- 2) wastewater with a chloride concentration exceeding 250 mg/l only indirectly discharged if the receiving groundwater has the same or a higher concentration of chloride;
- 3) wastewater with a temperature exceeding 25 °C can be indirectly discharged only if the receiving groundwater has the same or higher temperature;
- 4) only wastewater with a pH greater than or equal to 5 and less than or equal to 9.5 is discharged indirectly.

6° point 5 shall be replaced with the following:

5° if the public road is equipped with public sewage facilities, indirect discharge into groundwater of industrial wastewater shall be prohibited, unless otherwise provided for in the environmental permit for the operation of the classified establishments or activities.'

Article 12. In Article 4.3.2.2 of the same Decree, amended by the Decrees of the Flemish Government of 7 March 2008, 7 June 2013 and 27 November 2015, the following amendments are made:

1° in section 1, the introductory phrase is replaced by the following:

'Commercial wastewater must be discharged into groundwater:';

2° in section 3(1), the phrase 'In the case referred to in § 1, the operator shall, at its expense in the vicinity of the floor drain, construct at least three groundwater measuring wells in order to' is replaced by the phrase 'Unless otherwise specified in the environmental permit for operating the classified establishment or activity, with volumes directly discharged greater than 10 m³ per day of 2500 m³ per year in the case, stated in section 1, at least three groundwater measuring wells shall be constructed in the vicinity of the infiltration facility'.

Article 13. In Article 4.3.2.3, §1, of the same Decree, amended by the Decree of the Flemish Government of 27 November 2015, the following amendments are made:

1° in the introductory sentence, the phrase 'the bester pit referred to in Article 4.3.2.1 is drained, exceeds 10 m³ per day or 250 m³ per month or 2,500 m³ per year' is replaced by the phrase 'the infiltration facility referred to in Article 4.3.2.1 is drained, exceeds 10 m³ per day or 2,500 m³ per year';

2 ° in point 1°, the words 'wastewater discharged into the floor drain' are replaced by the words 'wastewater discharged into the infiltration facility'.

Article 14. In Article 4.3.3.1 of the same Decree, replaced by the Decree of the Flemish Government of 20 November 2009 and amended by the Decrees of the Flemish Government of 23 December 2011 and 27 November 2015, the following amendments are made:

1° in the introductory sentence the phrase ', and 52.2, 1°', shall be repealed;

2° in point 3°, the introductory phrase is replaced by the following:

'unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, indirect discharge shall be carried out through an infiltration facility meeting the following conditions:';

3° in point 3°, point (b) is replaced by the following:

'(b) are located at a distance of at least 100 metres from a groundwater extraction from an unconfined aquifer;';

4° point 3°(c) shall be repealed;

5° in point 3°, point (d) is replaced by the following:

'd) the quality of the wastewater discharged is sampleable;';

6° point 4° is replaced with the following:

'4° the discharge into groundwater of domestic wastewater is prohibited if the public road is provided with public sewers;';

7° in point 5°, the phrase 'is discharged into a well, is treated' is replaced by the phrase 'is discharged into groundwater, is minimally treated'.

Article 15. A Section 4.3.4, consisting of Article 4.3.4.1.1, shall be added to Chapter 4.3 of the same Decree, last amended by the Decree of the Flemish Government of 3 May 2019, as follows:

'Section 4.3.4 Measurements and control

Subsection 4.3.4.1 Assessment of measurement results in monitoring by the supervisory authority

Article 4.3.4.1.1 §1. The provisions of this subsection shall apply to the activities specified in headings 52, 53 and 54 of the Classification List.

§2. If the analysis of water shows that the value measured for the parameters, without accounting for precision and accuracy, exceeds twice the test value applicable to that parameter, the test value is deemed to have been violated. However, for the parameters acidity, temperature and for the substances of Annex 2B, the test value shall be considered to be violated if the measured value, after taking into account the measurement uncertainty requirements for those parameters listed in Article 4 of Annex 4.2.5.2, exceeds the test value applicable to that parameter. However, for the parameter flow rate, the test value is considered to be violated if the measured value, after taking into account a measurement uncertainty of 10 %, exceeds the test value applicable to that parameter.

§3. If the analysis of water shows that the measured value for a parameter other than flow, acidity, temperature and the substances in Annex 2B is less than or equal to twice the limit value applicable to that parameter, but after taking into account the measurement uncertainty requirements for that parameter, listed in Annex 4.2.5.2, is higher than the limit value applicable to that parameter, the evaluation of the value measured for that parameter in a second sample shall be carried out. If the value measured in that second sample, after taking into account the measurement uncertainty requirements for those parameters, listed

in Annex 4.2.5.2, is higher than the test value applicable to that parameter, the test value shall be considered to be violated.”.

Article 16. In Article 5.9.7.1(1)(3) of the same decree, as amended by the Decree of the Flemish Government of 23 December 2011, the words ‘the supervisory authority’ are replaced by the words ‘an EIA expert in the discipline of water, subdomain geohydrology referred to in Article 6, 1°(d)(4) of the VLAREL of 19 November 2010’.

Article 17. In Article 5.53.1.2. of the same Decree, as amended by the Decrees of the Flemish Government of 19 September 2008, 1 March 2013, 18 March 2016 and 3 May 2019, the phrase ‘The construction, alteration, conversion and decommissioning of groundwater extraction’ is replaced by the phrase ‘Carrying out drilling, laying down or modifying the well construction of a groundwater extraction and decommissioning of groundwater extraction’.

Article 18. Article 5.53.2.2 of the same decree, inserted by the Decree of the Flemish Government of 19 January 1999, replaced by the Decree of the Flemish Government of 16 May 2014 and amended by the Decree of the Flemish Government of 27 November 2015, is replaced by the following:

‘Article 5.53.2.2. The groundwater level in any groundwater extraction plant, with the exception of groundwater extractions by means of vacuum pumps, must always be measurable both with the extraction at rest and in operation. Therefore, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, at any groundwater extraction installation with a diameter of less than 600 mm, where the water is not pumped via an above-ground pump, a straight undistorted monitoring well with an internal diameter of at least 18 mm shall be installed in each borehole. The monitoring well shall be installed in accordance with the requirements in the Code of Good Practice for drilling, operating and plugging boreholes for groundwater extraction, established in Annex 5.53.1, which is attached to this Decree.’.

Article 19. In Article 5.53.3.2 of the same Decree, inserted by the Decree of the Flemish Government of 19 January 1999, the following amendments are made:

1 ° in section 1, the words ‘The measuring device is’ are replaced by the phrase ‘Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the measuring device shall be’;

2° section 2 is deleted.

Article 20. In Article 5.53.3.3 of 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 24 June 2022, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. The meters are placed, periodically checked and maintained according to the code of good practice for installation, maintenance and control of measuring devices for inflated groundwater. In accordance with that code of good practice, a technical file for inspection by the operator shall be established per metre, and

can be requested by the officials responsible for monitoring on a simple request. For flow meters that were mandatory before 1 July 2025, the technical file contains at least the data as of the date of 1 July 2025.';

2° section 4 shall be replaced by the following:

'§ 4. The indications necessary for the technical file mentioned in paragraph 1 are permanently legible on each meter.';

3 ° in section 5, the sentence 'The operator shall keep a certificate of any calibration submitted to the supervisory officials on simple request.'

4° in paragraph 6, between the phrase 'to the supervisors.' and the words 'The position of the meter' the sentence 'For drainage operations classified under heading 53.2 of the classification list, this may be communicated via a web application of the Subsoil Database Flanders.' inserted;

5° in section 7, the phrase 'the head of the department responsible for environmental enforcement' is replaced by the words 'the supervisor';

6° section 8 shall be replaced by the following:

'§ 8. The position of each flow meter shall be recorded in a register on the last day of each year in which groundwater is inflated and whenever, for whatever reason, the flow meter is removed or relocated.';

7° section 9 is deleted.

Article 21. In Article 5.53.4.1, §1, of the same Decree, inserted by the Flemish Government Decree of 19 January 1999 and replaced by the Flemish Government Decree of 18 March 2016, the words 'establishments classified in the first class' shall be replaced by the phrase 'activities classified in the first class of heading 53.5.2°, c), 53.6, 53.7, 53.8 and 53.12'.

Article 22. Article 5.53.4.7 of the same Decree, inserted by the Decree of the Flemish Government of 19 January 1999 and replaced by the Decree of the Flemish Government of 7 January 2005, is replaced by the following:

'Article 5.53.4.7. The operator of a groundwater extraction, the authorised volume of which exceeds 30 000 m³ per year, shall communicate each year electronically the results of the previous calendar year of the collected volumes of groundwater per aquifer, the analyses of groundwater and the level measurements. The operator shall make this notification in accordance with the provisions of the Flemish Government Decree of 2 April 2004 on the integral environmental annual report. For groundwater extractions for public water supply, the results may, notwithstanding the model forms mentioned in the aforementioned decree, be delivered electronically to the entity of the Flemish Environment Agency competent for groundwater consultancy in a manner to be determined by that entity.'.

Article 23. In Article 5.53.5.1 of 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 16 May 2014, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. The operator shall decommission groundwater extraction temporarily or permanently in accordance with the code of good practice for drilling, operating and shutting down wells for groundwater extraction set out in Annex 5.53.1, annexed to this Decree.’;

2° section 2 is deleted.

Article 24. In section 5.53.6 of 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 24 June 2022, subsection 5.53.6.1, which consists of sections 5.53.6.1.1 to 5.53.6.1.2, shall be replaced by the following:

‘Subsection 5.53.6.1. Pumping technically necessary for the realisation of works or the construction of utilities

Article 5.53.6.1.1. The provisions of this Subsection shall apply to the activities listed in sub-heading 53.2 of the classification list.

Article 5.53.6.1.2. § 1. Each drainage is dimensioned and operated according to a code of good practice.

§ 2. A drainage pump may only be installed by a drilling company approved in accordance with the VLAREL of 19 November 2010 for the discipline mentioned in Article 6(7°)(a)(1) of the aforementioned Decree. No later than the third working day after a drainage pump has been installed, the licensed drilling company shall provide the following information from each flow meter intended for recording the flow pumped and returned to the subsurface via a web application of the Databank Ondergrond Vlaanderen:

1° the brand and serial number;

2° the time of placement and the counter position at the time of placement.

When dismantling the drainage plant, the approved drilling company will deliver the time of dismantling and counter position at the time of dismantling using a web application of the Databank Ondergrond Vlaanderen at the latest on the third working day after dismantling.

If flow meters are moved or added, the provisions of Article 5.53.3.3(6) shall apply.

The first and second paragraphs of this section do not apply to activities licensed or deeded before 1 July 2025 and started no later than 31 December 2026.

§ 3. While maintaining the application of Article 5.53.3.3(8), the numerator reading of each flow meter shall be recorded on the first five working days after start-up and then weekly. That recording also checks the proper functioning of the flow meter.

By way of derogation from Article 5.53.3.3(8), no numerator stand needs to be recorded on the last day of the year if the drainage has already been

stopped and the numerator level has been transmitted with the application of section 2 via the web application of the Databank Ondergrond Vlaanderen.

The first paragraph of this section does not apply to activities licensed or deeded before 1 July 2025 and started no later than 31 December 2026.

§ 4. A minimum of one well is placed per drainage with a filter in the aqueous layer in which the reduction is intended. That well shall be placed in such a location that the well is representative for monitoring the desired groundwater level reduction and can be used for the control referred to in section 5. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, in the case of construction wells with a circumference of more than 150 metres, one additional well shall be installed for each additional bracket of 150 meter started. Unless otherwise stated in the environmental permit for the operation of the classified establishment or activity, in the case of line boring, at least one monitoring well shall be installed every 400 metres of route.

This section does not apply if the drainage water drains gravitationally to a collector and the drainage water is pumped from the collector.

For activities licensed or deeded before 1 July 2025, the provisions of the first paragraph shall apply from 1 July 2026.

§ 5. The pumps of a drainage facility shall be controlled automatically, in such a way that the groundwater level is not lowered beyond what is necessary to achieve the necessary reduction in the groundwater level.

It is controlled at the groundwater level in the pumping well or collecting well, or at the groundwater level in separate wells.

In case of return drainage, the technically minimal flow rate necessary for the operation of the return may be pumped up.

To avoid frost damage, the minimum flow rate technically required for this purpose may be pumped.

The necessary reduction is determined for each construction phase, and the regulation of the level control is adjusted according to the progress of the construction works.

For activities licensed or deeded before 1 July 2025, the provisions of this section apply from 1 July 2026.

Article 5.53.6.1.3. § 1. In order to minimise the impact of the drainage on the groundwater supply, a drainage cascade shall be applied in which the following steps are applied in order of prioritisation:

- 1° step 1: limiting the volume of drainage water abstracted as mentioned in section 2;
- 2° step 2: the useful use of drainage water as mentioned in section 3;
- 3° step 3: the discharge of drainage water into surface water, into an artificial drainage path for rainwater or into the part of the separate sewerage system intended for the drainage of rainwater, mentioned in section 4;

- 4° step 4: discharge of drainage water into the public sewerage system, mentioned in section 5.

§ 2. The net extracted volume of drainage water is maximally limited or maximally returned to the subsoil, in each case by using best available techniques. Returning drainage water to the subsurface is possible by returning it via return wells in the aquifer from which it was extracted, or by infiltrating the drainage water via an infiltration facility such as an infiltration well, infiltration basin or infiltration ditch. Putting it back into the subsoil does not cause any water nuisance for third parties.

Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the drainage water that is reintroduced into the subsurface shall comply with:

- 1° the environmental quality standards for groundwater for undesirable substances, for toxic substances and for pH referred to in Article 2.4.1.1(2) (1) of this Decree;
- 2° the guide value for groundwater, as set out in Annex II to the VLAREBO Decree of 14 December 2007, if no environmental quality standard is defined for the substance in accordance with Article 2.4.1.1(2)(1) of this Decree;
- 3° for hazardous substances, if a value for the substance is missing as specified in points 1° and 2°: the reporting limit for groundwater according to the reference measurement method.

Unless otherwise specified in the environmental permit for the operation of the classified installation or activity:

- 1° drainage water with a conductivity at 20 °C higher than 1600 µS/cm can only be returned to the subsurface if the receiving groundwater has the same or higher conductivity;
- 2° drainage water with a chloride concentration higher than 250 mg/l should be returned to the subsoil only if the receiving groundwater has the same or higher chloride concentration.

For existing classified establishments or activities, a new, more stringent value as set out in paragraph 2 shall apply after eighteen months. That period starts from the date of publication of the new values. Existing classified establishments or activities means those classified establishments or activities that are licensed, deeded, notified, or for which an application for an environmental permit for the operation of the classified establishment or activity has been submitted before the publication of the new value.

Unless otherwise stated in the environmental permit for the operation of the classified establishment or activity, if the drainage water meets the quality requirements stated in the second and third paragraphs, at least part of the drainage water, from drainage connected to a construction pit that has been active for more than 30 days returned to the subsoil if an infiltration facility can be installed, on public property or on site property, which can be reached via public property or via site property with a pipe not exceeding 200 metres from the location of the drainage pump.

Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the distance specified in the fifth

paragraph is increased to 500 metres for pumping stations linked to a construction pit classified in class 1 and active for more than six months.

Unless otherwise stipulated in the environmental permit for the operation of the classified establishment or activity, if the drainage water meets the quality requirements listed in paragraphs 2 and 3, for those parts of the drainage installation for a construction pit that is active for more than 30 days where the maximum lowering of the groundwater level is more than six metres below ground level, the drainage water shall be returned to the subsoil for at least 75 % of the flow rate extracted.

The fifth, sixth and seventh paragraphs do not apply to activities licensed or deeded before 1 July 2025 and started no later than 31 December 2026.

§ 3. Unless otherwise stated in the environmental permit for the operation of the classified establishment or activity, the portion of the drainage water that is not reintroduced into the subsoil may be beneficially used, except for the portion of the drainage water that comes from drainage filters or abstraction points that are either wholly or partly located on, or at a distance of less than 20 metres from, a parcel of land that meets at least one of the following conditions:

- 1° the plot belongs to a risk soil as mentioned in the Soil Decree of 27 October 2006, unless a decree soil investigation in accordance with the VLAREBO Decree of 14 December 2007 has been carried out for the risk activity in question;
- 2° a decree soil investigation in accordance with the VLAREBO Decree of 14 December 2007 has been carried out for the plot;
- 3° the plot has been the site of a claim as mentioned in the VLAREBO Decree of 27 October 2006;
- 4° conditions or restrictive measures for groundwater use have been promulgated by the authorities on at least part of the plot due to the suspected or proven presence of contaminants.

Unless the provisions of the Flemish Government Decree of 13 December 2002 regulating the quality and supply of water intended for human consumption are complied with, the operator shall provide clear signalling at each tapping point that the water is not intended for human consumption.

The operator shall take all possible measures to avoid additional inconvenience when making drainage water available. Drains will be provided at safely accessible locations. If a motor vehicle is used to transport groundwater, the draining shall not take place before 07:00 and not after 19:00, nor on Sundays and public holidays, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity. The times at which drainage water is extracted shall be clearly displayed at the drainage point.

§ 4. The drainage water that is not returned to the subsoil or can be beneficially reused shall be discharged into surface water, into an artificial stormwater drainage route or into the part of the separate sewerage system intended for stormwater drainage, unless these are not accessible in accordance with best available techniques.

§ 5. Discharge to a public sewage system shall only be permitted if it is not possible, in accordance with the best available techniques, to dispose of that water in any other way. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, drainage water shall

not be discharged into the public sewerage system if an artificial outlet for rainwater or surface water can be reached through public property by a pipe not more than 200 metres from the location of the drainage pump.

Volumes greater than 10 m³ per hour may only be discharged into a public sewage system connected to a sewage treatment plant, after the express authorisation of the operator of that installation.

The discharge of the groundwater does not cause any inconvenience to third parties.

Article 5.53.6.1.4. While maintaining the application of Article 5.53.3.1, a metering device shall be provided so that, for each aquifer, the volume of drainage water that cannot be reintroduced into the aquifer and the volume of drainage water that is beneficially used can be determined. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the metering device shall be a metering device as specified in Article 5.53.3.2.

By way of derogation from Article 5.53.3.1, a venting system for above-ground pumps shall not be considered to be a drain point, provided that unused connection points of the venting system are leak-proof closed and any open parts of the system are covered by at least an attached grid with openings not exceeding 50 x 50 mm or with an equivalent alternative.

Article 5.53.6.1.5. The required reduction in the groundwater level shall not be maintained for longer than is necessary for the phase in which the project for which the groundwater has been constructed is located.

If, due to unforeseen circumstances, the project for which the drainage is required is paused for more than 4 weeks, the drainage shall be adjusted judiciously on the basis of an action plan approved by an expert. This plan of action is kept at the disposal of the supervisor. This paragraph is without prejudice to the obligations laid down in Article 6 of the Decree of 25 April 2014 on the environmental permit.

Article 5.53.6.1.6. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the groundwater shall be sampled and analysed after the installation and cleaning of the drainage filters or abstraction points which are either wholly or partially located on, or at a distance of less than 20 metres from, a plot meeting at least one of the following conditions:

- 1° the plot belongs to a risk soil as mentioned in the Soil Decree of 27 October 2006, unless a decree soil investigation in accordance with the VLAREBO Decree of 14 December 2007 has been carried out for the risk activity in question;
- 2° a decree soil investigation in accordance with the VLAREBO Decree of 14 December 2007 has been carried out for the plot;
- 3° the plot has been the site of a claim as mentioned in the VLAREBO Decree of 27 October 2006;
- 4° conditions or restrictive measures for groundwater use have been promulgated by the authorities on at least part of the plot due to the suspected or proven presence of contaminants.

The sampling and analysis referred to in paragraph 1 shall be carried out by an approved laboratory, in the water discipline, for the subdomain in question

referred to in Article 6, 5°(a) of the VLAREL of 19 November 2010. Sampling is carried out at the point where the groundwater leaves the drainage installation (including a sand filter, aeration or settling bin).

The drainage plant may not be put into service until the analysis results are available.

When activating an additional drainage filter or a withdrawal point that meets one of the conditions in the first paragraph, and which are located at a distance of more than 20 metres from an already analysed drainage filter or a withdrawal point, a new sampling and analysis shall be carried out. Shutdown of the additional drainage filter or the additional withdrawal point pending the analysis result is not required.

The parameters to be analysed in drainage water to which the conditions referred to in the first paragraph, 1°, 2° and 3° apply are at least:

- 1° pH, conductivity and temperature;
- 2° heavy metals: lead (Pb), zinc (Zn), cadmium (Cd), copper (Cu), nickel (Ni), arsenic (As), mercury (Hg), chromium 3+ (Cr³⁺);
- 3° BTEX (benzene, toluene, ethylbenzene and xylenes)
- 4° mineral oil;
- 5° VOCl: 1,2-dichloroethane, dichloromethane, tetrachloromethane, tetrachloroethene, trichloromethane, trichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, cis-1,2-dichloroethylene and trans-1,2-dichloroethene;
- 6° vinyl chloride.

The parameters to be analysed in drainage water to which the condition referred to in the first paragraph, 4°, applies are the pollutants for which use restrictions have been declared.

The analysis of the parameters referred to in paragraphs 5 and 6 may be supplemented by the analysis of other parameters assessed as relevant on the basis of the preliminary examination.

The provisions of this Article shall not apply if analyses have been carried out by an approved laboratory, in the water discipline, for the subdomain referred to in Article 6, 5°(a) of the VLAREL of 19 November 2010, on the parameters required by paragraphs 5 and 6 of Article 6 of the VLAREL, up to a maximum of three years prior to the start of the construction of the ground. A monitoring well is representative if it is located within a distance of 20 metres from the drainage installation, and if it has a filter head that extracts groundwater at a similar depth as the drainage installation.

The provisions of paragraphs 1 to 3 do not apply to drainage installations started before 1 July 2025. The provisions of the other paragraphs do not apply to drainage filters or abstraction points that were switched on before 1 July 2025.'.

Article 25. In section 5.53.6 of 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 24 June 2022, a subsection 5.53.6.1/1, which consists of sections 5.53.6.1/1.1 to 5.53.6.1/1.4, shall be inserted to read as follows:

'Subsection 5.53.6.1/1. Drainage necessary to enable or maintain the use or operation of structures or land or to carry out maintenance works

Article 5.53.6.1/1.1. The provisions of this Subsection shall apply to the activities listed in sub-heading 53.5 of the classification list.

Article 5.53.6.1/1.2. § 1. By way of derogation from Article 5.53.4.1, at least one well shall be placed with a filter in the aqueous layer in which the reduction is intended, in the case of an authorised drainage. That well shall be placed in such a location that the well is representative for monitoring the desired groundwater level reduction and can be used for the control referred to in section 2.

For activities licensed before 1 July 2025, the provisions of this section apply from 1 July 2026.

The provisions of this section do not apply if the drainage water drains gravitationally to a collecting well and the drainage water is pumped from the collecting well.

§ 2. The pumps of a drainage system are automatically controlled so that the groundwater level is not lowered further than necessary.

It is controlled at the water level in the pumping well or collecting well, or at the groundwater level in separate wells. The necessary reduction is determined per construction.

For activities licensed or deeded before 1 July 2025, the provisions of this section shall apply from 1 July 2026.

Article 5.53.6.1/1.3. § 1. The provisions of this section shall apply to the activities specified in subheading 53.5.1, 53.5.2 and 53.5.3 of the classification list, except for the provisions of section 2 which shall apply only to the activities specified in subheading 53.5.1 and 53.5.3 of the classification list.

§ 2. In the case of drainage, only the leak flow rate may be pumped up. The net extracted volume of drainage water is maximally limited or maximally returned to the subsoil, in each case by using best available techniques. Return of the drainage water to the subsurface is possible by returning it via return wells, or by infiltration via an infiltration facility such as an infiltration well, infiltration basin or infiltration ditch. Putting it back into the subsoil does not cause any water nuisance for third parties.

For structures that have already been granted planning permission or deeded or constructed before 1 July 2025, this section does not apply, but any modification to the structural elements shall, to the extent possible, take measures to reduce the drainage flows.

§ 3. The drainage water that is still pumped despite any restrictive measures is preferably and if it meets the quality requirements of paragraphs 2 and 3, returned to the subsoil. Returning the drainage water to the subsurface can be done by returning it through return wells in the aquifer from which it was

extracted, or by infiltrating the drainage water through an infiltration facility such as an infiltration well, infiltration basin or infiltration ditch.

Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the drainage water that is returned to the subsurface shall comply with:

- 1° the environmental quality standards for groundwater for undesirable substances, for toxic substances and for pH referred to in Article 2.4.1.1(2) (1) of this Decree;
- 2° the guide value for groundwater, as set out in Annex II to the VLAREBO Decree of 14 December 2007, if no environmental quality standard is defined for the substance in accordance with Article 2.4.1.1(2)(1) of this Decree;
- 3° for hazardous substances if a value for the substance is missing as specified in points 1° and 2°: the reporting limit for groundwater according to the reference measurement method.

Unless otherwise specified in the environmental permit for the operation of the classified installation or activity:

- 1° drainage water with a conductivity at 20 °C higher than 1600 µS/cm is only reintroduced into the subsurface if the receiving groundwater has the same or higher conductivity;
- 2° drainage water with a chloride concentration higher than 250 mg/l shall be reintroduced into the subsoil only if the receiving groundwater has the same or higher chloride concentration.

For existing classified establishments or activities, a new, more stringent value as set out in paragraph 2 shall apply after eighteen months. That period starts from the date of publication of the new values. Existing classified establishments or activities means those classified establishments or activities that have been licensed, deeded, notified, or for which an application for an environmental permit for the operation of the classified establishment or activity has been submitted before the publication of the new value.

§ 4. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the portion of the drainage water that cannot be reintroduced into the subsoil may be beneficially used, except for the portion of the drainage water that comes from drainage filters or abstraction points that are either wholly or partly located on, or at a distance of less than 20 metres from, a parcel of land that meets at least one of the following conditions:

- 1° the plot belongs to a risk soil as mentioned in the Soil Decree of 27 October 2006, unless a decree soil investigation in accordance with the VLAREBO Decree of 14 December 2007 has been carried out for the risk activity in question;
- 2° a decree soil investigation in accordance with the VLAREBO Decree of 14 December 2007 has been carried out for the plot;
- 3° the plot has been the site of a claim as mentioned in the VLAREBO Decree of 27 October 2006;
- 4° conditions or restrictive measures for groundwater use have been promulgated by the authorities on at least part of the plot due to the suspected or proven presence of contaminants.

Paragraph 1 is without prejudice to the obligations laid down in Article 6 of the Decree of 25 April 2014 on the environmental permit if the useful use exceeds 5 000 m³ per year.

Unless the provisions of the Flemish Government Decree of 13 December 2002 regulating the quality and supply of water intended for human consumption are complied with, the operator shall provide clear signalling at each tapping point that the water is not intended for human consumption.

The operator shall take all possible measures to avoid additional inconvenience when making drainage water available. Drains will be provided at safely accessible locations. If a motor vehicle is used to transport groundwater, the draining shall not take place before 07:00 and not after 19:00, nor on Sundays and public holidays, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity. The times at which drainage water is extracted shall be clearly displayed at the drainage point.

§ 5. The drainage water that is not returned to the subsoil or beneficially reused shall be discharged into surface water, into an artificial stormwater drainage route or into the part of the separate sewerage system intended for stormwater drainage, unless these are not accessible in accordance with best available techniques.

Discharging the groundwater into a public sewage system is only permitted if, in accordance with the best available techniques, it is not possible to dispose of that water in any other way.

Volumes greater than 10 m³ per hour may only be discharged into a public sewage system connected to a sewage treatment plant, after the express authorisation of the operator of that installation.

The discharge or reintroduction of the drainage water into the subsoil does not cause flooding to third parties.

For activities licensed or deeded before 1 July 2025, the provisions of paragraphs 1 and 2 of this section apply from 1 July 2026.

Article 5.53.6.1/1.4. While maintaining the application of Article 5.53.3.1, a metering device shall be provided so that, for each aquifer, the volume of drainage water that cannot be reintroduced into the aquifer and the volume of drainage water that is beneficially used can be determined. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the metering device shall consist of a metering device as specified in Article 5.53.3.2.

By way of derogation from Article 5.53.3.1, a venting system for above-ground pumps shall not be considered as a drainage point, provided that unused connection points of the venting system are leak-proof closed and any open parts of the system are covered by at least an attached grid with openings not exceeding 50 x 50 mm or with an equivalent alternative.';

Article 26. In section 5.53.6 of 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 24 June 2022, a subsection 5.53.6.1/2, which consists of sections 5.53.6.1/2.1 to 5.53.6.1/2.3, shall be inserted to read as follows:

‘Subsection 5.53.6.1/2. Drainage

Article 5.53.6.1/2.1. The provisions of this Subsection shall apply to the activities listed in sub-heading 53.3 of the classification list.

Article 5.53.6.1/2.2. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, a drainage system, if constructed from 1 July 2025, or if the underground structure is completely renewed from 1 July 2025, shall be constructed in such a way that the discharge of soil and groundwater can be controlled and completely stopped. The control involves regulating the amount of soil and groundwater drained based on the use of the land or site. Soil and groundwater must not be disposed of more or longer than is necessary for the intended use.

The first paragraph applies only within areas designated by the Flemish minister on the advice of the entity of the Flemish Environment Agency competent for groundwater advice. The areas shall be designated based on the following criteria:

- 1° gradient;
- 2° permeability;
- 3° groundwater supply.

Article 5.53.6.1/2.3. By way of derogation from Article 5.53.3.1, the obligation to provide a measuring device shall not apply to drainage as referenced in subheading 53.3 of the classification list.’.

Article 27. In Article 5.53.6.2.1 of the same Decree, inserted by the Decree of the Flemish Government of 19 January 1999 and replaced by the Decree of the Flemish Government of 23 December 2011, the phrase ‘mentioned in heading 53.6, 1°, of the classification list’ shall be replaced by the phrase ‘mentioned in heading 53.6, 1°, and heading 53.6, 2°, of the classification list’.

Article 28. In Article 5.53.6.2.2 of the same Decree, inserted by the Decree of the Flemish Government of 23 December 2011, the following sentence is added:

‘Effluent may be re-infiltrated into the phreatic aquifer, except if it comes from the chemical regeneration of wells.’.

Article 29. In Article 5.53.6.2.3 of the same decree, inserted by the Decree of the Flemish Government of 23 December 2011, is amended as follows:

- 1° the first paragraph shall be replaced by the following:

‘Groundwater is pumped into a pipe system that is physically sealed from the water in the building system by a double-walled heat exchanger. For establishments licensed before 1 July 2025, single-walled heat exchangers may be retained until they need to be replaced. When the heat exchanger is replaced, a double wall heat exchanger shall be installed’;

- 2° In paragraph 2, the word 'double' is replaced by the phrase 'double wall';
- 3° in the third paragraph, the phrase 'listed under heading 53.6, 2°, of the classification list' is replaced by the phrase 'listed under heading 53.6, 3°, and heading 53.6, 4°, of the classification list'.

Article 30. Article 5.53.6.2.5 of the same Decree, inserted by the Decree of the Flemish Government of 23 December 2011, is replaced by the following:

'Article 5.53.6.2.5 § 1. Notwithstanding Article 5.53.4.1(2) and Article 5.53.4.2, for groundwater extractions listed in heading 53.6(3°) of the classification list, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the construction of the following monitoring wells shall be mandatory:

- 1° for the disc of 100 001 m³ to 500 000 m³ per year licensed flow: one monitoring well;
- 2° for the disc of more than 500 000 m³ per year of licensed flow: one monitoring well per started unit of 500 000 m³ per year of licensed flow with a maximum of three monitoring wells.

The wells shall be constructed in accordance with the rules of good workmanship referred to in Articles 5.53.1.2, 5.53.2.1 and 5.53.2.2. Each monitoring well is fitted with monitoring wells with filters in the aquifer from which groundwater is extracted and in all aquifers above it. If the monitoring wells are installed in different monitoring wells, the split monitoring wells are only considered as one monitoring well when determining the number of monitoring wells. The location of the monitoring wells must be determined in consultation with an EIA expert in the discipline of water, sub-domain geohydrology, as mentioned in Article 6(1°)(d)(4) of the VLAREL, in such a way that at least in one monitoring well the thermal interference of the geothermal system can be determined by measurement. In the case of multiple wells, the location of the additional wells is determined such that either the thermal interference of the geothermal system can be determined by measurement or the pumping cone of water extraction in the addressed aquifer and the influence in the overlying aquifers can be determined by measurement. The diameter of the level tube in the aquifer from which water is extracted should also allow the taking of water samples.

For groundwater abstractions listed in heading 53.6(3°) of the classification list, constructed before 1 July 2025, monitoring wells constructed in accordance with Article 5.53.4.1(2) shall also be accepted.

§ 2. Notwithstanding Article 5.53.4.1(2) and Article 5.53.4.2, for groundwater abstractions listed in heading 53.6(4°) of the Classification List, the construction of monitoring wells shall not be mandatory.

§3. For groundwater extractions listed in heading 53.6(3°) and heading 53.6(4°) of the classification list, by way of derogation from Article 5.53.4.5(2), the groundwater from both an abstraction and injection filter shall be analysed annually by an accredited laboratory in the discipline of water, groundwater sub-domain, as mentioned in Article 6(5°)(a) of the VLAREL. If there are different

source pairs, the same source pair is always followed and preferably the pair with the largest flow rate.

Article 31. In Article 5.53.6.2.6 of the same Decree, inserted by the Decree of the Flemish Government of 23 December 2011 and replaced by the Decree of the Flemish Government of 3 May 2019, the phrase 'mentioned in heading 53.6(2°) of the classification list' shall be replaced by the phrase 'mentioned in heading 53.6(3°) and heading 53.6(4°) of the classification list'.

Article 32. Article 5.53.6.2.7 of the same Decree, inserted by the Flemish Government Decree of 23 December 2011 and replaced by the Flemish Government Decree of 27 November 2015, now reads:

'Article 5.53.6.2.7. The wells are regenerated mechanically. If chemical treatment is necessary, the operator shall submit a plan of action for prior approval to the entity of the Flemish Environment Agency responsible for groundwater consultancy.

Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the drainage during the regeneration of the wells shall be limited to a maximum of 500 m³ per well per year. Water not coming from the chemical regeneration of the wells is preferably re-infiltrated or, if not possible, used usefully.

The effluent that does not originate from the chemical regeneration of the wells and that cannot be re-infiltrated or beneficially reused shall be discharged into surface water, into an artificial drainage path for rainwater or into the part of the separate sewerage system intended for the disposal of rainwater, unless these are not accessible in accordance with the best available techniques.

Discharging wastewater not originating from the chemical regeneration of the wells to a public sewer shall be permitted only if, in accordance with the best available techniques, it is not possible to dispose of that water in any other way. Volumes greater than 10 m³ per hour shall only be discharged into a public sewage system connected to a sewage treatment plant, after the express authorisation of the operator of that installation.

Discharging wastewater does not cause any inconvenience to third parties.';

Article 33. Article 5.53.6.2.9 of the same Decree, inserted by the Decree of the Flemish Government of 23 December 2011, is replaced by the following:

'Article 5.53.6.2.9 Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, at establishments listed in heading 53.6(1°), heading 53.6(2°) and heading 53.6(3°), the temperature of groundwater reinjected shall not exceed 25 °C.

For establishments listed in heading 53.6(3°) and heading 53.6(4°) of the classification list, the temperature of the injected groundwater shall be monitored via automatic recording.

In addition, for the facilities listed in heading 53.6(3°) in the well network, as required by Article 5.53.6.2.5(1), a temperature measurement at the level of the filter element in the pumped layer shall be carried out monthly.

The provisions of the third paragraph apply from 1 January 2026.’.

Article 34. In subsection 5.53.6.3 of 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, a section 5.53.6.3.2/1 shall be inserted to read as follows:

‘Article 5.53.6.3.2/1. The operator of a groundwater extraction as mentioned in subheading 53.7 of the classification list, shall, no later than two years before the period of validity of 20 years after the granting of the environmental permit of indefinite duration, mentioned in article 83(1)(3) of the decree of 25 April 2014 on the environmental permit, has expired, provide a report that contains all the following elements:

- 1° an evaluation of the data referred to in Article 5.53.6.3.2 of this Decree for the authorisation period already expired;
- 2° an updated hydrogeological study containing at least the data listed in Addendum RH of the Addenda Library listed in Annex 2 to the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit.

The report, mentioned in the first paragraph, is delivered to the authority competent in accordance with Article 15 of the Decree of 25 April 2014 on the single permit, and to the following actors:

- 1° the entity of the Flemish Environment Agency responsible for groundwater consultancy;
- 2° the Agency for Nature and Forests for extractions from an unenclosed aquifer if the Agency for Nature and Forest has been designated as an advisory body pursuant to Article 37, §12, of the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit.’;

Article 35. In Article 5.53.6.3.3 of the same decree, inserted by the Decree of the Flemish Government of 19 January 1999 and amended by the decrees of the Flemish Government of 12 May 2006, 16 May 2014 and 18 March 2016, a point 4/1° is inserted, which reads as follows:

‘4/1° all new wells are located within the demarcated water catchment area or within type I protection zone. Where no water extraction area or type I protection zone is demarcated, it shall be allowed if the new groundwater extraction wells are at a distance of less than 10 metres from the wells already constructed;’;

Article 36. To section 5.53.6 of 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 24 June 2022, a subsection 5.53.6.5, consisting of sections 5.53.6.5.1 to 5.53.6.5.3, shall be added, reading as follows:

‘Subsection 5.53.6.5 Test pumps and test drainage

Article 5.53.6.5.1. The provisions of this Subsection shall apply to the activities listed in sub-heading 53.1 of the classification list.

Article 5.53.6.5.2. § 1. During a test, at least the flow rate and groundwater level in the pump well(s) are recorded. The measurement interval is sufficiently small to accurately monitor the changes and the measurement interval of flow rate and level are matched.

§ 2. On the basis of the results of the test referred to in section 1, at least the permeability of the aquifer into which it is pumped is determined.

The results of the test referred to in section 1 shall be incorporated in a report describing the method of pumping, measurement and interpretation used. That report shall be delivered in digital format to the entity of the Vlaamse Milieumaatschappij responsible for groundwater consultancy within ninety days of the execution of the trial, unless a notification or permit application containing that report is submitted within ninety days of the execution of the trial.

§ 3. During the trial, mentioned in section 1, the extracted groundwater will be returned to the subsoil as much as possible using best available techniques. If it is technically or in function of the parameters determined during the test, not possible to return the extracted groundwater to the subsoil, the pumped groundwater will be put to beneficial use whenever possible and if its quality allows.

Paragraph 1 is without prejudice to the obligations laid down in Article 6 of the Decree of 25 April 2014 on the environmental permit if the useful use exceeds 5 000 m³ per year.

Unless the provisions of the Flemish Government Decree of 13 December 2002 regulating the quality and supply of water intended for human consumption are complied with, the operator shall provide clear signalling at each tapping point that the water is not intended for human consumption.

The operator shall take all possible measures to avoid additional inconvenience when making drainage water available. Drains will be provided at safely accessible locations. If a motor vehicle is used to transport groundwater, tapping shall not take place before 07:00 and not after 19:00, nor on Sundays and public holidays, unless otherwise specified in the environmental operating permit for the classified establishment or activity. The hours at which groundwater is made available are clearly displayed at the drain point.

Groundwater that is not reintroduced to the subsoil or cannot be beneficially reused shall be discharged to surface water, to an artificial stormwater drainage route or to the part of the separate sewerage system intended for stormwater drainage, unless these are not accessible in accordance with best available techniques.

Discharging groundwater into a public sewage system is only permitted if, in accordance with the best available techniques, it is not possible to dispose of that water in any other way. Volumes greater than 10 m³ per hour may only be discharged into a public sewage system connected to a sewage treatment plant, after the express authorisation of the operator of that installation.

The trial referred to in section 1 does not cause any flooding for third parties.

Article 5.53.6.5.3. §1 The provisions of this article apply to the activities listed in subheading 53.1(1°) of the classification list.

§ 2. No excavations below the natural groundwater level shall be carried out during the test drainage.’;

Article 37. To section 5.53.6 of 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 24 June 2022, a subsection 5.53.6.6, consisting of section 5.53.6.6.1, shall be added, reading as follows:

‘Subsection 5.53.6.6. Other groundwater extractions

Article 5.53.6.6.1. The provisions of this article apply to the activities listed in heading 53.8 of the classification list.

Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, for domestic purposes, groundwater use shall be limited to a maximum of 30 m³ per year and per domiciliary in the housing units for which groundwater extraction is used and to a maximum of 15 m³ per year and per registered in the population register under shared residence for the relevant housing units for which groundwater extraction is used.

From 1 July 2025, it will be prohibited to install groundwater extractions that require a permit, as mentioned in heading 53.8 of the classification list, if they are wholly or partially located in a spatially sensitive area, as stipulated in Article 1.1.2 of the Flemish Zoning Code, and are not compatible with the zoning regulations.

Licensed groundwater extractions that have been in operation for more than 10 years, with the exception of groundwater extractions whose construction is excluded from the scope of application of a drilling company as mentioned in Article 6(7°)(a) of the VLAREL, shall be inspected and maintained at least once every 10 years by a drilling company as mentioned in Article 6(7°)(a) of the VLAREL that is recognised under the provisions of the VLAREL. That inspection involves checking the condition of extraction wells, monitoring wells and flow meters for compliance with the code of good practice. The conclusions of that audit and all adjustments and work carried out and to be carried out are described in a report for the operator, which is kept available for inspection by supervisors.

For groundwater extractions authorised or deeded before 1 January 2020, the first check shall be carried out by 31 December 2029.’.

Article 38. In Article 5.54.2 of the same Decree, inserted by the Decree of the Flemish Government of 19 January 1999, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. Unless otherwise provided for in the environmental permit for the operation of the classified establishment or activity, a level measuring network shall be

established around the installations for artificial refilling of groundwater in establishments authorised for more than 30 000 m³ per year. That monitoring network includes so many monitoring wells that it is possible to determine the impact of artificial recharge on groundwater quality, groundwater levels and above-ground properties.

The wells shall be constructed in accordance with the rules of good workmanship set out in the Code of Good Practice for Drilling, Exploring and Closing Drilling Wells for Groundwater Extraction, as set out in Annex 5.53.1, attached to this Decree.

Each monitoring well will be fitted with monitoring wells with filters in the aquifer where water is recharged and in all aquifers above. The location of the monitoring wells shall be determined in consultation with an EIA expert in the discipline of water, sub-domain of geohydrology, as mentioned in Article 6(1)(d) (4) of the VLAREL of 19 November 2010. The diameter of the level tube in the aquifer in which water is replenished makes it possible to take water samples.’;

2° a new section 3 shall be added, with the following text:

‘§ 3. The artificial replenishment of groundwater does not cause water nuisance to third parties.’;

Article 39. In Article 5.54.3 of the same Decree, inserted by the Flemish Government Decree of 19 January 1999 and amended by the Flemish Government Decrees of 7 March 2008 and 21 May 2021, the following amendments are made:

1° section 1 shall be replaced with the following:

‘§ 1. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the following level measurements shall be carried out in the wells referred to in Article 5.54.2(1) in the case of establishments authorised for more than 30 000 m³ per year:

- 1° at least four measurements with an intermediate period of at least one week prior to the start-up of artificial replenishment, the last measurement being carried out in the week before starting up;
- 2° at least weekly for 1 month, from the start of artificial replenishment;
- 3° then monthly.

It is recorded each time the measurement is carried out and whether it is artificially replenished at that time. If there is no artificial replenishment at that time, when the last supplement stops will be recorded. If more than one month is no longer completed, level measurements no longer need to be carried out. In the week before the new start-up, the level will be re-measured once. Thereafter, the monthly frequency of measurement referred to in paragraph 1, 3°, shall be resumed.’;

2° a section 1/1 is inserted, with the following text:

‘§ 1/1. Unless otherwise provided for in the environmental permit for the operation of the classified establishment or activity, in establishments authorised under heading 54(a), 2°, 54(a), 3°, 54(b), 1°, 54, b), 2° or 54(b), 3° of the

classification list, for more than 30 000 m³/j, for the start-up and thereafter at least annually a sample taken from a downstream well and an analysis carried out by an approved laboratory, in the water subdomain referred to in Article 6, 5°(a) of the VLAREL of 19 November 2010, to the parameters referred to in Article 5.54.4(1) of this Decree.';

3° section 2 now reads:

'§ 2. The operator shall keep a register on the operation of an artificial groundwater replenishment facility in which the following elements are recorded:

- 1° the results of the level measurements referred to in section 1;
- 2° the sampling and analysis reports referred to in section 1/1 and Article 5.54.4(2) and Article 5.54.5;
- 3° the amount of water that is artificially replenished every month.

The operator shall keep the register referred to in paragraph 1 for inspection by the supervisory authority.';

4° section 4 is deleted.

Article 40. In Article 5.54.4 of 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 16 May 2014, sections 1 and 2 are replaced by the following:

'§ 1. Unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the water introduced into the subsoil shall comply with:

- 1° environmental quality standards for groundwater for undesirable substances and for toxic substances referred to in Article 2.4.1.1(2)(1) of this Decree;
- 2° the guide value for groundwater, as set out in Annex II to the VLAREBO Decree of 14 December 2007, if no environmental quality standard is defined for the substance in accordance with Article 2.4.1.1(2)(1) of this Decree;
- 3° for hazardous substances if a value for the substance is missing as specified in points 1° and 2°: the reporting limit for groundwater according to the reference measurement method.

Unless otherwise specified in the environmental permit for the operation of the classified installation or activity:

- 1° water with conductivity at 20 °C exceeding 1600 µS/cm shall only be brought into the subsoil if the receiving groundwater has the same or higher conductivity;
- 2° water with a chloride concentration greater than 250 mg/l shall only be placed in the subsoil if the receiving groundwater has the same or a higher concentration of chloride;
- 3° water with a temperature higher than 25 °C may be introduced into the subsoil only if the receiving groundwater has the same or a higher temperature;
- 4° only water with a pH greater than or equal to 5 and less than or equal to 9.5 should be introduced into the subsoil.

For existing classified establishments or activities, a new, more stringent value as set out in paragraph 1 shall apply after 18 months. That period shall start from the date of publication of those new values. Existing classified establishments or activities means those classified establishments or activities that are licensed, deeded, notified, or for which an application for an environmental permit for the operation of the classified establishment or activity has been submitted before the publication of the new value.

§ 2. Before artificial replenishment may commence, at least two samplings and analyses of the water injected into the subsoil shall be carried out. Those sampling and analysis are subject to the following conditions:

- 1° they are carried out by an approved laboratory, in the water discipline, for the subdomain in question referred to in Article 6, 5°(a) of the VLAREL of 19 November 2010;
- 2° samplings are carried out at least one week apart and are no more than three months old at the start of replenishment;
- 3° the analyses shall be carried out for the following parameters at a minimum:
 - a) pH, conductivity (in $\mu\text{S}/\text{cm}$ at 20 °C) and temperature (in °C);
 - b) anions (in mg/l): sulphate (SO_4^{--}), chloride (Cl^-), carbonate (CO_3^-), hydrogen carbonate (HCO_3^-);
 - c) cations (in mg/l): calcium (Ca^{++}), potassium (K^+), sodium (Na^+), magnesium (Mg^{++});
 - d) undesirable substances (in mg/l): nitrite (NO_2^-), nitrate (NO_3^-), ammonium (NH_4^+), fluoride (F^-) and manganese (Mn^{++});
 - e) metals (in $\mu\text{g}/\text{l}$): lead (Pb), zinc (Zn), cadmium (Cd), copper (Cu), nickel (Ni), arsenic (As), mercury (Hg), chromium 3+ (Cr^{3+}), iron total;
 - f) BTEX (in $\mu\text{g}/\text{l}$): benzene, toluene, ethylbenzene and xylene;
 - g) mineral oil (in $\mu\text{g}/\text{l}$);
 - h) VOCI (in $\mu\text{g}/\text{l}$): 1,2-dichloroethane, dichloromethane, tetrachloromethane, tetrachloroethene, trichloromethane, trichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, cis-1,2-dichloroethylene and trans-1,2-dichloroethene;
 - i) vinyl chloride (in $\mu\text{g}/\text{l}$);
 - j) pesticide total (in $\mu\text{g}/\text{l}$) and individual pesticides, including relevant metabolites likely to occur, both by LC-MS analysis.'.

Article 41. Article 5.54.5 of the same Decree, inserted by the Flemish Government Decree of 19 January 1999 and amended by the Flemish Government Decrees of 7 March 2008, 16 May 2014 and 21 May 2021, shall be replaced by the following:

'Article 5.54.5. After the start of artificial replenishment, sampling and analysis of the water injected into the subsoil shall be carried out. Those sampling and analysis are subject to the following conditions:

- 1° they are carried out by an approved laboratory in the discipline of water, for the subdomain in question, as mentioned in Article 6(5°)(a) of the VLAREL of 19 November 2010;
- 2° unless otherwise specified in the environmental permit for the operation of the classified establishment or activity, the sampling and analysis shall be:
 - a) carried out at least annually for each of the parameters referred to in Article 5.54.4(2),3° of this Decree;

- b) carried out at least quarterly for:
 - i. pH, conductivity and temperature;
 - ii. the parameters, mentioned in Article 5.54.4(2)(3°), for which, in the preceding annual analysis mentioned in point (a), more than 50 % of the test value mentioned in Article 5.54.4(1) of this Decree was found. The parameters listed in Article 5.54.4(2)(3°)(b) and (c) are excluded;
- c) the analyses may be supplemented by the analysis of parameters other than those referred to in Article 5.54.4(2), 3°, of this Decree, which shall be assessed as relevant on the basis of the preliminary examination.'

Article 42. In Article 5.55.1.2 of the same Decree, inserted by the Decree of the Flemish Government of 23 December 2011 and amended by the Decrees of the Flemish Government of 1 March 2013, 18 March 2016 and 3 May 2019, the words 'carrying out and' shall be replaced by the phrase 'carrying out a drilling, constructing or modifying the construction in a borehole and'.

Article 43. In Article 5.55.2.7 of the same decree, inserted by the Decree of the Flemish Government of 23 December 2011 and amended by the Decree of the Flemish Government of 27 November 2015, section 2 is replaced by the following:

'§ 2. If the use of an antifreeze is necessary, only authorised antifreeze shall be used, unless otherwise specified in the environmental permit for the operation of the classified establishment or activity.

The composition of the antifreeze agent and the mixing ratio with the water is kept for inspection by the regulators.

Authorised antifreezing agents are monopropylene glycol or beet derivative. The Flemish Environment Agency can supplement or modify the authorised antifreeze products. The authorised antifreeze products are published in the Belgian Official Gazette. The Flemish Environment Agency can only authorise or modify an antifreeze if the use of the antifreeze in the event of an accidental leak does not lead to an impairment of groundwater quality that is more severe than in the event of a leak of monopropylene glycol.'

Article 44. To Part 5 of the same Decree, inserted by the Decree of the Flemish Government of 1 June 1995 and last amended by the Decree of the Flemish Government of 21 May 2021, shall be added a chapter 5.64, consisting of Article 5.64.1, reading as follows:

'Chapter 5.64. Irrigation for agricultural purposes

Article 5.64.1. For establishments listed in heading 64 of the classification list, no sectoral rules are laid down. The general provisions and any special conditions shall apply without prejudice.'

Article 45. To Part 5 of the same Decree, inserted by the Decree of the Flemish Government of 1 June 1995 and last amended by the Decree of the Flemish Government of 21 May 2021, shall be added a chapter 5.65, consisting of Article 5.65.1, reading as follows:

'Chapter 5.65. Drainage projects through adjustable structures for agricultural purposes

Article 5.65.1. For establishments listed in heading 65 of the classification list, no sectoral rules are laid down. The general provisions and any special conditions shall apply without prejudice.';

Article 46. In the heading of Section 6.2.2 of the same Decree, inserted by the Decree of the Flemish Government of 9 May 2008 and amended by the Decree of the Flemish Government of 23 December 2011, the words 'Uncontaminated rainwater discharges and or drainage water' are replaced by the words 'Unclassified discharges of rainwater, of groundwater'.

Article 47. In Article 6.2.2.1.2 of the same decree, inserted by the Decree of the Flemish Government of 9 May 2008 and amended by the decrees of the Flemish Government of 16 May 2014, 27 November 2015 and 3 May 2019, section 5 is replaced by the following:

'§ 5. Groundwater may be discharged only if permitted in accordance with the steps of the drainage cascade referred to in Articles 5.53.6.1.3, 5.53.6.1/1.3 and 5.53.6.5.2.

The groundwater not classified for discharge shall comply with the following conditions:

- 1° the pH of the discharged groundwater shall not exceed 9 or be less than 6.5. For the determination of pH limits, the natural pH of groundwater referred to in Article 2 of Annex 2.4.1, annexed to this Decree, may be adopted if that pH exceeds 9 or less than 6.5;
- 2° the biochemical oxygen demand in five days at 20 °C in the discharged water shall not exceed 25 milligrams of oxygen demand per litre;
- 3° in the discharged water, 60 milligrams per litre for the floating substances are not exceeded.

Volumes greater than 10 m³ per hour shall only be discharged into a public sewage system connected to a sewage treatment plant, after the express authorisation of the operator of that installation.';

Article 48. In Article 6.9.1.1 of the same Decree, inserted by the Decree of the Flemish Government of 20 November 2009 and last amended by the Decree of the Flemish Government of 24 June 2022, the following amendments are made:

- 1° the phrase 'other than groundwater extraction for hand pumps' shall be removed in each case;
- 2° the phrase 'The construction, modification, conversion and decommissioning of groundwater extraction and drilling and decommissioning' shall be replaced by the phrase 'Executing a drilling, laying or modifying the well structure of a groundwater extraction or construction in a borehole and decommissioning of groundwater extraction or drilling';
- 3° A third paragraph is added, reading as follows:

'The provisions of the second paragraph shall apply from 1 July 2025 for groundwater extractions for hand pumps.'

Article 49. In section 6.9.1 of the same Decree, last amended by the Decree of the Flemish Government of 24 June 2022, a section 6.9.1.1quater shall be inserted, reading as follows:

'Article 6.9.1.1quater/1. Groundwater extraction shall be equipped with a measuring device, which shall be placed for the first drain point of the extracted groundwater.

The metering device shall be installed so that the volume of groundwater pumped can be totalised for each aquifer.

If there is a removable piece between the measuring device and the head of the well, it may be sealed by the officials in charge of supervision.

This section does not apply to extractions from which water is pumped only by hand, foot or nose pump, and to drainages.

§ 2. The measuring device shall be placed in accordance with the code of good practice for installation, maintenance and control of measuring devices for inflated groundwater.

§ 3. Each measuring device measures and totals the volume of the flowing water.

The total volume can easily be read at the location of the measurement.

The meter is placed and connected so that all flowing water is measured, especially if the measurement requires electricity.

The ability to disable, move or otherwise change the indication of the extracted volume may be sealed by the officials in charge of supervision.

§ 4. Each meter is positioned so that a reading can always be taken in complete safety and that damage or interference with the measurement is avoided.

§ 5. The indications mentioned in section 3 are permanently legible on each gauge.

§ 6. Each meter shall be recalibrated with a periodicity and in accordance with the requirements laid down in the legislation in question.

The calibration shall be carried out by a calibration institution authorised to do so.

The operator shall keep a certificate for each calibration which shall be submitted, upon simple request, to the officials responsible for supervising.

§ 7. Any meter removed for any reason will be replaced as soon as possible.

The position of the meter shall be recorded in a register at the time of removal and removal.

§ 8. Officials responsible for monitoring may seal a measuring device or any part thereof.

If the seal is broken, the supervisor shall be notified as soon as possible.

§ 9. The position of each flow meter shall be recorded in a register on the last day of each year in which groundwater is inflated and whenever, for whatever reason, the flow meter is removed or relocated.

§ 10. For establishments installed before 1 July 2025, the provisions of this Article apply from 1 July 2035.’.

Article 50. In Article 6.9.1.3 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 24 June 2022, section 2 shall be replaced by the following:

‘§ 2. Only if all the pressure tests listed in Chapter 3 of Annex 5.53.1 annexed to this Decree exclude the existence of leaks can antifreezing agents be added to the water. Authorised antifreezing agents are monopropylene glycol or beet derivative. The Flemish Environment Agency may amend or supplement the authorised antifreeze products, as provided for in Article 5.55.2.7(2) of this Decree. The authorised antifreeze products are published in the Belgian Official Gazette. The composition of the antifreeze agent and the mixing ratio with the water shall be kept for inspection by the supervisor.’.

Article 51. Article 6.9.1.4 of the same Decree, inserted by the Decree of the Flemish Government of 3 May 2019 and repealed by the Decree of the Flemish Government of 24 June 2022, shall be reinstated in the next reading:

‘Article 6.9.1.4. § 1. Each drainage is dimensioned and operated according to a code of good practice.

§ 2. A drainage pump may only be installed by a drilling company approved in accordance with the VLAREL of 19 November 2010, for the discipline referred to in Article 6, 7°(a), (1) of the aforementioned Decree. No later than the third working day after a drainage pump has been installed, the approved drilling company of each flow meter intended to record the flow rate pumped up and returned to the subsurface shall provide the following information via a web application of the Databank Ondergrond Vlaanderen:

- 1° the mark and serial number;
- 2° the time of placement and the numerator position at the time of placement.

When dismantling the drainage plant, the approved drilling company will deliver the time of dismantling and counter position at the time of dismantling using a web application of the Databank Ondergrond Vlaanderen at the latest on the third working day after dismantling.

Any flow meter removed for any reason shall be replaced as soon as possible. Any removal and relocation of a flow meter shall be notified immediately to the supervisors. This can be done via a web application of the Databank Ondergrond Vlaanderen. The position of the meter shall be recorded in a register at the time of

removal and replacement.

§ 3. In order to minimise the impact of the groundwater treatment on the groundwater supply, the following steps shall be applied in order of prioritisation:

- 1° limiting the extracted volume of groundwater;
- 2° the useful use of groundwater;
- 3° the discharge of groundwater into surface water, into an artificial rainwater drain or into the part of the segregated sewage intended for the discharge of rainwater;
- 4° the discharge of groundwater into the public sewerage system.

§ 4. The required reduction in the groundwater level shall not be maintained for longer than is necessary for the phase in which the project for which the groundwater has been constructed is located.

The drainage should never be active for more than 14 days. The operator shall take the necessary measures to ensure the stability of the excavation and existing structures in order to be able to stop the drainage at all times after fourteen days.’;

Article 52. In the heading of Section 6.9.2 of the same Decree, inserted by the Decree of the Flemish Government of 20 November 2009, the word ‘indirect’ is deleted.

Article 53. Article 6.9.2.1 of the same Decree, amended by the Flemish Government Decree of 20 November 2009, is replaced by the following:

‘Article 6.9.2.1. Domestic wastewater shall be treated as a minimum in accordance with the general conditions set out in Articles 6.2.2.3.1 and 6.2.2.4.1, before being discharged into an infiltration facility.’;

Article 54. In Article 6.9.2.2 of the same Decree, inserted by the Decree of the Flemish Government of 20 November 2009 and amended by the Decree of the Flemish Government of 23 December 2011, the following amendments shall be made:

- 1° in the introductory sentence, the word ‘indirect’ shall be deleted;
- 2° in point 3°, introductory sentence, the phrase ‘floor drain’ is replaced by the phrase ‘infiltration device’;
- 3° point 3°(b) shall be repealed;
- 4° point 3°(c) shall be repealed;
- 5° in point 3°, point (d) is replaced by the following:
‘d) the quality of the discharged wastewater must be sampleable;’;
- 6° point 4° is replaced with the following:
‘4° discharge into groundwater of domestic wastewater is prohibited if the public road is provided with public sewerage.’;

7° point 5° shall be removed.

Article 55. In Annex 1 to the same Decree, inserted by the Decree of the Flemish Government of 27 November 2015 and last amended by the Decree of the Flemish Government of 12 May 2023, the following amendments are made:

1° to subheading 3, the following changes shall be made:

a) in the heading of the heading, the words ‘Wastewater and cooling water’ are replaced by the words ‘Waste and cooling water discharges, other than those mentioned in headings 52 and 54’;

b) in point 2, a point (h), a point (i) and a point (j) are added as follows:

‘h) the discharge of drainage water which is excluded under heading 53;

i) discharge of the drainage of mechanically regenerating the groundwater extractions for thermal energy storage;

j) the discharge of wash water from tunnel wall cleaning, provided that the detergents used are fully biodegradable in accordance with Regulation 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.’;

2° a subheading 3.8 is inserted, which reads as follows:

‘Heading 3.8.

heading	definition	class	remarks	coordinator	auditing	annual report	VLARE BO
3.8.	The discharge of ground water from a drainage operation classified under heading 53.1.1°, 53.2 or 53.5. <u>Remarks:</u> The application of a wastewater treatment plant is included in this heading. The following establishments are not classified under this heading: a) the discharge, whether or not via a wastewater treatment						

	<p>plant, of drainage water that does not contain hazardous substances as listed in Annex 2C, which is attached to this Decree, in concentrations higher than the test values specified in Article 4.2.9.1(3)(4°) of this Decree;</p> <p>b) the discharge, whether or not through a wastewater treatment plant, of water containing no dangerous substances as listed in Annex 2C, annexed to this Decree, in concentrations higher than 10 times the test values referred to in Article 4.2.9.1(3), 4° of this Decree, with a maximum flow rate of 1 000 m³ per day at a level of up to 6 months;</p> <p>c) the discharge, through a wastewater treatment plant or otherwise, of drainage water other than potentially polluted</p>						
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	<p>drainage water of up to 1 000 m³ per day for a drainage operation of up to six months;</p> <p>d) the discharge, whether through a wastewater treatment plant or not, of drainage water other than potentially polluted drainage water of up to 1 000 m³ per day in the case of drainage for the construction of line infrastructure of public character for the duration of the works.</p>						
	<p>1 with a discharged flow rate of up to 2 500 m³ per day</p> <p>a) from a drainage operation with a duration of no more than 12 months, and the concentrations of hazardous substances as listed in Annex 2C, which is attached to this Decree,</p>	3					

	are lower than or equal to 1) for the priority hazardous substances: the test values referred to in Article 4.2.9.1(3) (4°) of this Decree, and 2) for the other hazardous substances, 10 times the test values referred to in Article 4.2.9.1(3) (4°) of this Decree	2	M,T				
2°	b) from drainage other than that referred to in 1°(a) with a discharged flow rate of more than 2 500 m ³ per day	1	M,T				

3° classification heading 52 shall be replaced by the following:

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
52.	Indirect discharges into groundwater Exceptions						

<p>1° indirect discharges into groundwater for which an authorisation has been granted or a notification with deed has been made in accordance with the Decree of the Flemish Government of 14 July 2023 regulating the quality and production, delivery and use of recovered water;</p> <p>2° provided that the legal provisions are applied:</p> <ul style="list-style-type: none"> a) the spread of fertilisers and pesticides; b) the injection of carbon dioxide streams for storage in geological formations which by their nature are permanently unsuitable for other purposes; c) the recovery of water inflated during the extraction of geothermal heat into the same geothermal reservoir. 						
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’;

4° classification heading 52.1 shall be replaced by the following:

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heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
52.1.	operations within the catchment areas and type I, II or III protection zones						
52.1.1	indirect discharge into groundwater:						
	1 indirect discharge of domestic wastewater into groundwater	2	W				
	2 indirect discharge of industrial wastewater into groundwater	1	M,W	A	P		O

5° classification heading 52.2 shall be replaced by the following:

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
52.2.	operations outside the water catchment areas and type I, II or III protection zones: <u>Exception:</u> indirect discharge of domestic wastewater into groundwat						

	er is not classified. 2° indirect discharge of industrial wastewater into groundwater	2	W				O
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’;

6° to subheading 53, the following changes shall be made:

point (b) is replaced by the following:

‘b. groundwater extraction up to a maximum of 150 m³ per year, the water of which is used exclusively for domestic purposes;’;

b) a point (c) and a point (d) are added, which read as follows:

‘c. a net pumped up flow rate not exceeding 150 m³ per year necessary to carry out any of the following activities:

1) enable or maintain the use or operation of structures or land;

2) perform maintenance work on those structures present on site, and for uses other than those classified in heading 53.5(1°) or 53.5(2°) of the classification list;

d. drainage which is technically necessary for the full realisation of works or the construction of utilities, or which is carried out within the framework of an archaeological preliminary investigation as mentioned in and in accordance with the Immoveable Heritage Decree of 12 July 2013, including the reintroduction of drainage water into the subsoil, with an pumped flow rate of less than 1 000 m³ per day and less than 10 000 m³ per year and a lowering of the groundwater level to a maximum of four metres below ground level for a period of up to 14 days after the start-up of pumping. Useful use of up to 5 000 m³ of drainage water per year is included in this exception.’;

c) the following phrase is inserted after the newly inserted point (d):

‘The establishments listed below are not classified, regardless of their location in protection zone type III: carry out drainage at private residential units or to comply with legal obligations for the operation of establishments or for the operation of public roads (including tunnels) or public transport infrastructure’;

7° in subheading 53.1, in the table, the row:

’

headin g	definition	clas s	remarks	coordinato r	auditin g	annual report	VLAREBO
53.1.	drilling of	3					

	groundwater wells or groundwater extraction for the execution of test pumps for less than 3 months						
--	--	--	--	--	--	--	--

is replaced by the line

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
53.1.	construction and operation of a groundwater extraction, including the reintroduction of groundwater into the subsurface in the same aquifer and beneficial use of up to 5 000 m ³ of groundwater, to carry out: 1° test drainage for less than 1 month; 2° test pumps for groundwater extraction other than drainage for less than 3 months.	3 3					

8° classification heading 53.2 shall be replaced by the following:

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
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	up volume per day exceeds 1 000 m ³ ;						
	b) the groundwat er level reduction shall be more than four metres below ground level for at least part of the ground level	2	W, T	N			
3°	with a net inflated volume per IIOA of more than 180 000 m ³	1	W, T	N			

9° classification heading 53.3 shall be replaced by the following:

headin g	definition	class	remarks	coordinato r	auditin g	annual report	VLAREBO
53.3.	drainage to enable or maintain the use or exploitation of land, including re-infiltration and discharge of drainage water. If the drained groundwater is not drained gravitationally, heading 53.2, 53.5, 53.8, 53.9, 53.10 or 53.11 shall						

	<p>apply as appropriate, rather than section 53.3.</p>	1					
	<p>1° drainage for agricultural purposes on contiguous parcels of land with an area of 50 ha or more</p>	3					
	<p>2° existing drainage other than the drainage mentioned in point 1°</p>	3					
	<p>3° historical drainage other than the drainage mentioned in point 1° and point 2°</p>	2		N			
	<p>4° new drainage, located at least partially in or at a distance of less than 500 metres from special protection areas or the Flemish Ecological Network or 'valley area' or 'valley and source area'</p>	3					
	<p>5° drainage, other than the drainage mentioned in point 1°, point 2°, point 3° and point 4°</p>						

;

	<p>than 500 metres from a Habitats Directive site (SPA-H)</p> <p>b) drainage other than that specified in (a)</p>	2		N			
	<p>4° drainage other than the drainage mentioned in point 1°, point 2° and point 3°, located at least partially in, or at a distance of less than 500 metres from, special protection areas or the Flemish Ecological Network or 'valley area' or 'valley and source area'</p>	3					
	<p>5° drainage other than the drainage mentioned in point 1°, point 2°, point 3° and point 4°</p>	2		N			
		3					

;

11° classification heading 53.4 is deleted;

12° classification heading 53.5 shall be replaced by the following:

heading	definition	classes	remarks	coordinator	auditing	annual report	VLAREBO
53.5.	<p>drainage necessary to:</p> <p>1) enable or maintain the use or operation of structures or land;</p> <p>2) carry out maintenance works on the structures present on the site.</p> <p>This heading includes: the beneficial use of drainage water up to a maximum of 5 000 m³ per year and the return of drainage water to the subsoil.</p> <p>The drainage is necessary for:</p> <p>1° operation of public roads (including tunnels) or infrastructure for public transport</p> <p>a) with a net inflated flow rate of up to 30 000 m³ per year</p> <p>b) with a net inflated flow rate exceeding 30 000 m³ per year;</p> <p>2° the water management of mine subsidence areas, even if that water is used for public water supply, as the depth of water extraction:</p> <p>a) less than 10 m, with an inflated flow rate not exceeding 5 000 m³ per year;</p> <p>b) less than 10 m, with an inflated flow rate exceeding 5 000 m³ up to and including 30 000 m³ per year;</p> <p>c) Is 10 m or more, or with an inflated flow rate exceeding 30 000 m³ per year;</p> <p>3° for purposes other than those mentioned in point 1° and 2°</p> <p>a) with a net pumped flow rate of more than 150 m³ per year up to a maximum of 5 000 m³ per year;</p> <p>b) with a net inflated flow rate of more than 5 000 m³ up to and including 30 000 m³ per year;</p>	<p>3</p> <p>2</p> <p>3</p> <p>2</p> <p>1</p> <p>3</p> <p>2</p>	<p>W</p> <p>W</p> <p>W</p> <p>W</p> <p>W</p>	<p></p> <p></p> <p></p> <p>N</p> <p>N</p> <p></p> <p>N</p>			

	c) with a net inflated flow rate of more than 30 000 m ³ per year	1	W	N			
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13° classification heading 53.6 is replaced by the following:

heading	definition	class	Remarks	coordinate	auditing	annual report	VLAREBO
53.6.	<p>construction and operation of a groundwater extraction used for thermal energy storage in aquifers, including re-pumps and the useful use of the drainage water:</p> <p>1° with an inflated flow rate of up to 30 000 m³/year , and</p> <p>(a) all wells have a depth less than or equal to the site-specific depth criterion, as shown on the map contained in Annex 2c, which is attached to this decision;</p> <p>b) at least one well has a depth greater than the location-specific depth criterion, as shown on the map, listed in Annex 2quater annexed to this Decree, and all wells are less than</p>	3					
		2	W	N			

	500 m in relation to ground level;						
2°	with an inflated flow rate of more than 30 000 m ³ /year and not more than 100 000 m ³ /year, and all wells are less than 500 m in relation to ground level;	2	W	N			
3°	with an inflated flow rate of more than 100 000 m ³ /year, and all wells are less than 500 metres deep compared to ground level	1	W	N			
4°	with a depth of 500 m or more relative to ground level.	1	W, N	N			

14° in classification heading 53.7, the phrase 'and 53.4' is deleted;

15° in subheading 53.8, in the fourth column, under 'Remarks' and before the letter 'W', the letter 'T' is inserted each time;

16° classification heading 53.10 is deleted;

17° in classification heading 53.11(1°), the phrase 'back pumping of untreated and unpolluted groundwater into the same aquifer, and with a net abstraction flow rate of 2 500 m³ per day or more' is replaced by the phrase 'reintroduction of groundwater, with a net abstraction flow rate of 2 500 m³ per day or more, other than those classified in heading 53.11(2°)';

18° classification heading 54 shall be replaced by the following:

'Heading 54 - artificial groundwater recharge (by means other than those referred to in headings 52, 53.1, 53.2, 53.5, 53.6, 53.12 and 64)

heading	definition	class	remarks	coordinates	auditing	annual report	VLAREB O
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54.	<p>artificially replenishing groundwater</p> <p>Remark: This heading does not cover:</p> <p>a. infiltration into the saturated and unsaturated rainwater zone which has not been in contact with pollutants;</p> <p>b. the infiltration of water through basins for public water supply;</p> <p>c. irrigation, both superficial and direct in the root zone.</p> <p>a) with a flow rate of less than 2 500 m³ per day, and the input of the water is carried out:</p> <p>1° completely in the unsaturated zone or through an above-ground infiltration facility;</p> <p>2° at least partially in the saturated zone of a phreatic aquifer, and not through an above-ground infiltration facility;</p> <p>3° at least partially in the saturated zone, and not completely in a phreatic aquifer.</p>	2	W	N			
		1	W	N			
		1	W	N			

	with a flow rate of 2 500 m ³ per day or more, and the input of the water is carried out:						
	1° completely in the unsaturated zone or through an above-ground infiltration facility;	1	W	N			
	2° at least partially in the saturated zone of a phreatic aquifer, and not through an above-ground infiltration facility;	1	W	N			
	3° at least partially in the saturated zone, and not completely in a phreatic aquifer.	1	W	N			

;

19° classification heading 55.1 shall be replaced by the following:

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
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55.1.	<p>vertical drillings other than drillings specified in headings 52, 53, 54 and 55.3.</p> <p>The following drillings are not classified:</p> <ol style="list-style-type: none"> 1) drilling for the construction of wells in the context of soil and groundwater analyses; 2) drilling for the construction of wells in order to comply with the environmental conditions for the operation of facilities; 3) drilling to comply with legal obligations; 4) foundation drilling; 5) geotechnical drilling for soil stability up to 2.5 m below ground level. <p>The following drillings outside the Type III protection zone are not classified:</p> <ol style="list-style-type: none"> 1) geotechnical drilling for soil stability research deeper than 2.5 m below ground level; 						
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2) drilling in the context of thermal energy storage in boreholes whose depth is limited to a maximum of the depth criterion as shown in the map in Annex 2quinquies annexed to this Decree.							
1° up to and including a depth of the depth criterion as shown in the map in Annex 2quinquies to this Decree, which are outside a type III protection zone;	3						
2° deeper than the depth criterion, as shown on the map in Annex 2quinquies to this Decree, or located within a type III protection zone, with a depth of less than 500 metres from ground level.	2	W	N				

“;

20° in classification heading 55.2, the phrase ‘borings from a depth of 500 metres below ground level’ is replaced by the phrase ‘borings from a depth of 500 metres above ground level which are not classified under heading 53.6.3’;

21° classification heading 60 shall be replaced by the following:

headin		class	remarks	coordinato	auditin	annual	VLAREBO
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g	definition			r	g	report	
60.	<p>full or partial filling of grooves, diggings and other wells,</p> <p>For the purposes of this heading, well means a depth made in the ground (including puddles and ponds), whether or not containing water. The deepest point of the bottom of the well is at least 1.5 m below ground level. Here, the deepest point is used at the moment before the first filling.</p> <p>Remark: If waste is used for filling, heading 2 applies. This heading does not cover the use of soil materials in the context of functional elevations and additions carried out above ground level, with the aim of making land ready for construction or to realise a</p>						

	<p>ground or building work. Limited mechanical activities, such as sorting or sifting of soil materials, fall under this heading and are not subject to authorisation under heading 30.</p> <p>The complete or partial filling, with soil materials which fulfil the conditions for use as soil set out in the Soil Decree of 27 October 2006 and the VLAREBO Decree of 14 December 2007, of structures that are below ground level and which are (temporarily or not) released in the context of construction or demolition works (e.g. cellars) are not covered by this heading.</p>						
	1° with a capacity of 1 000 m to 10 000 m ³ ;	2	N,O,W				
	2° of a capacity exceeding 10 000 m ³	1	N,O,W	N		O	

’;

22° a subheading 64 is added, which reads as follows:

'Heading 64 - irrigation for agricultural purposes

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
64	Irrigation by watering and sprinkling, both at the surface and directly in the root zone An irrigation project of 100 ha and above for agricultural purposes	1	W	N	P		

”.

23° a subheading 65 is added, which reads as follows:

'Heading 65 - Reclamation projects through adjustable structures for agricultural purposes

heading	definition	class	remarks	coordinator	auditing	annual report	VLAREBO
65	Drainage projects through an adjustable structure for agricultural purposes other than those listed in heading 53.3. There may be an overlap with one or more sub-headings of heading 56. Exception: projects falling within the scope of, and in accordance with, an approved well decision as referred to in Article 26/2 of the Decree of the Flemish Government of 5 May 2023 on the level management on unnavigable watercourses and canals.						
	1° a reclamation project through adjustable construction of 50 ha or more	1		N			
		1		N			

	2° a drainage project through adjustable construction of 15 ha or more, which may result in a significant reduction of the phreatic groundwater table in a particularly protected area						
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”

Article 56. Annex 2bis to the same Decree, inserted by the Decree of the Flemish Government of 27 November 2015, is replaced by the Annex annexed to this Decree as Annex 1.

Article 57. Annex 2ter to the same Decree, inserted by the Decree of the Flemish Government of 27 November 2015, is replaced by the Annex annexed to this Decree as Annex 2.

Article 58. In the same Decree, last amended by the Flemish Government Decree of 23 February 2024, an Annex 2quater is inserted, which is attached to this Decree as Annex 3.

Chapter 2. Amendments to the VLAREL of 19 November 2010

Article 59. In Article 6, 7°(a) of the VLAREL of 19 November 2010, inserted by the Decree of the Flemish Government of 1 March 2013, replaced by the Decree of the Flemish Government of 18 March 2016 and last amended by the Decree of the Flemish Government of 3 May 2019, the following amendments are made:

1° the phrase ‘, including test drainage as specified in heading 53.1.1° of the classification list, as set out in Annex 1 to Title II of the VLAREM’ is added to point 1);

2° at point (2), the phrase ‘and limited to a depth of less than 500 metres below ground level’ is added;

3° point 4) is replaced by the following:

‘4) vertical drilling:

vertical drilling as listed in heading 55.1 of the classification list set out in Annex 1 in Title II of the VLAREM, with the exception of drilling, referred to in point 3;

b) drillings covered by the exception set out in heading 55.1 of the classification list set out in Annex 1 to Title II of VLAREM, with the exception of drillings referred to in point 3;’;

Article 60. In Article 53/6 of the same Decree, inserted by the Decree of the Flemish Government of 1 March 2013 and last amended by the Decree of the Flemish Government of 24 June 2022, the following amendments shall be made:

1° point 7° shall be replaced by the following:

'7° performs works in relation to classified facilities only if the necessary permit or record is available and reports the start of all drilling and filling works in advance via a web application of the Databank Ondergrond Vlaanderen to the competent section of the department, and complies with the applicable environmental conditions;';

2° a point 12° and 13° are added, which shall read as follows:

'12° provides the data referred to in Article 5.53.6.1.2, §2 of Title II of the VLAREM, within the specified time limits using a web application of the Databank Ondergrond Vlaanderen.

13° provides the report mentioned in Article 5.53.6.1(4) of Title II of the VLAREM within two months via a web application of the Databank Ondergrond Vlaanderen.'

Chapter 3. Amendment to the Flemish Government Decree of 27 November 2015 implementing the Decree of 25 April 2014 on environmental permits

Article 61. In Title 3, Chapter 9, of the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the single permit, last amended by the Decree of the Flemish Government of 24 June 2022, a section 1/1, consisting of Article 53/1, shall be inserted as follows:

'Section 1/1. Duration of permits

Article 53(1). The period of validity of the environmental permit for the establishments or activities listed in subheading 53.4, 53.5, 53.8 and 53.12 shall not exceed 20 years.

The period of validity of the environmental permit for the establishments or activities referred to in subheading 53.2 shall not exceed 5 years.';

Chapter 4. Final provisions

Article 62. Article 16 shall apply to observation tubes or wells fitted after the entry into force of this Decree.

Article 63. The Flemish Minister, competent for the environment and nature, shall designate the areas as referred to in Article 5.53.6.1/2.2, second paragraph, of the Decree of the Flemish Government of 1 June 1995 containing general and sectoral provisions on environmental hygiene, no later than six months after Article 26 of this Decree takes effect.

Article 64. Article 55, 10°, enters into force three years after the publication of this decree in the Belgian Official Gazette.

Article 65. Article 1, 1°, Articles 3 to 10, 14, 21, 24, 25, 27 to 33, 36, 39, 2° and 3°, Articles 44 to 47, 51, 55, 1° to 9° and 11° to 31°, and Articles 56 to 60 shall enter into force on a date to be determined by the Flemish Minister responsible for the environment and nature, and no later than one year after the publication of this Decree in the Belgian Official Gazette.

Article 66. Article 5.54.2(1)(3) of the Decree of the Flemish Government of 1 June 1995 containing general and sectoral provisions on environmental hygiene, as amended by Article 38(1°) of this Decree, only applies to monitoring wells constructed after Article 38(1°) of this Decree came into force.

Article 67. Article 6.2.2.1.2(5) of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene, as in force before the entry into force of Article 47 of this Decree, shall continue to apply to the discharges of groundwater referred to in that Article which started before the entry into force of Article 47 of this Decree.

Article 68. An application for an environmental permit or a notification submitted before the date of entry into force of a relevant amending provision of this Decree shall be dealt with and decided on the basis of the classification list included in Annex 1 to the Decree of the Flemish Government of 1 June 1995 containing general and sectoral provisions on environmental hygiene, as it was valid at the time the application or notification was submitted.

Article 69. For the establishments or activities listed in Article 53/1 of the Flemish Government Decree of 27 November 2015 implementing the Decree of 25 April 2014 on the single permit, as inserted by Article 61 of this Decree, which were licensed before Article 61 of this Decree entered into force, the period of validity of the establishment or activity in the permit in force shall be reduced as follows:

1° permits of limited duration: the period of validity of the establishment or activity shall be reduced to 20 years from the date of the final permit, unless the period for which the establishment or activity is licensed is less than 20 years. In that case, the original term shall be retained;

2° open-ended permits: the period of validity of the establishment or activity is reduced to 20 years from the date of the final permit.

Article 70. The Flemish Minister responsible for the environment and nature is in charge of the implementation of this Decree.

Brussels, 21 June 2024.

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 health, the VLAREL of 19 November 2010 and the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit, as regards water regulations.

Annex 2bis of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene

Annex 2bis. Aquifers - hydrogeological coding of the subsurface of Flanders (HCOV-coding)

Main unit		Sub-unit		Basic unit			
A0000	undefined						
A0100	Quaternary Aquifer Systems	A0110	Embankments				
		A0120	Dunes				
		A0130	Polder deposits	A0131	Clay polder deposits		
				A0132	Sandy creek ridges		
				A0133	Peat-clay pool soils		
				A0134	Beach deposits		
		A0140	Alluvial coatings				
		A0150	Aeolian coatings outside the Roerdalslenk	A0151	Sand coatings		
				A0152	Sandy loam coatings		
				A0153	Loam coatings		
		A0160	Fluvio-eolic coatings within the Roerdalslenk	A0161	Boxtel sand 1		
				A0162	Boxtel clay 1		
				A0163	Boxtel sand 2		
				A0164	Boxtel clay 2		
				A0165	Boxtel sand 3		
		A0170	Pleistocene deposits				
		A0180	Meuse and Rhine deposits	A0181	Beegden sand 1		
				A0182	Beegden clay 1		
				A0183	Beegden sand 2		
A0184	Beegden clay 2						
A0185	Beegden sand 3						
A0186	Beegden undifferentiated						
A0187	Sterksel sand 1						
A0188	Sterksel clay 1						
A0189	Sterksel sand 2						
A0200	Aquifer system from de Kempen	A0210	Clay-sand complex from the Kempen				
		A0220	Pleistocene and Pliocene Aquifer System - west	A0221	Clay sand from Malle		
				A0222	Sand from Merksplas		
				A0223	Sands from Zandvliet and Merksem	A0226	Undifferentiated sands from Lillo and Poederlee
				A0224	Clay sand from Kruisschans		
				A0225	Sands from Oorderen and Luchtbal		
		A0230	Pleistocene and Pliocene Aquifer System - east	A0231	Sand from Mol	A0232	Kiezeloölit sand 1
						A0233	Kiezeloölit clay 1
						A0234	Kiezeloölit sand 2
						A0235	Kiezeloölit clay 2
						A0236	Kiezeloölit sand 3
						A0237	Kiezeloölit clay 3
		A0238	Kiezeloölit sand 4				
A0240	Clay sand from Kattendijk and Kasterlee						
A0250	Miocene Aquifer system	A0251	Sand from Diest outside the Roerdalslenk	A0252	Sands from Diest and Bolderberg within the Roerdalslenk		
		A0253	Bolderberg sand				

					outside the Roerdalslenk			
				A0254	Sands of Berchem and Voort outside the RDS	A0255	Voort sand 1	
						A0256	Voort clay 1	
						A0257	Voort sand 2	
				A0258	Sandy part of Eigenbilzen			
A0300	Boom Aquitard			A0301	Clay part of Eigenbilzen			
				A0302	Clay-silt from Boeretang			
				A0303	Clay from Putte			
				A0304	Clay from Terhagen			
				A0305	Silt from Belsele-Waas			
A0400	Oligocene Aquifer System	A0410	Sand from Kerniel					
		A0420	Clay from Kleine-Spouwen					
		A0430	Ruisbroek-Berg Aquifer	A0432	Sand from Ruisbroek	A0431	Berg sand	
						A0433	Sand from Kerkom	
						A0434	Clay sand from Alden Biesen	
		A0440	Tongeren Aquitard	A0442	Sandy clay from Watervliet	A0441	Clay from Henis	
		A0450	Onder-Oligoceen Aquifer System	A0453	Clay sand from Bassevelde	A0451	Sand from Neerrepen	
						A0452	Clay sand from Grimmeringen	
A0500	Bartoon Aquitard system			A0501	Bartoon clay 1			
				A0502	Bartoon sand 1			
				A0503	Bartoon clay 2			
				A0504	Bartoon sand 2			
				A0505	Bartoon clay 3			
A0600	Ledo Paniseliaan Brusseliaan Aquifer system	A0610	Wemmel-Lede Aquifer	A0611	Sand from Wemmel			
				A0612	Sand from Lede			
		A0620	Sand from Brussels					
		A0630	Deposits from the Paniseliaan	A0631	Sand from Oedelem			
				A0632	Sandy clay of Beernem			
		A0633	Sand from Aalterbrugge and Vlierzele					
A0700	Paniseliaan Aquitard System			A0701	Clay sand from Pittem			
				A0702	Clay from Merelbeke			
A0800	Ieperiaan Aquifer System			A0801	Sand from Egem			
				A0802	Clay from Egemkapel			
				A0803	Silt from Kortemark and sand from Mont-Panisel			
A0900	Ieperiaan Aquitard System			A0901	Clay from Aalbeke			
				A0902	Sandy clay from Roubaix	A0903	Clay sand from Mons-en-Pévèle	
				A0904	Clays from Orchies, Mont-Héribu and The Zoute			
A1000	Paleoceen Aquifer System	A1010	Landeniaan Aquifer system	A1011	Sand from Knokke	A1012	Sandy deposits from Loksbergen and Dormaal	
				A1013	Sand from Grandglise			
		A1020	Landeniaan and Heersiaan Aquitard	A1021	Silty deposits from Halen and Tufsteen van Lincent			
				A1022	Clays from Waterschei and Beselare			
		A1030	Heersiaan and Opglabbeek Aquifer system	A1031	Clay marls from Maaseik			
				A1032	Marls from Gelinden			
				A1033	Sand from Orp			
				A1034	Sand from Eisdén			
A1035	Clay from Opoeteren							
A1100	Krijt Aquifer system			A1101	Kalkarenite from Houthem			
				A1102	Kalkarenites from Maastricht and Kunrade			
				A1103	Chalk deposits from Gulpen and Nevele, sands and marls from Vaals and Dorne and the Turoon marls			
				A1104	Sand from Aachen			
A1200	Jura - Trias - Perm	A1210	Jura (incl. Sleen)					
		A1220	Trias (excl. Sleen) and Perm					
A1300	Pedestal	A1310	Boven-Carboon (coal terrain and layers)					
		A1320	Kolenkalk (incl. Wealdiaan)					
		A1330	Devoon					
		A1340	Cambro-Siluur					

			Massif van Brabant	
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Seen to be attached to the Flemish Government Decree of 21 June 2024 amending the Flemish Government Decree of 1 June 1995 on general and sectoral provisions on environmental hygiene, the VLAREL of 19 November 2010 and the Flemish Government Decree of 27 November 2015 implementing the decree of 25 April 2014 on environmental permits, as regards water regulations.

Brussels, 21 June 2024.

The Minister-President of the Flemish Government,

Jan JAMBON

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

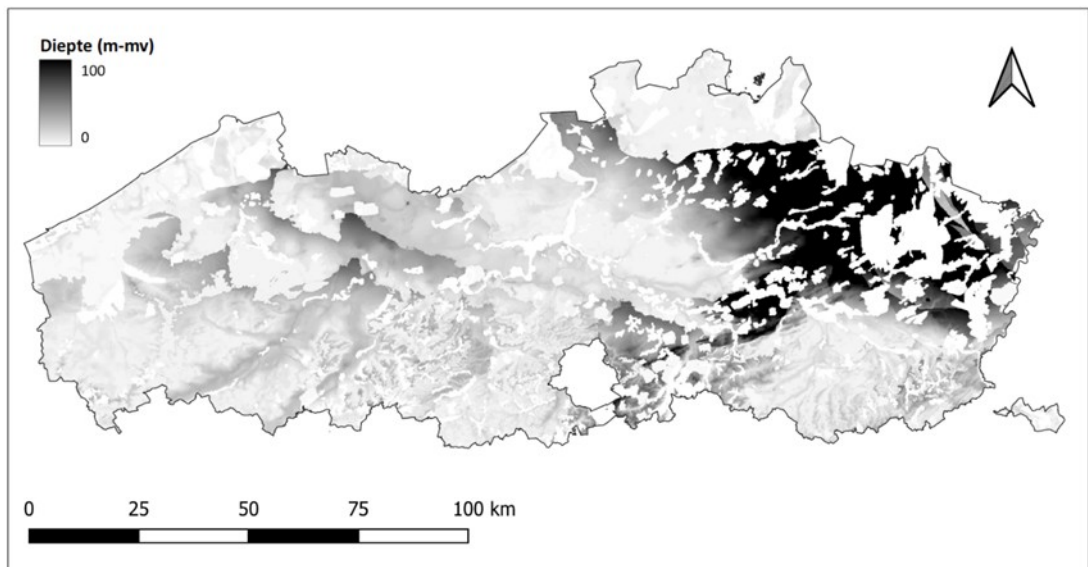
Zuhal DEMIR

Annex 2 to the Decree of the Flemish Government amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene, the VLAREL of 19 November 2010, and the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit, as regards water regulations.

Annex 2ter of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene

Annex 2ter. Map with depth criteria for heading 53.8

On the map available for consultation at <http://dov.vlaanderen.be>, indicate the location of groundwater extraction. The value you will then receive is a criterion for the classification in heading 53.8.



”

Seen to be attached to the Flemish Government Decree of 21 June 2024 amending the Flemish Government Decree of 1 June 1995 on general and sectoral provisions on environmental hygiene, the VLAREL of 19 November 2010

and the Flemish Government Decree of 27 November 2015 implementing the decree of 25 April 2014 on environmental permits, as regards water regulations.

Brussels, 21 June 2024.

The Minister-President of the Flemish Government,

Jan JAMBON

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

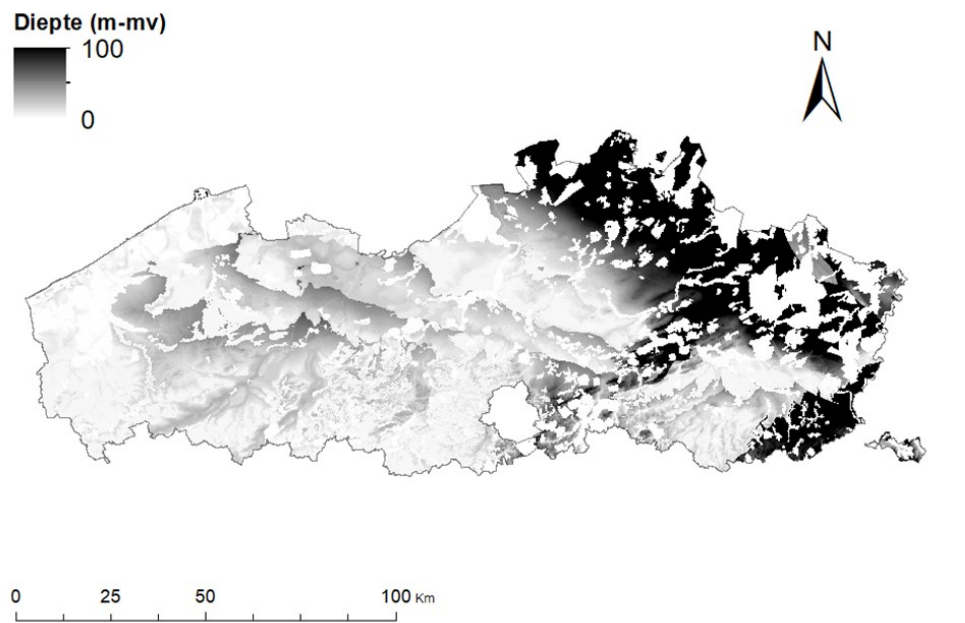
Zuhal DEMIR

Annex 3 to the Decree of the Flemish Government amending the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene, the VLAREL of 19 November 2010 and the Decree of the Flemish Government of 27 November 2015 implementing the Decree of 25 April 2014 on the environmental permit, as regards water regulations.

Annex 2quater of the Decree of the Flemish Government of 1 June 1995 laying down general and sectoral provisions on environmental hygiene

Annex 2quater. Map with depth criteria for heading 53.6

On the map available for consultation at <http://dov.vlaanderen.be>, indicate the location of groundwater extraction used for thermal energy storage in aquifers. The value you will then receive is a criterion for the classification in heading 53.6.



Seen to be attached to the Flemish Government Decree of 21 June 2024 amending the Flemish Government Decree of 1 June 1995 on general and

sectoral provisions on environmental hygiene, the VLAREL of 19 November 2010 and the Flemish Government Decree of 27 November 2015 implementing the decree of 25 April 2014 on environmental permits, as regards water regulations.

Brussels, 21 June 2024.

The Minister-President of the Flemish Government,

Jan JAMBON

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

Zuhal DEMIR