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If a whole or part of a paragraph has been amended, the date of the amending regulation appears in square brackets at the end of the paragraph. If a whole paragraph or sub-paragraph has been deleted, the date of the deletion appears in square brackets beside the deleted paragraph or sub-paragraph.

Republic of Latvia

Cabinet

Regulation No. 1032

Adopted 27 December 2011

**Regulations Regarding Landfill Sites**

[*12 October 2021*]

*Issued pursuant to*

*Section 7, Paragraph one, Clause 6, Section 12, Paragraph two, Clause 6, Section 22, Paragraphs 1.1 and 1.2, and Paragraph two, Clauses 2, 4, 5, and 6 of the Waste Management Law*

[*12 October2021*]

**1. General Provisions**

1. The Regulation prescribes:

1.1. the requirements for the construction of landfill sites, management of landfill sites and waste dumps, and closure and re-cultivation of such landfill sites and waste dumps;

1.2. the procedures by which landfill sites shall be closed and re-cultivated;

1.3. the requirements for the re-cultivation of a closed waste dump and for the repeated re-cultivation of a re-cultivated waste dump after digging up thereof and resorting of waste, including the requirements for the monitoring and maintenance of such waste dump after re-cultivation;

1.4. the procedures for a manager of a landfill site to measure the contents, mass, and volume of the waste disposed of in the landfill site;

1.5. the criteria for the establishment that the municipal waste has been prepared for disposal;

1.6. the amount of and the time period for the reduction of the amount of municipal waste disposed of in the landfill site for municipal waste;

1.7. the criteria according to which the achievement of the objectives in respect of the reduction of the amount of waste disposed of in the landfill site for municipal waste is assessed;

1.8. the procedures, time periods for and the manner in which the owner or manager of a landfill site for municipal waste submits a report on the reduction of the amount of waste disposed of in the landfill site for municipal waste;

1.9. the requirements for the content of the plan to extend the time for the achievement of the objectives in respect of the reduction of the amount of waste to be disposed of in the landfill site for municipal waste (hereinafter – the extension plan).

[*3 November 2015; 21 August 2018; 12 October 2021*]

2. The following terms are used in the Regulation:

2.1. inert waste – waste that does not undergo significant physical, biological or chemical transformations, it does not dissolve, burn and otherwise physically or chemically react, it does not react with other substances or materials with which it comes into contact, and also does not endanger human life, health or the environment. Waste leaching is negligible, the content of polluting substances in waste and the ecotoxicity of leachate is insignificant and does not endanger the quality of surface water and groundwater;

2.2. biodegradable waste – waste that is capable of undergoing anaerobic or aerobic decomposition;

2.3. liquid waste – waste that in disposal conditions is in a liquid aggregate state, including waste waters, except sludge;

2.4. leachate – any liquid which is formed by percolating through the waste disposed of within a landfill site or waste dump, and is accumulated in the landfill site or waste dump or is emitted from it;

2.5. landfill gases – all the gases generated from the decomposition processes of the landfilled waste. Gases generated in a landfill site as a result of the recovery or recycling of biological waste shall also be considered landfill gases;

2.6. re-cultivation – a set of measures to be performed in a territory polluted with waste in a closed landfill site, in a closed part of a landfill site or a waste dump in order to eliminate the adverse effect of the waste on the environment and human health and to ensure integration of the territory polluted with waste into the surrounding landscape;

2.7. eluate – the solution obtained by a laboratory leaching test;

2.8. waste treatment – the physical, thermal, chemical, mechanical (including sorting) or biological processes which change the characteristics of the waste, reduce its volume or hazardous nature, speed up decomposition or facilitate waste recycling and recovery;

2.9. operator – a natural person or a legal person which manages a landfill site or a waste dump;

2.10. isolated settlement – a settlement with no more than 500 inhabitants and no more than 5 inhabitants per square kilometre and where the distance to the nearest urban agglomeration with at least 250 inhabitants per square kilometre is not less than 50 kilometres or with difficult access by road to such nearest urban agglomeration, due to harsh meteorological conditions during a significant part of the year;

2.11. underground storage – a permanent waste storage facility in a deep geological cavity, for example, a salt or potassium mine;

2.12. [13 December 2016].

[*12 October 2021*]

3. The Regulation shall apply to landfill sites and waste dumps, including waste generation sites where the waste producer disposes of them, and also specially equipped sites for the storage of waste where waste is stored for more than a year, except:

3.1. locations of unloading of waste where it is prepared for transportation for the purpose of recovery, recycling, treatment or disposal at another location;

3.2. locations where waste is stored before disposal thereof if the waste is stored for not longer than one year, and locations where waste is stored before treatment or recycling thereof if the waste is stored for not longer than three years;

3.3. working of waste water sludge, river bed deepening sludge and similar materials in soil for fertilisation or improvement;

3.4. utilisation of inert waste for territory development if such waste is suitable for the relevant purpose or for construction work on landfill sites;

3.5. distribution of sludge along water bodies and watercourses from which they have been removed in order to deepen the bed, or distributing them in surface waters, including the bed or base thereof, if the sludge is non-hazardous in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

3.6. [12 October 2021].

3.1 The Regulation shall not apply to the management of waste from the mineral extraction industry which is governed by the laws and regulations regarding the management of waste from the mineral extraction industry.

[*12 October2021*]

4. Landfill sites shall be classified into the following categories:

4.1. landfill sites for hazardous waste;

4.2. landfill sites for municipal waste;

4.3. landfill sites for inert waste.

**2. Construction of Landfill Sites**

5. A place for construction of a landfill site shall be selected in accordance with the territorial planning of the local government in the territory of which it is planned to construct the landfill site. The place for construction of a landfill site shall be selected taking into account:

5.1. the distance from residential areas, tourism objects, from areas used for recreation and health care, and also from water bodies, watercourses and agricultural land;

5.2. limitations in respect of all types of protection zones at a possible construction site of a landfill;

5.3. geological and hydro-geological conditions at a possible construction site of a landfill;

5.4. possibility of flooding, subsidence, landslides or avalanches at a possible construction site of a landfill;

5.5. direction of dominant winds in relation to residential areas, tourism objects and areas used for recreation and health care;

5.6. location of objects of increased danger and the possible undesirable effect thereof on the landfill site, and also the possible effect of the landfill site on objects of increased danger.

6. It is prohibited to construct landfill sites in:

6.1. locations where it is prohibited in accordance with the laws and regulations regarding the protection zones or specially protected nature territories;

6.2. territories in which during the whole period of the landfill site operation the maximum level of groundwater cannot be ensured to be lower than one metre below the base of the landfill site;

6.3. active karst zones.

7. If construction of a landfill site is to be financed in full or in part from State or local government budget resources or financial resources of international financial institutions, the European Union, the Member States thereof or other states, the submitter of the project shall, before commencing construction of the landfill site or a stage thereof, prepare a feasibility study of the landfill site construction. The feasibility study shall include the following information:

7.1. information on the region where the landfill site for disposal of collected waste is intended to be constructed:

7.1.1. description of the relevant territory, size and density of population in the relevant region, and also types of entrepreneurial activity and characterisation of the infrastructure;

7.1.2. sources of waste generation, amount and composition of waste, types of waste to be disposed of, distance between the location of the intended landfill site and significant sources of waste generation, existing waste management infrastructure;

7.1.3. institutional, technical, and economic aspects of waste management in the relevant territory, also the current and planned tariff system;

7.1.4. forecasts for changes in the amount, composition, and types of waste to be generated and disposed of in the landfill site during the intended period of operation of the landfill;

7.1.5. technological alternatives for separate waste collection, treatment, recycling, and disposal of waste, expenses for the introduction and use thereof;

7.1.6. socio-economic situation in the relevant territory, planned tariff system and impact thereof on the paying capacity of the inhabitants;

7.1.7. compliance of the construction intention of the landfill site with the conditions of the regional waste management plan, if such has been approved;

7.1.8. informing of the public about the waste management system and tasks to be solved within the framework thereof;

7.1.1 a description of the waste management activities planned at the landfill site;

7.2. information on the financing possibilities and scheme for construction of the landfill site and the waste management system related thereto, and the calendar schedule for the forecasted fulfilment of works;

7.3. information on the possible place for construction of the landfill site:

7.3.1. conformity with the development programme and spatial plan of the relevant administrative territory, if such have been drawn up;

7.3.2. data of engineering-geological and hydrogeological surveys;

7.3.3. information on the documents certifying land ownership rights or rights of use;

7.3.4. need to change the type of land use;

7.4. general layout of the landfill site, including access roads and external engineering networks;

7.5. a description of the infrastructure (including civil engineering structures for environmental protection) planned at the landfill site;

7.6. plan for the landfill site management, closure, re-cultivation, monitoring, and control;

7.7. information on bridges, roads, and railway network as well as other communications which directly affect the stream of waste to the landfill site;

7.8. information on the forecasted costs for the construction, management, closure, re-cultivation, monitoring, and control of the landfill site;

7.9. information on the possibilities to ensure co-financing for implementing the project;

7.10. information on the conformity of the planned landfill site project with the State and respective regional waste management plan.

[*3 November 2015; 13 December 2016*]

8. A submitter of a project shall submit the feasibility study drawn up in accordance with the requirements of Paragraph 7 of this Regulation to the Ministry of Environmental Protection and Regional Development. In order to inform the local government in the administrative territory of which the respective landfill site is located, the Ministry of Environmental Protection and Regional Development shall send to it the feasibility study drawn up by the submitter of the project. The Ministry of Environmental Protection and Regional Development shall evaluate and accept the feasibility study within a month from the day of receipt thereof or request to make corrections in a specific period of time.

9. The feasibility study shall be used in the minimum composition of a building design and for drawing up the building design.

[*3 November 2015*]

10. A submitter of a project shall draw up a building design in the minimum composition after acceptance of the feasibility study has been received from the Ministry of Environmental Protection and Regional Development, if Paragraph 7 of this Regulation applies, the environmental impact assessment has been completed, and the opinion of the State Environmental Monitoring Bureau on the final report has been received.

[*3 November 2015*]

11. The requirements for the construction design of a landfill site laid down in Chapter 3 of this Regulation shall be taken into account when drawing up a building design in the minimum composition and a building design of the landfill site.

[*3 November 2015*]

12. Construction of a landfill site shall be performed in accordance with the requirements of the laws and regulations governing construction.

[*3 November 2015*]

13. [3 November 2015]

14. Prior to commencing the operation of a landfill site, the regional environmental board of the State Environmental Service (hereinafter – the board) shall inspect the landfill site to assess the conformity thereof with the issued permit for the performance of Category A or B polluting activity.

[*13 December 2016*]

**3. Requirements for a Construction Design of Landfill Sites**

[*3 November 2015*]

15. [3 November 2015]

16. In order to ensure the operation of a landfill site, the establishment of the necessary infrastructure shall be provided for in the building design.

17. The infrastructure of a landfill site shall include:

17.1. an access road;

17.2. a power line (cable);

17.3. an electronic communications network line;

17.4. an external water supply for fire service activities (a water-pipe and (or) an artificial water reservoir);

17.5. a waste acceptance and treatment zone;

17.6. internal roads and areas;

17.7. a waste disposal zone;

17.8. an economic zone, including premises for employees complying with the requirements of laws and regulations;

17.9. a leachate treatment plant.

18. A waste acceptance and treatment zone shall have:

18.1. a control point intended for:

18.1.1. registration of waste loads, visual examination of waste, weighing of waste loads, and sending of loads to the waste disposal or treatment site;

18.1.2. checking and registering of vehicles leaving the landfill site;

18.2. a waste treatment and sorting site which shall be equipped with:

18.2.1. a wastewater drainage system;

18.2.2. a water-proof and chemically resistant hydro-technical bituminous concrete or concrete surface, or an anti-filtration layer installed under the standard bituminous concrete or concrete surface. The filtration ratio shall not exceed 10–9m/s for landfill sites for municipal and hazardous waste and not more than 10–7m/s for landfill sites for inert waste. The composition and thickness of the surface layers shall be determined in the building design;

18.2.3. appropriate technological equipment if biodegradable waste is to be accepted at the landfill site;

18.2.4. appropriate technological equipment if waste sorting and pressing is to be performed at the landfill site;

18.3. an area for washing the vehicles and technical equipment of the landfill site, and for the disinfecting of tyres.

19. Access roads to a landfill site shall be designed so that the transport for waste transportation has as little effect on traffic safety as possible and does not cause inconvenience to the local population.

20. The internal roads that connect separate buildings of the landfill site and ensure undisturbed and safe movement of transport at the landfill site and areas used for technological processes shall be designed in accordance with the purposes of utilisation thereof. They may have a surface of bituminous concrete, gravel or crushed stone.

21. A waste disposal zone shall be designed in the building design for a long-term and safe storage of waste. One or several waste disposal compartments for unloading, compacting, and disposing of waste shall be provided for when drawing up a building design of the zone.

22. The following shall be provided for in the building design of waste disposal compartments:

22.1. a specially constructed anti-filtration surface in accordance with the requirements of Paragraphs 24, 26, and 27 of this Regulation;

22.2. a leachate and wastewater collection and drainage system;

22.3. a landfill gas collection and drainage system;

22.4. a surface water and groundwater pollution monitoring system;

22.5. movable fences around a waste disposal compartment;

22.6. protective walls in conformity with the planned waste disposal height.

22.1 If a landfill site is located in the territory of centralised water supply service provision, water consumption for fire service activities shall be not less than 35 litres per second per one fire extinguishing occasion. Fire hydrants shall be located in the external engineering network of water supply in such a way as to ensure that at least two fire hydrants are available for fire service activities and that the distance between the landfill site and fire hydrants is not more than 200 metres.

[*21 August 2018*]

22.2 If a landfill site is not located in the territory of centralised water supply service provision, the water required for fire service activities at the landfill site shall be provided from two closed or open artificial water reservoirs located on opposite sides of the landfill site not closer than 30 metres from the outer pile of waste, taking into account the total amount of water required. The amount of water within the artificial water reservoirs shall be calculated on the basis of the consumption of the water used for fire service activities from the external water supply, i.e. 35 litres per second, and the fire extinguishing duration of three hours. The maximum time for restocking water used for fire service activities shall not exceed 72 hours.

[*21 August 2018*]

22.3 If it is intended to store such waste above the ground (prior to further treatment, disposal, or removal thereof from the landfill site) which due to the moisture content and calorific value thereof can be classified as combustible waste, the permissible area of one pile at the landfill site shall not exceed 2000 m2, whereas the height thereof shall not exceed 8 metres. A distance of 10 metres shall be ensured between the piles. If such waste is stored in the territory of the landfill site that by combustion or temperature forms a melting mass (mixture of substances), bunded areas shall be created in order to prevent the spillage of this mass outside the bunded area.

[*21 August 2018*]

23. The base and internal walls of the waste disposal compartment shall have an insulating layer made of natural material and shall conform to the following requirements:

23.1. for landfill sites for hazardous waste the thickness of the insulating layer made of natural material shall be not less than five metres, ensuring that the rock filtration ratio is not more than 10–9m/s;

23.2. for landfill sites for municipal waste the thickness of the insulating layer made of natural material shall be not less than one metre, ensuring that the rock filtration ratio is not more than 10–9m/s;

23.3. for landfill sites for inert waste or parts of landfill sites intended for the disposal of inert waste the thickness of the insulating layer shall be not less than one metre, ensuring that the rock filtration ratio is not more than 10–7m/s.

[*13 December 2016*]

24. If the insulating layer made of natural material referred to in Paragraph 23 of this Regulation cannot be ensured in a potential landfill construction site, an artificial insulating layer, the thickness of which is not less than 0.5 metres and which ensures that the rock filtration ratio conforms to the requirements referred to in Paragraph 23 of this Regulation, shall be ensured for the base and internal walls of the waste disposal compartment.

25. Above the insulating layer made of natural material or artificial insulating layer of landfill sites, an artificial waterproofing layer and at least 0.5 metres thick layer of well-filtrating soil or material shall be installed the filtration ratio of which is at least 10–3m/s and such layer shall have drainage pipes or a drainage system for the collection and drainage of leachate, and also the possibility of washing the drainage system shall be ensured.

26. Leachate shall be discharged outside the waste disposal compartment to installations for leachate accumulation. Installations for leachate accumulation shall be equipped with a piping and pumping system for discharging of the leachate to leachate treatment plants at the landfill site. In order to decrease the volume of the leachate, it may be used for spraying above the disposed of waste. Equipment for the leachate inlet volume measuring and the possibility for taking of samples of leachate shall be ensured in leachate accumulation installation and waste water treatment plant. Installations for leachate accumulation shall be constructed of waterproof and chemically stable material.

27. Leachate treatment plants shall be designed taking into consideration the amount of leachate and pollution variations depending on the amount of precipitation and the season.

28. A collecting system for landfill gases shall be designed for all landfill sites for municipal waste where biodegradable waste is accepted. The collected gas shall be treated and used for producing energy. If the collected gas cannot be utilised for the production of energy, it shall be flared.

29. Landfill gases shall be collected, treated, and utilised so as to create no threat to human health or the environment.

30. All other infrastructure elements required for ensuring the operations of the landfill site, which include structures and engineering communications, shall be placed in an economic zone.

31. The landfill site shall be separated from the surrounding territory with a fence at least two metres high. Information on the operator shall be placed at the landfill site, i.e. information stating the contact details of the operator (address, contact telephone, electronic mail address, and website of the landfill site) and the working hours of the landfill site (the time when waste is accepted at the landfill site). All entrances to the landfill site shall be enclosed with barrier-type gates or gates that are locked during the time when waste is not accepted at the landfill.

[*13 December 2016*]

32. A greenery area shall be arranged around a landfill site or parts thereof in places where it is determined by the requirements of building design regulations.

**4. Management of Landfill Sites and Waste Dumps**

**4.1. General Requirements for the Acceptance of Waste at Landfill Sites and Waste Dumps**

33. In landfill sites it shall be permitted to dispose of only such waste which has been treated and prepared for disposal, except for such inert waste the treatment of which is not technically possible, or such waste the treatment of which will not decrease the amount thereof or the possible hazard to human life, health and the environment.

34. In landfill sites it is not permitted to accept for disposal:

34.1. liquid waste;

34.2. sludge of waste water treatment plants if the content of dry matter therein is less than 15 %;

34.3. organic waste of food industry and wood processing waste if it is not composted or used for the acquisition of landfill gas;

34.4. waste which in landfill site conditions is explosive, corrosive, combustible or flammable in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

34.5. waste which forms after human or animal health care and which is infectious in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

34.6. whole end-of-life tyres and cut tyres, with the exception of whole end-of-life tyres which are used for engineering work in a landfill site or waste dump, bicycle tyres and tyres the external diameter of which is more than 1400 mm;

34.7. waste that contains unidentified chemical substances produced in research, educational or technical activity, the effect of which on humans or the environment is not known (substance and product residues from laboratories), in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

34.8. other waste which does not conform to the waste acceptance criteria laid down in this Regulation;

34.9. waste that has been collected separately in accordance with the laws and regulations regarding separate waste collection, preparation for re-use, recycling, and material recovery for the purpose of the preparation thereof for re-use, recycling, and material recovery, unless it is waste arising from further recycling or recovery processes of separately collected waste and the disposal of which in the landfill site ensures the best environmental outcome in accordance with the priority order of the waste management activities laid down in the laws and regulations regarding waste management.

[*12 October 2021*]

35. It is prohibited to mix waste in order to achieve conformity thereof with the waste acceptance criteria.

36. Prior to accepting waste, the operator shall obtain a description of waste (Annex 1) from the waste supplier, providing a certification that the delivered waste conforms to the conditions of the permit (for the performance of Category A or B polluting activities) issued for the operation of the landfill site and the waste acceptance criteria for the respective Category of landfill sites referred to in Sub-chapter 4.2, 4.3, or 4.4 of this Regulation; however, if municipal waste is accepted at the landfill site – the criteria for the establishment that the municipal waste has been prepared for disposal if preparation of waste for disposal has not been performed at the landfill site. If a contract has been entered into between a waste supplier and an operator regarding the disposal of waste in the landfill site, then the description of waste shall be part of the contract. It shall be indicated in a contract how the parties check the conformity of the waste delivered to the landfill site or waste dump with the requirements determined in the contract and also the action in cases if the waste delivered fails to conform to the requirements of the contract. If the abovementioned contract has not been entered into, a separate description of waste shall be submitted for each waste load.

[*21 August 2018*]

37. Waste shall be accepted for disposal in a landfill site if it conforms to:

37.1. the conditions of a permit issued for the relevant landfill site (regarding the performance of Category A or B polluting activities);

37.2. the relevant description of waste;

37.3. the waste acceptance criteria referred to in Sub-chapter 4.2, 4.3, or 4.4 of this Regulation;

37.4. the criteria for the establishment that the municipal waste has been prepared for disposal.

[*21 August 2018*]

38. The operator shall ensure a visual inspection of the waste before and after unloading of the waste at the landfill site in order to determine the conformity of the delivered waste with:

38.1. the description of waste;

38.2. the waste acceptance criteria referred to in Sub-chapter 4.2, 4.3, or 4.4 of this Regulation;

38.3. in the case of unloading of municipal waste, the criterion referred to in Paragraph 58.1 of this Regulation for the establishment that the municipal waste has been prepared for disposal.

[*21 August 2018*]

39. In order to determine the conformity of waste with the waste acceptance criteria referred to in Sub-chapters 4.2, 4.3, and 4.4 of this Regulation, the methods referred to in Annex 2 to this Regulation for the sampling of waste and analysis shall be used for the sampling of waste and analyses. Samples of waste for the preparation of the chemical analysis of the description of waste shall be obtained and conformity testing shall be performed by laboratories which are accredited by the national accreditation body in accordance with the laws and regulations governing assessment, accreditation, and supervision of conformity assessment bodies, or by laboratories and bodies to which a competent authority of a Member State of the European Union, a country of the European Economic Area, the Member States of the European Free Trade Association, or the Organisation for Economic Co-operation and Development has issued a confirmation or attestation in conformity with the rules laid down in the European Union Member States attesting that the relevant studies have been performed and supervised in accordance with the principle of good laboratory practice.

[*13 December 2016*]

39.1 In order to determine the contents of waste and conformity with the criteria for the establishment that the municipal waste has been prepared for disposal, the operator shall ensure the sampling of municipal waste and determination of the contents of municipal waste in accordance with Sub-chapter 4.1.1 of this Regulation.

[*21 August 2018*]

40. Waste conformity with the waste acceptance criteria (Sub-chapters 4.2, 4.3, and 4.4 of this Regulation) shall not be checked:

40.1. for the waste referred to in Paragraphs 60 and 68 and Annex 3 to this Regulation;

40.2. if the waste description (Annex 1) includes all necessary information on conformity of the waste with the waste acceptance criteria;

40.3. if a laboratory has provided an opinion in writing that it is impossible to perform the waste analyses or the relevant test procedures and criteria are not available.

41. In order to accept hazardous waste for disposal and check the conformity thereof with the description of waste, the operator of a hazardous landfill site shall ensure that sampling of hazardous waste is performed before the unloading of hazardous waste. Samples of hazardous waste shall be obtained and analyses thereof shall be performed by the laboratories which conform to the requirements referred to in Paragraph 39 of this Regulation. Samples of hazardous waste shall be stored for at least one month after sampling, and performance of analyses thereof shall be ensured during this period.

[*12 October 2021*]

42. If it is determined that the waste delivered is not disposable in a landfill site, it shall be returned to the supplier. The operator shall immediately inform the relevant board regarding non-conformity of the waste with the waste description.

43. The operator shall manage waste so as to:

43.1. prevent pollution of surface water and groundwater;

43.2. reduce the spreading of odours and dust;

43.3. avert spreading of top distillate of waste due to wind;

43.4. diminish noises;

43.5. avert the harmful activity of birds, rodents and insects;

43.6. prevent aerosol formation;

43.7. prevent fire, self-ignition of waste and leakage or spillage of hazardous waste due to damage in the packaging or container.

[*13 December 2016*]

44. The waste registered and accepted at a control point of a landfill site shall be sent to a site or container for sorting, recycling of recyclable materials or storage.

44.1 The mass of waste disposed of in a landfill site shall be determined by weighing the waste and the vehicles used for the transportation thereof at the control point referred to in Sub-paragraph 18.1 of this Regulation.

[*21 August 2018*]

44.2 The volume of waste disposed of in a landfill site shall be determined by annual topographic survey of the disposed waste layer or by other technical means, for example, unmanned aircraft or other types of aircraft which do not qualify as aircraft in accordance with the laws and regulations regarding aviation.

[*21 August 2018*]

44.3 The Ministry of Environmental Protection and Regional Development shall recommend to the national standardisation body, in accordance with the laws and regulations in the field of standardisation, a list of standards that may be applied for the fulfilment of the requirements referred to in Sub-chapter 4.1.1 of this Regulation (hereinafter – the applicable standards). The national standardisation body shall publish on its official website a list of the applicable standards adapted in the status of national standards which may be applied to fulfil the requirements referred to in Sub-chapter 4.1.1 of this Regulation.

[*21 August 2018*]

44.4 The operator shall ensure that the sampling and measurement of the contents of the waste referred to in Sub-chapter 4.1.1 of this Regulation are performed by using the methods which ensure that the data obtained are reliable, representative, and comparable. If the used methods conform to the requirements of the applicable standards, they shall be deemed to be conforming for meeting the requirements referred to in Sub-chapter 4.1.1 of this Regulation.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

44.5 The operator shall ensure that the contents of the waste referred to in Paragraph 56.10 of this Regulation is measured four times a year during the following reporting periods:

44.51. for the period of time from 1 January until 30 March of the current year;

44.52. for the period of time from 1 April until 30 June of the current year;

44.53. for the period of time from 1 July until 30 September of the current year;

44.54. for the period of time from 1 October until 31 December of the current year.

[*21 August 2018*]

45. The operator shall ensure employees with working conditions in accordance with the laws and regulations regarding safety at work and also with training regarding the technical aspects of waste management. A hazardous landfill site operator shall ensure that measures for reducing the hazardousness of hazardous landfill sites are performed in accordance with the laws and regulations regarding the criteria for determining objects of increased danger and the obligations of the owners (holders, managers) of such objects to ensure measures for reducing risks in the event of an accident.

[*13 December 2016*]

46. The operator shall register the activities performed with waste in a journal (Annex 4) of the landfill site operation. Waste accepted for disposal arriving at the landfill site from dug up landfill sites shall be recorded by the operator in a separate journal. If the operator registers the activities performed with waste electronically, the data registered shall be printed out once a quarter. Upon request, the operator shall issue a written statement to the waste supplier for each load of waste that has been accepted for disposal in the landfill site.

[*3 November 2015*]

47. The operator shall, within two months after the end of the calendar year, submit an annual report to the board. The annual report shall include the following information:

47.1. the amount (in tonnes) and types (according to the laws and regulations regarding waste classification and characteristics making waste hazardous) of waste at a landfill site during the reporting year that have been:

47.1.1. accepted;

47.1.2. disposed of;

47.2. the full and remaining capacity for the storage of waste in the landfill site in tonnes and cubic metres;

47.3. the volume of waste disposed of in the landfill site in cubic metres;

47.4. the amount and types of waste or recyclable materials removed from the landfill site;

47.5. recycling, storage, or disposal sites of waste or recyclable materials removed from the landfill site;

47.6. operation of the landfill gas collection system installed at the landfill site and the collected amount and contents of the gas;

47.7. the results of measurements of leachate volume and content analyses and the results of analyses of waste water discharged into the environment from the waste water treatment plants;

47.8. the measurements of the environmental parameters of the territory surrounding the landfill site in accordance with Annex 5 to this Regulation;

47.9. information on the measurements taken by the operator in respect of the measurements of contents of municipal waste and the results thereof in accordance with Part III of Annex 4 to this Regulation;

47.10. a copy of the municipal waste sampling plan referred to in Paragraph 56.2 of this Regulation;

47.11. information on the compliance of the disposed municipal waste with the criteria for the establishment that the municipal waste has been prepared for disposal in accordance with Part III of Annex 4 to this Regulation;

47.12. the amount of municipal waste (in tonnes) resulting from the preparation of municipal waste for recycling or recovery (including sorting of municipal waste and mechanical biological treatment of municipal waste) and disposed of in the landfill site for municipal waste;

47.13. the amount of municipal waste (in tonnes) resulting from the aerobic or anaerobic treatment of biodegradable municipal waste performed in the landfill site for municipal waste and disposed of in the landfill site for municipal waste.

[*21 August 2018; 12 October 2021*]

48. The board shall compile and submit the information included in the annual reports to the Ministry of Environmental Protection and Regional Development and to the State limited liability company Latvian Environment, Geology and Meteorology Centre. The State limited liability company Latvian Environment, Geology and Meteorology Centre shall ensure the accessibility of the relevant information to the public.

49. In order to reduce pollution of the environment, the operator shall ensure monitoring of the state of the environment in accordance with the requirements laid down in Annex 5 to this Regulation and also operational examination and maintenance of civil engineering structures for environmental protection. Sampling of the relevant samples and chemical analyses shall be performed by the laboratories referred to in Paragraph 41 of this Regulation.

50. The board shall determine sites in the vicinity of a landfill site or waste dump where the measurements of the environmental parameters referred to in Annex 5 to this Regulation and also the measurements of parameters of the full and partial chemical analyses to be performed within the scope of the monitoring referred to in Annex 5 to this Regulation and, where necessary, additional parameters shall be performed.

51. Before commencing disposal of waste in a landfill site, the operator shall ensure that samples of groundwater are taken in at least three control boreholes and that the full chemical analyses laid down in Paragraph 50 of this Regulation are performed for the groundwater to determine reference values for comparison with future samples. The abovementioned samples shall be obtained by the laboratories referred to in Paragraph 39 of this Regulation in accordance with the standard LVS ISO 5667-11:2011 L Water quality – Sampling – Part 11: Guidance on sampling of groundwaters (ISO 5667–11:2009).

[*13 December 2016*]

52. If environmental pollution is discovered in the vicinity of a landfill site or waste dump, the operator shall, within one working day from the moment of discovery of the pollution, inform the relevant board which shall, within five working days after receipt of the information provided by the operator, take the decision on the time periods and measures for the elimination of the causes of the environmental pollution and the consequences thereof, and shall inform the relevant operator thereof. The operator shall eliminate the causes of the environmental pollution and the consequences thereof in accordance with the measures and time periods laid down in the decision of the board.

[*13 December 2016*]

53. In order to control pollution of surface waters in the protection zone of a landfill site, at least two sampling points shall be installed upstream and downstream of the landfill site.

54. In order to control pollution of groundwater, a control borehole network for sampling and measuring the levels of groundwater shall be installed in the protection zone of a landfill site or waste dump. At least one borehole for the sampling of groundwater shall be installed at a location where the groundwater flows in the direction towards the landfill site or waste dump, and at least two boreholes in the direction of the groundwater flow from the landfill site or waste dump. If the existing data and hydro-geological conditions of the territory indicate a possibility of artesian water pollution, at least one deep borehole shall be installed for the control of artesian waters.

55. The operator shall ensure that for every control point installed to measure leachate leakage from the landfill site the leachate volume and composition is measured (Annex 5) and that a landfill gas monitoring system is installed in every waste disposal compartment.

56. The water balance method shall be used for the calculation of the volume of leachate from the landfill site, unless the operator has installed the leachate volume measurement equipment referred to in Paragraph 28 of this Regulation. The water balance shall be calculated by using data from the closest meteorological observation station to the landfill site in accordance with Annex 5 to this Regulation.

56.1 Prior to digging up a landfill site and commencing the work of resorting the waste located there, the operator shall ensure that groundwater is not polluted during the abovementioned works through previously created monitoring boreholes which shall be demarcated or tamped down.

[*3 November 2015*]

**4.1.1 Essential Requirements for the Sampling of Municipal Waste and Determination of the Contents of Waste**

[*21 August 2018 / Sub-chapter shall come into force on 1 January 2019. See Paragraph 92*]

56.2 The operator shall ensure that a municipal waste sampling plan is drawn up by 30 March of each year for the relevant calendar year. The following shall be specified in the plan:

56.21. the address of the municipal waste sampling point;

56.22. the date of sampling of the municipal waste;

56.23. the number and weight of municipal waste samples to be analysed;

56.24. the method of sampling of municipal waste in accordance with Paragraph 56.5 of this Regulation;

56.25. the method of preparation of municipal waste samples in accordance with Paragraph 56.6 of this Regulation.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.3 The operator shall ensure that the load of municipal waste arriving at the landfill site is weighed before sampling and the weight of the load is recorded and the inspection referred to in Paragraph 38 of this Regulation is carried out.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.4 The registered load of municipal waste is sent to a pre-selected sampling and sorting point for municipal waste at the landfill site.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.5 One of the following methods shall be used for sampling of municipal waste from the load of municipal waste:

56.51. sampling of municipal waste from a randomly selected number of loads over a specified period of time;

56.52. sampling of municipal waste from all loads within a specified period of time.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.6 One of the following methods shall be used for the preparation of samples of municipal waste:

56.61. the load of municipal waste to be sampled shall be unloaded into a conical pile and divided vertically into four equal parts by two imaginary lines. The two opposite quarters of the conical pile shall be mixed together into one sample in a conical pile which shall again be divided vertically into four equal parts by two imaginary lines, whereas the two remaining quarters shall not be included in the subsequent operations. These operations shall be repeated until the sample size of municipal waste referred to in Paragraph 56.7 of this Regulation is obtained;

56.62. the load of municipal waste from which the municipal waste sample is to be obtained shall be unloaded and spread in a layer of approximately 50 cm. The load of municipal waste shall be divided into four equal parts by two imaginary lines. The two opposite quarters of the pile shall be mixed together into one sample which shall again be divided vertically into four equal parts by two imaginary lines, whereas the two remaining quarters shall not be included in the subsequent operations. These operations shall be repeated until the sample size of municipal waste referred to in Paragraph 56.7 of this Regulation is obtained.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.7 The size of the municipal waste sample to be prepared from each load of municipal waste shall be between 100 and 250 kilograms.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.8 The operator shall provide the necessary equipment in order to obtain a representative sample of municipal waste to be taken from the total load of municipal waste in accordance with the methods of sampling and preparation of municipal waste referred to in Paragraphs 56.5 and 56.6 of this Regulation.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.9 The municipal waste sample shall be sorted manually according to the municipal waste fractions referred to in Paragraph 56.10 of this Regulation. After sorting, the waste of each municipal waste fraction shall be weighed and the weight thereof shall be registered.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.10 In determining the composition of municipal waste to be disposed of, municipal waste shall be separated into the following fractions:

56.101. paper and waste containing paper (for example, packaging, cardboard, carton, mixed paper, and cardboard waste);

56.102. plastic and waste containing plastic (for example, packaging, film, mixed plastic waste);

56.103. glass and waste containing glass;

56.104. waste containing metals;

56.105. biodegradable waste and biological waste;

56.106. construction and demolition waste;

56.107. electrical and electronic equipment waste;

56.108. battery and accumulator waste;

56.109. textile waste;

56.1010. bulky waste (at least one external dimension exceeds 50 cm);

56.1011. fine fraction (dimensions of municipal waste less than 10 mm);

56.1012. other municipal waste that does not correspond to the fractions referred to in this Clause.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.11 For each municipal waste fraction referred to in Paragraph 56.10 of this Regulation, its percentage in each municipal waste sample shall be determined by using the following formula:

|  |  |  |
| --- | --- | --- |
| K= | V | x 100 % where |
| M |

K – percentage of the municipal waste fraction;

V – weight of the municipal waste fraction material in tonnes;

M – total weight of the municipal waste sample in tonnes.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.12 The average percentage of the material of each municipal waste fraction in the disposed waste shall be calculated by using the following formula:

, where

 – the average percentage of the municipal waste fraction material;

*n*– the number of municipal waste samples in the respective sampling stage;

 – the calculated percentage of the municipal waste fraction in municipal waste samples in the respective sampling stage.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

56.13 The operator shall ensure that the laboratories or bodies referred to in Paragraph 39 of this Regulation:

56.131. take samples of the municipal waste referred to in Sub-chapter 4.1.1 of this Regulation;

56.132. determine the contents of municipal waste in accordance with Sub-chapter 4.1.1 of this Regulation;

56.133. determine whether the municipal waste to be disposed of meets the criterion referred to in Paragraph 58.1 of this Regulation for the establishment that the municipal waste has been prepared for disposal.

[*21 August 2018 / Paragraph shall come into force on 1 January 2019. See Paragraph 92*]

**4.2. Criteria for Acceptance of Waste at the Landfill Sites for Municipal Waste and Criteria for the Establishment that the Municipal Waste Has Been Prepared for Disposal**

[*21 August 2018*]

57. The disposal of the following waste is permitted at the landfill sites for municipal waste:

57.1. municipal waste that meets the criterion referred to in Paragraph 58.1 of this Regulation;

57.2. stable, solidified or vitrified, chemically inactive monolithic hazardous waste if such waste is disposed separately from biodegradable waste and if they conform to the requirements of the permit (regarding the performance of Category A or B polluting activities) issued to the relevant landfill site;

57.3. municipal waste of any other origin that meets the waste acceptance criteria referred to in Annex 6 to this Regulation and the criterion referred to in Paragraph 58.1 of this Regulation.

[*13 December 2016; 21 August 2018*]

58. The following waste shall be accepted at landfill sites for municipal waste without conformity testing for the limit values laid down in Annex 6 to this Regulation:

58.1. municipal waste which has arisen in households, except for those which may be classified as hazardous waste in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

58.2. separately collected municipal waste which has arisen in a household, except for those which may be classified as hazardous waste in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

58.3. similar municipal waste of other origin.

58.1 [*Paragraph shall come into force on 1 January 2030 and shall be included in the wording of the Regulation as of 1 January 2030. See Paragraph 94*]

58.2 [*Paragraph shall come into force on 1 January 2030 and shall be included in the wording of the Regulation as of 1 January 2030. See Paragraph 94*]

59. Municipal waste containing gypsum shall be disposed of in the storage of a landfill site for municipal waste where biodegradable waste is not disposed of.

60. Construction waste containing asbestos and other waste containing asbestos (hereinafter – waste containing asbestos) may be accepted and disposed of without additional tests in landfill sites for municipal waste (separate compartments thereof) or in landfill sites where only waste containing asbestos is disposed of, if it conforms to the requirements referred to in Sub-paragraph 57.2 of this Regulation. The following additional requirements shall be observed in compartments of landfill sites for municipal waste or in landfill sites where only waste containing asbestos is disposed of:

60.1. waste does not contain other harmful substances except for asbestos in a bound form, including fibres which are bound with a binding agent or packed in a plastic packaging;

60.2. only waste containing asbestos is accepted or it is disposed of in a separate compartment of a landfill site, if the waste containing asbestos is disposed of in the landfill site for municipal waste;

60.3. an area for the disposal of waste containing asbestos shall be covered with a layer of insulating material before each compacting of waste in order to prevent the distribution of asbestos fibres;

60.4. if the packaging of waste containing asbestos is damaged or it is not packed, it shall be immediately covered with a layer of insulating material. Before each compacting of waste it shall be covered again with a layer of insulating material and sprayed with water or leachate in order to prevent the spreading of asbestos fibres;

60.5. a landfill site or a compartment thereof shall be covered with a closing cover after complete filling to prevent the release of asbestos fibres into the environment;

60.6. no activities are performed at a landfill site or in a compartment thereof which could cause the release of asbestos fibres into the environment;

60.7. the plan of a landfill site or a compartment thereof where the place of disposal of waste containing asbestos is indicated shall be kept after closure of the landfill site;

60.8. after closure of a landfill site measures shall be taken to limit possible use of the land and prevent people from coming into contact with waste.

61. The operator shall perform a visual inspection of the waste or packaging and labelling of packaged waste before acceptance of waste and after unloading of waste at the landfill site where only construction waste containing asbestos is disposed of in order to determine the conformity of the waste delivered with the description of waste.

[*13 December 2016*]

62. If waste fails to conform to the requirements referred to in Paragraph 57 of this Regulation, chemical analyses thereof shall be performed in order to determine whether this waste conforms to the waste acceptance criteria at a landfill site for municipal waste laid down in Annex 6 to this Regulation.

**4.3. Waste Acceptance Criteria at the Landfill Sites for Inert Waste or Parts of Landfill Sites Intended for the Disposal of Inert Waste**

[*13 December 2016*]

63. Only inert waste shall be allowed to be disposed of in the landfill sites for inert waste or parts of landfill sites intended for the disposal of inert waste.

64. The inert waste referred to in Annex 7 to this Regulation is allowed to be accepted at the landfill site for inert waste or part of the landfill site intended for the disposal of inert waste without conformity testing if one or several types of waste referred to in Annex 7 to this Regulation are being supplied from one source generating the waste. If inert waste contains impurities (other materials and substances) in such amount that there exists a risk of pollution caused by waste, such waste shall not be accepted at the landfill site for inert waste or part of the landfill site intended for the disposal of inert waste.

65. Waste resulting from construction work, including demolition, contaminated with hazardous substances shall not be accepted at the landfill site for inert waste or part of the landfill site intended for the disposal of inert waste.

66. If a class of waste is not included in Annex 7 to this Regulation, chemical analyses of waste shall be performed in order to determine whether the waste conforms to the limit values referred to in Annex 3 to this Regulation for the acceptance of waste at the landfill site for inert waste or part of the landfill site intended for the disposal of inert waste.

**4.4. Waste Acceptance Criteria at Landfill Sites for Hazardous Waste**

67. It is allowed to dispose of such type of hazardous waste in a landfill site for hazardous waste which is referred to in the permit for performance of Category A or B polluting activities issued to the relevant landfill site and which conforms to the criteria referred to in Annex 8 to this Regulation.

68. At a landfill site for hazardous waste (in addition to the requirements referred to in Paragraphs 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, and 56 of this Regulation) the following shall be done:

68.1. determine the weight of each type of hazardous waste;

68.2. check the conformity of the delivered hazardous waste with the registration card-way bill for transportation of hazardous waste in accordance with the laws and regulations regarding the record-keeping, identification, labelling, and transportation of hazardous waste (including cross-border transport);

68.3. check the information on the methods used for waste treatment;

68.4. check the name and address of the supplier and waste producer;

68.5. once a year or in accordance with the information determined in the description of the waste, check whether the waste conforms to the description of waste and the determined waste acceptance criteria.

69. When accepting hazardous waste for disposal in a landfill site for hazardous waste, the operator shall ensure the performance of chemical analyses in order to determine whether the waste conforms to the limit values laid down in Annex 8 to this Regulation.

**5. Closure of Landfill Sites and Parts Thereof and Conditions for Closed Landfill Sites, Parts Thereof, and Waste Dumps**

[*3 November 2015*]

70. The board shall take the decision to close a landfill site or a part thereof if:

70.1. the designed capacity of the landfill site, on the basis of the information indicated in the permit of Category A or B polluting activities and provided in an annual report, has been filled;

70.2. the term of the permit of Category A or B polluting activities has expired and it has not been extended;

70.3. the requirements referred to in the permit of Category A or B polluting activities have been violated;

70.4. the environmental monitoring data indicate deterioration of the state of the environment and, in continuing the operation of the landfill site, it is not possible to rectify it;

70.5. a written request of the respective operator has been received which provides information on the reasons for closing the landfill site or a part thereof.

[*13 December 2016*]

70.1 After the board has taken the decision to close a landfill site, a part thereof, or a waste dump, disposal of new waste shall be prohibited there.

[*3 November 2015; 13 December 2016*]

70.2 The operator shall ensure that the closed landfill site, part thereof, or waste dump is not accessible to unauthorised persons.

[*3 November 2015*]

71. [3 November 2015]

**6. Re-cultivation of Landfill Sites, Parts Thereof, and Waste Dumps**

[*3 November 2015*]

72. Waste dumps shall be divided into three categories according to the hazardousness thereof and potential environmental pollution caused thereby and in respect of the requirements for re-cultivation:

72.1. Category I – waste dumps which cause a potentially small risk;

72.2. Category II – waste dumps which cause a potentially medium risk;

72.3. Category III – waste dumps which cause a potentially large risk.

73. Waste dumps of Category I are waste dumps which do not cause adverse effect on human health and the environment, and also if:

73.1. the assessed amount of waste disposed of does not exceed 50 000 t (approximately 100 000 m3);

73.2. it is possible to determine that only municipal waste or production waste equivalent thereto and non-polluted construction waste is disposed of.

74. Waste dumps of Category II are waste dumps which can cause adverse effect on human health and the environment (soil, groundwater and surface water, and air), the adverse effect caused thereby has been long-term, and also if:

74.1. the assessed amount of waste disposed of does not exceed 175 000 t (approximately 350 000 m3);

74.2. it is possible to determine that municipal waste or production waste equivalent thereto and non-polluted construction waste is disposed of.

75. Waste dumps of Category III are waste dumps which have caused adverse effect on human health and the environment (soil, water, and air) and the adverse effect caused thereby has been long-term, and also if:

75.1. the assessed amount of waste disposed exceeds 175 000 t (approximately 350 000 m3);

75.2. waste with a large content of hazardous substances has been disposed of.

76. The requirements laid down for landfill sites of Category II shall be applied in the re-cultivation of landfill sites for inert waste or parts of landfill sites intended for the disposal of inert waste, but the requirements laid down for landfill sites of Category III shall be applied in the re-cultivation of landfill sites for municipal and hazardous waste.

[*13 December 2016*]

77. If a landfill site has been divided into compartments for waste disposal, re-cultivation shall be performed in compartments.

77.1 After digging up a landfill site and the completion of the work of resorting the waste located there, the operator shall perform the re-cultivation of the landfill site.

[*3 November 2015*]

78. In order to ensure the inclusion of a closed landfill site or waste dump into the landscape and further use of the territory, the operator shall ensure the drawing up of a project for the re-cultivation of the landfill site or waste dump.

[*13 December 2016*]

79. In addition to the documents specified in the construction regulations regarding port hydrotechnical, heat energy, gas and other separately non-classified engineering structures, the following documents shall be required for the commencement of the building design for the re-cultivation of a closed landfill site, a part thereof, or a waste dump:

79.1. a decision of the relevant local government and an opinion of competent authorities on the closure of the landfill site or waste dump;

79.2. a profile of the initial state of the waste disposal site, if such is available;

79.3. information on the content and amount of waste disposed of;

79.4. information on the geological and hydro-geological conditions of the territory;

79.5. monitoring data of the landfill site, a part thereof, or a waste dump.

[*3 November 2015*]

80. The building design in the minimum composition and the building design for the re-cultivation of a closed landfill site, a part thereof, or a waste dump shall be drawn up in accordance with the requirements of the laws and regulations governing construction and according to the category of the closed landfill site, part thereof, or waste dump in accordance with the re-cultivation conditions referred to in Paragraph 85 of this Regulation.

[*3 November 2015*]

81. Re-cultivation of a closed landfill site, a part thereof, or a waste dump shall be performed in accordance with the regional waste management plan, if such has been approved, the requirements of the laws and regulations governing construction for the rebuilding of a structure and the category of the closed landfill site or waste dump in accordance with the re-cultivation conditions referred to in Paragraph 85 of this Regulation.

[*3 November 2015*]

82. The following conditions shall be conformed to when carrying out re-cultivation of a landfill site or a part thereof or a waste dump:

82.1. potentially recyclable waste shall be removed from the surface of the waste dump before re-cultivation and delivered to waste recycling sites;

82.2. waste shall be compacted and pushed in one heap, thus reducing the area of the waste dump. In carrying out re-cultivation, the shape for the surface and side slopes of the waste dump shall be formed;

82.3. when forming the side slopes of a waste dump, techniques and construction materials that prevent possible landslides, including geosynthetic construction materials, shall be used. When forming the surface and shape of the side slopes of the waste dump, the specific features of the terrain surrounding the waste dump shall be taken into account, as well as the possibility for collection and discharging of surface waters;

82.4. a top cover of 0.5 metres thick layer of soil with low water permeability or an appropriate anti-filtration layer the rock filtration ratio of which is 10–7m/s and the guaranteed service life of which is at least the operational period of the landfill site and the monitoring period after closure of the landfill site or waste dump shall be formed for Category I and II waste dumps and landfill sites for inert waste or parts of landfill sites intended for the disposal of inert waste after smoothing and compacting of the waste dump surface and side slopes;

82.5. waste of Category I waste dumps shall be transferred to a landfill site if this has been determined in the technical regulations issued by the board. A territory shall be covered with at least 10 cm thick fertile soil layer after waste transfer, and greening thereof shall be performed;

82.6. an insulating cover is necessary for Category III waste dumps and landfill sites for municipal waste after smoothing and compacting of the surface and side slopes of the waste dump;

82.7. an insulating cover of the waste dump surface for Category III waste dumps and landfill sites for municipal waste shall be installed by ensuring:

82.7.1. a gas drainage layer in accordance with the requirements of Paragraph 28 of this Regulation;

82.7.2. a 0.5 metres thick layer of soil with low water permeability or appropriate anti-filtration layer the rock filtration ratio of which is 10–9m/s and the guaranteed service life of which is at least the operational period of the landfill site or waste dump and the monitoring period after closure of the landfill site, or an equivalent geosynthetic material;

82.7.3. a drainage layer which is more than 0.5 metres thick and the rock filtration ratio of which is 10–3m/s. If the drainage layer is made of soil, the surface shall be covered with a fertile soil layer and greening thereof shall be performed. If the drainage layer is made of geosynthetic materials, these materials shall be supported;

82.8. for the surface layer of the landfill site for hazardous waste the following shall be installed:

82.8.1. an artificial insulating layer in accordance with the requirements of Paragraph 24 of this Regulation;

82.8.2. an impermeable mineral layer which is more than 0.5 m thick;

82.8.3. a drainage layer which is more than 0.5 m thick in accordance with the requirements of Paragraph 25 of this Regulation;

82.9. an upper cover of Category I, II, and III waste dumps and landfill sites shall be formed from at least 0.2 m thick soil layer;

82.10. landscaping shall be ensured with greenery and grassland by selecting appropriate plant species.

[*13 December 2016*]

82.1 The following conditions shall be complied with when re-cultivating a landfill site after digging up and completion of the work of resorting the waste:

82.11. all unsorted waste shall be transported to a landfill site in the relevant waste management region for disposal;

82.12. continued operation of the monitoring boreholes previously established in the landfill site and the protection of the tamped-down monitoring boreholes shall be ensured;

82.13. the territory shall be covered with at least 10 cm thick layer of soil or compost and the greening thereof shall be provided or it shall be covered with another material in accordance with the type of land use envisaged in the plan for the use of the territory.

[*3 November 2015*]

82.2 After re-cultivation of a landfill site or a part thereof, the operator of the landfill site for municipal waste shall submit to the board information on the costs of re-cultivation and closure of the landfill site or a part thereof, indicated according to the items of costs specified in the laws and regulations regarding the costs related to the management of landfill sites after their closure, and also regarding the re-cultivated area of the closed landfill site or a part thereof and the amount of waste disposed of therein in tonnes.

[*13 December 2016*]

83. A waste dump, a landfill site or a part thereof shall be considered re-cultivated after the board has performed the final inspections at the closed waste dump, landfill site or a part thereof after re-cultivation and has evaluated the annual reports referred to in Paragraph 47 of this Regulation and the information referred to in Paragraph 82.2 of this Regulation provided by the operator, and also after the decision of the board on the re-cultivation of the waste dump, landfill site or a part thereof has entered into effect. The re-cultivated landfill site or waste dump shall be accepted for operation in accordance with the construction regulations for port hydrotechnical, heat energy, gas engineering structures and other engineering structures that are not classified separately.

[*3 November 2015; 13 December 2016*]

84. The board shall determine, after re-cultivation, where in the vicinity of a landfill site or waste dump the measurements of the environmental parameters referred to in Annex 5 to this Regulation as well as the parameters of full and partial chemical analyses to be performed within the scope of the monitoring referred to in Annex 5 to this Regulation and, if necessary, additional parameters shall be performed.

84.1 The results of analyses of the chemical composition of groundwater obtained during environmental monitoring for the first time after re-cultivation of the respective waste dump, landfill site or a part thereof shall be considered background indicators in respect of which the board shall evaluate whether the re-cultivated waste dump, re-cultivated landfill site or a part thereof has caused an increase in the level of groundwater pollution after re-cultivation.

[*21 August 2018*]

85. The board shall determine the time period for the maintenance and monitoring that shall not be less than 20 years for a re-cultivated waste dump, not less than 30 years for a re-cultivated landfill site or a part thereof, and not less than five years for re-cultivated waste dump after digging up thereof and resorting of waste, taking into account the potential environmental impact of the re-cultivated waste dump, landfill site or a part thereof. Monitoring after re-cultivation of a waste dump, landfill site or a part thereof shall be performed in accordance with Annex 5 to this Regulation.

[*3 November 2015*]

85.1 Maintenance shall include the maintenance of the territory in accordance with the fire safety requirements, the maintenance of the insulating cover of the depository surface of a landfill site in adequate condition, collection, accumulation, pre-treatment, storage, and removal of leachate, maintenance of monitoring and landfill gas equipment and leachate collection systems in appropriate technical condition, maintenance of the territory around monitoring places, ensuring access thereto.

[*3 November 2015*]

86. After re-cultivation of a waste dump, a landfill site or a part thereof the operator shall ensure the maintenance and monitoring of the waste dump, landfill site or a part thereof in accordance with Paragraphs 84 and 85 of and Annex 5 to this Regulation, and shall also ensure the performance of analyses of the landfill gas and leachate and measurements of the condition of groundwater in the vicinity of the re-cultivated waste dump, landfill site or a part thereof, making use of the services of the laboratories referred to in Paragraph 39 of this Regulation.

[*12 October2021*]

87. The operator shall inform the board of any established negative effect on the environment. Based on the received information, the board shall take the decision on the measures to be taken and the time periods for taking them in order to eliminate the discovered negative effect on the environment.

[*3 November 2015*]

**6.1 Objectives for the Reduction of the Amount of Municipal Waste Disposed of in the Landfill Site for Municipal Waste, Criteria for Assessing the Achievement of the Objectives for the Reduction of the Amount of Municipal Waste Disposed of in the Landfill Site for Municipal Waste, and the Requirements for the Contents of the Extension Plan**

[*12 October 2021*]

87.1 In order to achieve the objective for the reduction of the amount of municipal waste disposed of, the amount of municipal waste disposed of in the landfill site for municipal waste shall be reduced in the following amount and term:

87.11. by 31 December 2024, the mass of municipal waste disposed of in the landfill site for municipal waste shall not exceed 45 % of the mass of municipal waste generated in the respective calendar year;

87.12. by 31 December 2027, the mass of municipal waste disposed of in the landfill site for municipal waste shall not exceed 35 % of the mass of municipal waste generated in the respective calendar year;

87.13. by 31 December 2030, the mass of municipal waste disposed of in the landfill site for municipal waste shall not exceed 25 % of the mass of municipal waste generated in the respective calendar year;

87.14. by 31 December 2034, the mass of municipal waste disposed of in the landfill site for municipal waste shall not exceed 10 % of the mass of municipal waste generated in the respective calendar year.

[*12 October2021*]

87.2 The achievement of the objective referred to in Paragraph 87.1 of this Regulation shall be assessed according to the following criterion: compliance with the indicator resulting from the calculations made in Sub-paragraphs 87.31 and 87.32 of this Regulation. The objective referred to in Sub-paragraph 87.11, 87.12, 87.13, or 87.14 of this Regulation shall be assessed as achieved if the indicator resulting from the calculations made in Sub-paragraphs 87.31 and 87.32 of this Regulation is lower than or equal to the objective for the reduction of the disposal of municipal waste specified in Sub-paragraph 87.11, 87.12, 87.13, or 87.14 of this Regulation for the respective calendar year.

[*12 October2021*]

87.3 The Ministry of Environmental Protection and Regional Development shall annually, within 10 months after the end of the reporting year, calculate the following by using the information provided in accordance with the laws and regulations regarding forms of official statistical reports on environmental protection and polluting activities, publicly available reports of other State institutions, and also the information specified in the annual report of the operator, in accordance with Paragraph 47 of this Regulation and in conformity with the requirements referred to in Paragraphs 87.4 and 87.5 of this Regulation:

87.31. the mass of municipal waste disposed of in each landfill site for municipal waste and the ratio thereof against the mass of municipal waste generated in the respective calendar year;

87.32. the total mass of municipal waste disposed of in landfill sites for municipal waste and the ratio thereof against the mass of municipal waste generated in the respective calendar year.

[*12 October2021*]

87.4 For the purposes of the calculations referred to in Paragraph 87.3 of this Regulation, the mass of municipal waste disposed of in the respective calendar year shall be considered as municipal waste disposed of in the landfill, including:

87.41. the mass of municipal waste generated in the respective calendar year and disposed of in the landfill site for municipal waste;

87.42. the mass of municipal waste generated in the respective calendar year after preparation of municipal waste for recycling or recovery by other means, for example, sorting or mechanical biological treatment of municipal waste, and disposed of in the landfill site for municipal waste;

87.43. the mass of municipal waste incinerated in the respective calendar year in the municipal waste incineration facilities the permit for the performance of a polluting activity for the operation of which provides that the incineration of waste is performed at municipal waste incineration facilities as a waste disposal operation in accordance with the laws and regulations regarding waste recovery and disposal types, except for the mass of materials resulting from the waste generated in the process of incineration of municipal waste, taking into account the proportion of municipal waste in the waste subject to incineration;

87.44. the mass of municipal waste generated in the respective calendar year as a result of the stabilisation of biodegradable waste and disposed of in the landfill site for municipal waste;

87.45. municipal waste resulting from the preparation of municipal waste for re-use and from the inspection, cleaning, and repair of municipal waste and disposed of in the landfill site for municipal waste;

87.46. materials which are separated mechanically during or after aerobic or anaerobic treatment of biodegradable municipal waste and subsequently disposed of in the landfill site for municipal waste.

[*12 October2021*]

87.5 For the purposes of the calculations referred to in Paragraph 87.3 of this Regulation, the mass of municipal waste (glass, metals, paper and cardboard, plastics, wood, textiles, composite materials, electrical and electronic equipment waste, battery and accumulator waste) resulting from the recycling or other recovery of the abovementioned municipal waste and ultimately disposed of in the landfill site for municipal waste shall not be included in the disposed mass of municipal waste referred to in Paragraph 87.4 of this Regulation.

[*12 October2021*]

87.6 If municipal waste is shipped for recycling or material recovery in accordance with Regulation No 1013/2006 on shipments of waste to another European Union Member State or to a country which is not a European Union Member State, the amount of waste which results from the preparation of waste prior to recycling or material recovery and which in the country of destination is disposed of in the landfill site for municipal waste or incinerated with subsequent disposal thereof in the landfill site shall be included in the amount of municipal waste which is considered as disposed of in the landfill site for municipal waste.

[*12 October2021*]

87.7 If the Ministry of Environmental Protection and Regional Development, on the basis of the results of calculations made in Paragraph 87.3 of this Regulation, establishes that the objective referred to in Sub-paragraph 87.14 of this Regulation will not be achieved, the Ministry of Environmental Protection and Regional Development shall, no later than by 31 December 2032, prepare a plan for submission to the European Commission in accordance with Annex 9 to this Regulation in order to extend the time for the achievement of the objective for the reduction of the amount of municipal waste.

[*12 October2021*]

87.8 If the European Commission approves the plan referred to in Paragraph 87.7 of this Regulation, the amount of municipal waste disposed of in the landfill site for municipal waste by 31 December 2034 shall not exceed 25 % of the amount of municipal waste generated in the respective calendar year.

[*12 October2021*]

**7. Closing Provisions**

88. It shall be allowed to dispose of in landfill sites 75 % of the mass of biodegradable waste generated by households and of the mass of other waste that is similar to biodegradable waste generated by households due to the composition or features thereof (hereinafter – the biodegradable municipal waste) generated in 1995 or during the last year before 1995 and regarding which standardised Eurostat data are available.

[*13 December 2016*]

89. Starting from 16 July 2013, it shall be allowed to dispose of in landfill sites 50 % of the mass of biodegradable municipal waste generated in 1995 or during the last year before 1995 and regarding which standardised Eurostat data are available.

[*13 December 2016*]

90. Starting from 16 July 2020, it shall be allowed to dispose of in landfill sites 35 % of the mass of biodegradable municipal waste generated in 1995 or during the last year before 1995 and regarding which standardised Eurostat data are available.

[*13 December 2016*]

91. Paragraphs 22.1, 22.2, and 22.3 of the Regulation shall apply to the landfill sites put into operation after 1 January 2019.

[*21 August 2018*]

92. Paragraph 44.4 and Sub-chapter 4.1.1 of the Regulation shall come into force on 1 January 2019.

[*21 August 2018*]

93. The operator shall not include in the annual report for 2018 the information referred to in Sub-paragraphs 47.8, 47.9, and 47.10 of this Regulation.

[*21 August 2018*]

94. Sub-paragraphs 58.1 and 58.2 of this Regulation shall come into force on 1 January 2030. The operator shall ensure that:

94.1. the average percentage of municipal waste referred to in Sub-paragraph 56.105 of this Regulation in municipal waste prepared for disposal in the period from 1 January 2019 to 31 December 2024 shall not exceed 40 % of the total mass of waste disposed of in the landfill site in the respective reporting period;

94.2. the average percentage of municipal waste referred to in Sub-paragraph 56.105 of this Regulation in municipal waste prepared for disposal in the period from 1 January 2025 to 31 December 2029 shall not exceed 30 % of the total mass of waste disposed of in the landfill site in the respective reporting period.

[*21 August 2018 / The abovementioned amendments shall be included in the wording of the Regulation as of 1 January 2030*]

**Informative Reference to European Union Directives**

[*12 October2021*]

The Regulation contains legal norms arising from:

1) Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste;

2) Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste.

Prime Minister V. Dombrovskis

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 1**

Cabinet Regulation No. 1032

27 December 2011

**Description of Waste**

**Form No. \_\_\_\_\_**

|  |  |
| --- | --- |
| 1. Name, registration number in the Commercial Register, and address of the waste supplier |  |
|  |

2. Waste transportation permit No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

issued on \_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_,

valid until \_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_.

3. Amount of waste

|  |  |  |  |
| --- | --- | --- | --- |
| Class of waste\* | Name of waste\* | Weight of waste (t) | Volume of waste (m3) |
| 1 | 2 | 3 | 4 |
|  |  |  |  |

4. Additional information on the hazardous waste to be transported:

|  |  |
| --- | --- |
| 4.1. name and address of the producer of hazardous waste; |  |
|  |

4.2. information on the manufacturing process as a result of which the waste has been generated;

4.3. methods used for waste treatment or substantiation of the waste treatment irrelevance;

4.4. physical characteristics (odour, colour, physical state) and the amount of waste;

4.5. chemical composition of waste and the results of the leaching test;

4.6. codes of the hazardous characteristics of waste\*;

4.7. type of a landfill site in which waste may be disposed of;

4.8. information on the possibilities of waste recycling or disposal;

4.9. safety measures necessary when disposing of waste;

4.10. chemical substances or products with which waste must not be mixed.

I certify that the delivered waste conforms to the conditions included in the permit issued for the operation of the landfill site for the performance of Category A or B polluting activities and also with the waste acceptance criteria determined for the respective category of landfill sites.

|  |  |
| --- | --- |
| Waste supplier |  |
|  | (signature and full name) |

|  |  |
| --- | --- |
| Receiver of waste |  |
|  | (signature and full name) |

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_

Note.

\* Indicated in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 2**

Cabinet Regulation No. 1032

27 December 2011

**Methods of Waste Sampling and Analysis**

[*13 December 2016; 21 August 2018*]

1. [21 August 2018]

2. Leaching tests:

2.1. the standard LVS EN 12457-1:2005 A/L, Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 1: One stage batch test at a liquid to solid ratio of 2 l/kg for materials with high solid content and with particle size below 4 mm (without or with size reduction);

2.2. the standard LVS EN 12457-2:2005 A/L, Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 2: One stage batch test at a liquid to solid ratio of 10 l/kg for material with particle size below 4 mm (without or with size reduction);

2.3. the standard LVS EN 12457 – 3:2005 A/L, Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 3: Two stage batch test at a liquid to solid ratio of 2 l/kg and 8 l/kg for materials with high solid content and with particle size below 4 mm (without or with size reduction);

2.4. the standard LVS EN 12457-4:2005 A/L, Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 4: One stage batch test at a liquid to solid ratio of 10 l/kg for materials with particle size below 10 mm (without or with size reduction).

3. Digestion of untreated waste:

3.1. the standard LVS EN 13657:2005 A/L, Characterisation of waste – Digestion for subsequent determination of aqua regia soluble portion of elements;

3.2. the standard LVS EN 13656:2005 A/L, Characterisation of waste – Microwave assisted digestion with hydrofluoric (HF), nitric (HNO3) and hydrochloric (HCI) acid mixture for subsequent determination of elements.

4. [21 August 2018]

**Annex 3**

Cabinet Regulation No. 1032

27 December 2011

**Limit Values for Waste Accepted for Disposal in the Landfill Sites for Inert Waste or Parts of Landfill Sites Intended for Disposal of Inert Waste**

[*13 December 2016*]

**I. Leaching Test Limit Values**

Leaching test limit values for waste to be disposed of in the landfill sites for inert waste or parts of landfill sites intended for disposal of inert waste shall be calculated by liquid (L) and solid substances (S) ratio (L/S, 2 l/kg and 10 l/kg total capacity) and directly expressed in mg/l ratio to Co (in the first percolation test in eluate when L/S = 0.1).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Ingredient | L/S = 2 l/kg | L/S = 10 l/kg | Co (percolation test) |
| mg/kg (dry matter) | mg/kg (dry matter) | mg/l |
| 1. | As (arsenic) | 0.1 | 0.5 | 0.06 |
| 2. | Ba (barium) | 7 | 20 | 4 |
| 3. | Cd (cadmium) | 0.03 | 0.04 | 0.02 |
| 4. | Crkop (chrome) | 0.2 | 0.5 | 0.1 |
| 5. | Cu (copper) | 0.9 | 2 | 0.6 |
| 6. | Hg (mercury) | 0.003 | 0.01 | 0.002 |
| 7. | Mo (molybdenum) | 0.3 | 0.5 | 0.2 |
| 8. | Ni (nickel) | 0.2 | 0.4 | 0.12 |
| 9. | Pb (lead) | 0.2 | 0.5 | 0.15 |
| 10. | Sb (antimony) | 0.02 | 0.06 | 0.1 |
| 11. | Se (selenium) | 0.06 | 0.1 | 0.04 |
| 12. | Zn (zinc) | 2 | 4 | 1.2 |
| 13. | Cl- (chloride ions) | 550 | 800 | 460 |
| 14. | F- (fluoride ions) | 4 | 10 | 2.5 |
| 15. | SO42- (sulphate ions) | 560\* | 1000\* | 1500 |
| 16. | Index of phenols | 0.5 | 1 | 0.3 |
| 17. | Dissolved organic carbon (DOC)\*\* | 240 | 500 | 160 |
| 18. | Total dissolved solids (TDS)\*\*\* | 2500 | 4000 | – |

Notes.

1. \* If the waste fails to comply with these limit values for sulphate, it shall be considered as complying acceptance criteria if one of these limit values is not exceeded during the leaching test: 1500 mg/l as C0 if L/S = 0.1 l/kg and 6000 mg/kg if L/S = 10 l/kg. The percolation test shall be used in order to determine the limit value if L/S = 0.1 l/kg in accordance with the initial balance conditions because the respective limit value is determined either by the leaching test of the set of samples or by the percolation test in accordance with the conditions which are close to the local balance.

2. \*\* If the pH value of waste fails to comply with the limit values of dissolved organic carbon (DOC), it may be also tested if L/S = 10 l/kg and pH is from 7.5 up to 8.0. It may be considered that waste conforms to the acceptance criteria of dissolved organic carbon (DOC) if the test result does not exceed 500 mg/kg.

3. \*\*\* The content of the total dissolved solids (TDS) may be used as an alternative for sulphate and chloride concentrations.

**II. Limit Values for the Total Amount of Organic Parameters**

|  |  |  |
| --- | --- | --- |
| No. | Ingredient | Limit value mg/kg |
| 1. | Total organic carbon (TOC) | 30000\* |
| 2. | Benzene, toluene, ethylbenzene, and xylene (BTEX) | 6 |
| 3. | Polychlorinated biphenyl, including seven congeners (PCB) | 1 |
| 4. | Hydrocarbon oil (C10–C40) | 500 |
| 5. | Polycyclic aromatic hydrocarbons (PAH) | – |

Note. \* The board may allow a higher limit value in respect of soil if the dissolved organic carbon (DOC) achieves the limit value of 500 mg/kg, provided that L/S = 10 l/kg and pH is from 7.5 to 8.0 or the natural pH of the soil.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 4**

Cabinet Regulation No. 1032

27 December 2011

**Logbook for the Operation of a Landfill Site**

[*21 August 2018*]

|  |  |
| --- | --- |
| Manager of the landfill site |  |
|  | (name of the merchant and registration number in the Commercial Register) |
| Location of the landfill site |  |
|  | (address) |

Permit for the performance of Category A or B polluting activities No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, issued on \_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_,

valid until \_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_.

|  |  |  |
| --- | --- | --- |
| Logbook started on |  |  |
| Logbook closed on |  |  |

**I. Recording of waste received at the landfill site**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Receiver of waste (given name, surname) | Waste supplier (merchant) | Waste transportation permit number | Vehicle registration number | Number of the accompanying document or contract | Amount of waste | Class of waste\* | Origin of waste | [21 August 2018] | [21 August 2018] |
| t | m3 |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

**II. Recording of Waste or Recyclable Materials Removed from the Landfill Site**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Waste or recyclable materials subject to removal have been registered by (given name, surname) | Name of waste or recyclable materials | Amount of waste or recyclable materials | Carrier of waste or recyclable materials (name of the merchant / commercial company or the given name, surname of the natural person) | Place for recycling, storage, or disposal of waste or recyclable materials, address and name thereof | Waste transportation permit number | Vehicle registration number | Number of the accompanying document |
| t | m3 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**II.1 Recording of Waste Disposed of in the Landfill Site**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Amount of waste | Class of waste\* | Origin of waste | Place of disposal of waste in the landfill site |
| t | m3 |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |

**III. Results of the Landfill Site / Waste Dump Monitoring**

1. Results of the leachate and surface waters monitoring

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Sampling location (geographic coordinates) | Amount of leachate (m3) | Test report number | Chemical composition of the leachate | Chemical composition of the surface waters | Person taking the sample (given name, surname) | Notes |
| ingredients | concentration (mg/l) | ingredients | concentration (mg/l) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

2. Operation of the landfill gas collection system

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date | Identification number of the sample | Volume of the collected landfill gas (m3) | Chemical composition of the collected landfill gas | Use of the collected landfill gas | Person taking the sample (given name, surname) | Notes |
| ingredients | concentration (mg/Nm3) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

3. Amount of the disposed waste

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Location of measurements (geographic coordinates) | Perimeter of the waste disposal compartment | Height of the disposed waste mass (m) | Density of the disposed waste mass (kg/m3) | Area of the waste disposal compartment filled with waste (m2 or ha) | Area of the waste disposal compartment not filled with waste (m2 or ha) | [21 August 2018] | Signature of the performer of measurements | Notes |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

3.1 Measurements in respect of the contents of waste

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Date of measurement | Contents of waste (average percentage of the mass of waste disposed of in the landfill in the respective reporting period)\* | Note on the compliance of the disposed waste with the requirements of Paragraph 58.1 of this Regulation\*\* |
| paper and waste containing paper | plastic and waste containing plastic | glass and waste containing glass | waste containing metals | construction and demolition waste | electrical and electronic equipment waste | battery and accumulator waste | textile waste | bulky waste | fine fraction | other waste | biodegradable waste and biological waste |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

Notes.

1. \* Calculated in accordance with Paragraph 56.11 of this Regulation.

2. \*\* If the average percentage of biodegradable and biological waste in the mass of waste disposed of in the landfill site in the respective reporting year complies with the provisions of Paragraph 58.1 of this Regulation, the word “Compliant” shall be entered in the respective column, if the average percentage of biodegradable and biological waste in the mass of waste disposed of in the landfill site does not comply with the provisions of Paragraph 58.1 of this Regulation, the word “Non-compliant” shall be entered in the respective column.

**IV. Measurements of Environmental Components in the Surrounding Territory of the Landfill Site / Waste Dump**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date and time of sampling | Sampling location (geographic coordinates) | Groundwater level (m from the ground surface) | Test report route | Chemical composition of groundwater | Person taking the sample (given name, surname) | Notes |
| ingredient | concentration of the ingredient (mg/l) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Note. \* Indicated in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 5**

Cabinet Regulation No. 1032

27 December 2011

**Environmental Monitoring Parameters at the Landfill Site or Waste Dump and in the Vicinity of the Landfill Site or Waste Damp**

[*21 August 2018*]

|  |  |  |
| --- | --- | --- |
| No. | Parameters of monitoring and control | Frequency of monitoring and control |
| during operation of the landfill site | during operation of the waste dump | after closure of the waste damp, landfill site or a part thereof |
| 1. | Parameters of monitoring: |
| 1.1. | leachate: |
| 1.1.1. | quantity | once a month | 2 times a year | 2 times a year |
| 1.1.2. | chemical composition: |
| 1.1.2.1. | partial chemical analysis | 2 times a year | 2 times a year | once a year |
| 1.1.2.2. | full chemical analysis | 2 times a year | 2 times a year | once a year |
| 1.2. | landfill gas: |
| 1.2.1. | quantity | once a month | once a year | 2 times a year |
| 1.2.2. | quantitative composition | once a month | once a year | 2 times a year |
| 2. | Chemical composition of the surface waters in a collecting ditch around the landfill site or waste dump: |
| 2.1. | partial chemical analysis | 2 times a year | once a year | once a year |
| 2.2. | full chemical analysis | 2 times a year | once a year | once a year |
| 3. | Characterisation of the disposed waste: |
| 3.1. | height of the layer of the disposed waste | once a year | once a year | once a year |
| 3.2. | capacity and area of the container filled | once a year | once a year | – |
| 3.3. | vacuity of the container | once a year | once a year | – |
| 3.4. | waste density | once a year | once a year | – |
| 3.5. | contents of waste | once a quarter | once a year | – |
| 3.6. | disposal methods | once a year | once a year | – |
| 3.7. | time and length of disposal | once a year | once a year | – |
| 4. | Monitoring parameters of the surrounding territory of the landfill site: |
| 4.1. | groundwater: |
| 4.1.1. | level | 2 times a year | 2 times a year | 2 times a year |
| 4.1.2. | chemical composition: |
| 4.1.2.1. | partial chemical analysis | not specified | not specified | not specified |
| 4.1.2.2. | full chemical analysis | not specified | not specified | not specified |
| 5. | Surface waters in the vicinity of the landfill site |
| 5.1. | discharge specification | 3 times a year | once a year | once a year |
| 5.2. | chemical analyses |
| 5.2.1. | partial chemical analysis | 3 times a year | once a year | once a year |
| 5.2.2. | full chemical analysis | once a year | once a year | once a year |
| 6. | Data necessary for compiling the water balance |
| 6.1. | Rainfall | Every day | Every day, adding to the average monthly values | Every day, adding to the average monthly values |
| 6.2. | Air temperature (maximum and minimum, measured at 13:00) | Every day | Monthly average | Monthly average |
| 6.3. | Wind direction and velocity | Every day | Every day | Not necessary |
| 6.4. | Humidity (relative humidity, measured at 13:00) | Every day | Monthly average | Monthly average |
| 6.5. | Evaporation (see Note 8) |  |  |  |

Notes.

1. The capacity of a filled container shall be determined by carrying out a topographic measurement. The height and density of the layer of the disposed waste shall be calculated by taking into account the notes on the base of the container and mass of the brought-in waste.

2. The following parameters shall be determined in a partial chemical analysis:

2.1. pH (on site during the pumping out of a borehole);

2.2. conductance (on site during the pumping out of a borehole);

2.3. the chemical oxygen demand;

2.4. the total nitrogen;

2.5. the total phosphorus;

2.6. chlorides (Cl-).

3. The following parameters shall be determined in a full chemical analysis:

3.1. all the parameters of the partial chemical analysis;

3.2. the content of dry matter;

3.3. the biochemical oxygen demand during five days;

3.4. oxidisability (permanganate method);

3.5. nitrates (NO3-);

3.6. nitrites (NO2-);

3.7. ammonium (NH4+);

3.8. sulphates (SO42-);

3.9. phenol index;

3.10. petroleum products;

3.11. boron;

3.12. metals – zinc (Zn), copper (Cu), cadmium (Cd), chrome (Cr), lead (Pb), mercury (Hg), iron (Fe), manganese (Mn), and cobalt (Co).

4. Measurements of surface water body flows shall be performed using fixed stations for the performance of such measurements or mobile equipment for the flow specification.

5. Samples for chemical analysis of groundwaters shall be taken only after the stabilisation of pH and electrical conductivity.

6. Fixed or mobile installations shall be used for the control of composition of gases. Characteristics to be determined:

6.1. methane (CH4);

6.2. nitrogen (N2);

6.3. carbon dioxide (CO2);

6.4. oxygen (O2);

6.5. hydrogen sulphide (H2S);

6.6. hydrogen (H2);

6.7. atmospheric pressure.

7. The amount of gases shall be determined by using fixed installations or carrying out gas depumping (for landfill sites) or calculated (for waste dumps) by using specialised programmes for the calculation of the amount of gas.

8. The amount of evaporation shall be calculated theoretically as the average monthly indicator. If such evaporation calculation data are insufficient, additional evaporation and leaching observations shall be carried out in order to use the water balance method.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 6**

Cabinet Regulation No. 1032

27 December 2011

**Limit Values for Waste Accepted for Disposal in the Landfill Sites for Municipal Waste**

[*13 December 2016*]

**I. Limit Values of Leaching Tests for Municipal Waste**

For granular waste which is disposed of in the same compartment where stable chemically non-active hazardous waste is disposed of, the limit values of leaching tests shall be calculated by the liquid (L) and solid substances (S) ratio (L/S, 2 l/kg and 10 l/kg total capacity) in the total release and directly expressed in mg/l ratio to C0 (in the first percolation test in eluate when L/S = 0.1 l/kg). All waste that is not monolithic shall be considered granular waste.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Ingredient | L/S = 2 l/kg | L/S = 10 l/kg | Co (percolation test) |
| mg/kg (dry matter) | mg/kg (dry matter) | mg/l |
| 1. | As (arsenic) | 0.4 | 2 | 0.3 |
| 2. | Ba (barium) | 30 | 100 | 20 |
| 3. | Cd (cadmium) | 0.6 | 1 | 0.3 |
| 4. | Cr (chrome, total) | 4 | 10 | 2.5 |
| 5. | Cu (copper) | 25 | 50 | 30 |
| 6. | Hg (mercury) | 0.05 | 0.2 | 0.03 |
| 7. | Mo (molybdenum) | 5 | 10 | 3.5 |
| 8. | Ni (nickel) | 5 | 10 | 3 |
| 9. | Pb (lead) | 5 | 10 | 3 |
| 10. | Sb (antimony) | 0.2 | 0.7 | 0.15 |
| 11. | Se (selenium) | 0.3 | 0.5 | 0.2 |
| 12. | Zn (zinc) | 25 | 50 | 15 |
| 13. | Cl- (chloride ions) | 10000 | 15000 | 8500 |
| 14. | F- (fluoride ions) | 60 | 150 | 40 |
| 15. | SO42- (sulphate ions) | 10000 | 20000 | 7000 |
| 16. | Dissolved organic carbon (DOC)\* | 380 | 800 | 250 |
| 17. | Total dissolved solids (TDS)\*\* | 40000 | 60000 | – |

Notes.

1. \* If the pH value of waste fails to comply with the limit values of dissolved organic carbon (DOC), it may be also tested if L/S = 10 l/kg and pH is from 7.5 up to 8.0. It may be considered that waste conforms to the acceptance criteria of dissolved organic carbon (DOC) if the test result does not exceed 800 mg/kg.

2. \*\* The content of the total dissolved solids (TDS) may be used as an alternative for sulphate and chloride concentrations.

**II. Limit Values of Leaching Tests for Hazardous Waste Accepted at the Landfill Site for Municipal Waste**

The limit values of leaching tests for granular hazardous waste which is accepted for disposal in the landfill site for municipal waste shall be calculated at L/S = 2 l/kg and L/S = 10 l/kg in the total release and directly expressed in mg/l ratio to Co (in the first percolation test in eluate when L/S = 0.1 l/kg).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Ingredient | L/S = 2 l/kg | L/S = 10 l/kg | Co (percolation test) |
| mg/kg (dry matter) | mg/kg (dry matter) | mg/l |
| 1. | As (arsenic) | 0.4 | 2 | 0.3 |
| 2. | Ba (barium) | 30 | 100 | 20 |
| 3. | Cd (cadmium) | 0.6 | 1 | 0.3 |
| 4. | Crkop (chrome) | 4 | 10 | 2.5 |
| 5. | Cu (copper) | 25 | 50 | 30 |
| 6. | Hg (mercury) | 0.05 | 0.2 | 0.03 |
| 7. | Mo (molybdenum) | 5 | 10 | 3.5 |
| 8. | Ni (nickel) | 5 | 10 | 3 |
| 9. | Pb (lead) | 5 | 10 | 3 |
| 10. | Sb (antimony) | 0.2 | 0.7 | 0.15 |
| 11. | Se (selenium) | 0.3 | 0.5 | 0.2 |
| 12. | Zn (zinc) | 25 | 50 | 15 |
| 13. | Cl- (chloride ions) | 10000 | 15000 | 8500 |
| 14. | F- (fluoride ions) | 60 | 150 | 40 |
| 15. | SO42- (sulphate ions) | 10000 | 20000 | 7000 |
| 16. | Dissolved organic carbon (DOC)\* | 380 | 800 | 250 |
| 17. | Total dissolved solids (TDS)\*\* | 40000 | 60000 | – |

Notes.

1. \* If the pH value of waste fails to comply with the limit values of dissolved organic carbon (DOC), it may be also tested if L/S = 10 l/kg and pH is from 7.5 up to 8.0. It shall be considered that waste conforms to the acceptance criteria of dissolved organic carbon (DOC) if the test result does not exceed 800 mg/kg.

2. \*\* Limit values of the total dissolved solids (TDS) may be used as an alternative for sulphate and chloride limit values.

**III. Additional Criteria for Hazardous Waste Accepted for Temporary Storage at the Landfill Site for Municipal Waste**

In addition to the limit values of leaching tests, granular hazardous waste shall conform to the following criteria:

|  |  |  |
| --- | --- | --- |
| No. | Component | Value |
| 1. | Total organic carbon (TOC) | 5 %\* |
| 2. | PH | at least 6 |

Note. \* If it is not possible to achieve this limit value, the board may allow a higher limit value under the condition that the dissolved organic carbon (DOC) achieves the limit value of 800 mg/kg if L/S = 10 l/kg and the pH value is from 7.5 up to 8.0 or the same as pH of the material itself.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 7**

Cabinet Regulation No. 1032

27 December 2011

**Inert Waste Which Does not Require Conformity Testing Before Disposal in the Landfill Site for Inert Waste or Part of the Landfill Site Intended for the Disposal of Inert Waste**

[*13 December 2016*]

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Class of waste\* | Description | Restrictions |
| 1. | 1011 03 | Glass fibre waste | Without organic binding substances |
| 2. | 1501 07 | Glass packaging, glass |  |
| 3. | 1701 01 | Concrete | Construction waste, including demolition waste\*\* |
| 4. | 1701 02 | Bricks | Construction waste, including demolition waste\*\* |
| 5. | 1701 03 | Tiles, roof tiles, and pottery | Construction waste, including demolition waste\*\* |
| 6. | 1701 07 | Mixtures of concrete, bricks, tiles, roof tiles, and pottery | Construction waste, including demolition waste\*\* |
| 7. | 1702 02 | Glass |  |
| 8. | 1705 04 | Soil and stones | Except for topsoil and also soil and stones from contaminated sites |
| 9. | 1912 05 | Glass |  |
| 10. | 2001 02 | Glass | Only separately collected glass |
| 11. | 2002 02 | Soil and stones | Only from garden and park waste, except for topsoil and peat |

Notes.

1. \* Indicated in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous.

2. \*\* Construction waste, including demolition waste, with minor impurities of other materials (for example, metals, plastics, soil, organic substances, wood, rubber) if the origin of waste is known. The content of the impurities may not exceed 15 % of the total amount of waste.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 8**

Cabinet Regulation No. 1032

27 December 2011

**Limit Values for Waste Accepted for Disposal in the Landfill Sites for Hazardous Waste**

**I. Limit Values of Leaching Tests for Hazardous Waste**

Leaching test limit values for hazardous granular waste to be disposed of in the landfill sites for hazardous waste shall be calculated by liquid (L) and solid substances (S) ratio (L/S, 2 l/kg and 10 l/kg total capacity) in the total release and directly expressed in mg/l ratio to Co (in the first percolation test in eluate when L/S = 0.1 l/kg). All waste that is not monolithic shall be considered granular waste.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Parameter | L/S = 2 l/kg | L/S = 10 l/kg | Co (percolation test) |
| mg/kg (dry matter) | mg/kg (dry matter) | mg/l |
| 1. | As (arsenic) | 6 | 25 | 3 |
| 2. | Ba (barium) | 100 | 300 | 60 |
| 3. | Cd (cadmium) | 3 | 5 | 1.7 |
| 4. | Crkop (chrome) | 25 | 70 | 15 |
| 5. | Cu (copper) | 50 | 100 | 60 |
| 6. | Hg (mercury) | 0.5 | 2 | 0.3 |
| 7. | Mo (molybdenum) | 20 | 30 | 10 |
| 8. | Ni (nickel) | 20 | 40 | 12 |
| 9. | Pb (lead) | 25 | 50 | 15 |
| 10. | Sb (antimony) | 2 | 5 | 1 |
| 11. | Se (selenium) | 4 | 7 | 3 |
| 12. | Zn (zinc) | 90 | 200 | 60 |
| 13. | Cl- (chloride ions) | 17000 | 25000 | 15000 |
| 14. | F- (fluoride ions) | 200 | 500 | 120 |
| 15. | SO42- (sulphate ions) | 25000 | 50000 | 17000 |
| 16. | Dissolved organic carbon (DOC)\* | 480 | 1000 | 320 |
| 17. | Total dissolved solids (TDS)\*\* | 70000 | 100000 | – |

Notes.

1. \* If the pH value of waste fails to comply with the limit value of dissolved organic carbon (DOC), it may be also tested if L/S = 10 l/kg and pH is from 7.5 up to 8.0. It shall be considered that waste conforms to the acceptance criteria of dissolved organic carbon (DOC) if the test result does not exceed 1000 mg/kg.

2. \*\* Limit values of the total dissolved solids (TDS) may be used as an alternative for sulphate and chloride limit values.

**II. Other Criteria for Waste Acceptance at the Landfill Sites for Hazardous Waste**

In addition to leaching test limit values, hazardous waste shall conform to the following criteria:

|  |  |  |
| --- | --- | --- |
| No. | Component | Limit values |
| 1. | Loss on ignition (LOI)\* | 10 % |
| 2. | Total organic carbon (TOC)\* | 6 %\*\* |

Notes.

1. One of these indicators shall be used: LOI or TOC.

2. \*\* If this limit value is not reached, the competent authority may allow a higher limit value under the condition that the dissolved organic carbon (DOC) achieves the limit value of 1000 mg/kg if L/S = 10 l/kg and pH value is from 7.5 up to 8.0 or the same as pH of the material itself.

Minister for Environmental Protection and Regional Development E. Sprūdžs

**Annex 9**

Cabinet Regulation No. 1032

27 December 2011

**Plan for a Time Extension for the Achievement of the Objectives for the Reduction of the Amount of Waste Disposed of in the Landfill Sites for Municipal Waste**

[*12 October 2021*]

In order to extend the time for the achievement of the objectives for the reduction of the amount of waste disposed of in the landfill site for municipal waste, the plan shall include the following:

1) assessment of the previous, current, and projected municipal waste recycling, landfilling and other recovery and disposal rates, and also the streams from which the waste is composed;

2) assessment of the implementation of the national waste management plan and the national waste prevention programme;

3) reasons for which Latvia considers that it might not be able to achieve the respective objective for the achievement of the reduction of the amount of waste disposed of in the landfill sites for municipal waste and assessment of the time extension necessary to meet that objective;

4) the measures necessary for the achievement of the objectives for the reduction of the amount of waste disposed of in the landfill site for municipal waste and applicable during the extension period, including appropriate economic instruments and other measures taking into account the priority order of the waste management types laid down in the Waste Management Law;

5) a timetable for the implementation of the measures referred to in Paragraph 4 of this Annex, the competent authorities responsible for the implementation thereof and an assessment of their individual contribution to attaining the objectives applicable in the event of a time extension;

6) information on the funding for waste management in accordance with the polluter-pays principle;

7) measures to improve data quality which are required to improve planning and monitoring performance in waste management.