Republic of Latvia

Cabinet
Regulation No. 1032
Adopted 27 December 2011

Regulations Regarding the Construction of Landfill Sites, the Management, Closure and Re-cultivation of Landfill Sites and Waste Dumps

Issued pursuant to
Section 22, Paragraph two, Clause 2 of the Waste Management Law

1. General Provisions

1. This 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.

2. The following terms are used in this 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, as well as 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 gas – all the gases generated from the decomposition processes of the landfilled waste;
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 that 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 such as a salt or potassium mine;

2.12. household waste – domestic waste or any other waste that according to the properties or content thereof is similar to household waste.

3. This Regulation applies to landfill sites and waste dumps, including sites where the producer of waste disposes of the waste in the locations of generation thereof, as well as to 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 it 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, if the sludge is non-hazardous (in accordance with the laws and regulations regarding waste classification and characteristics that make waste hazardous);

3.6. disposal of unpolluted soil or inert waste resulting from geological investigation, extraction, processing and storage of mineral resources as well as from activity in quarries, if the waste is non-hazardous (in accordance with the laws and regulations regarding waste classification and characteristics that make waste hazardous).

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, as well as from water bodies, watercourses and land utilised for agriculture;

5.2. limitations in respect of all types of protective 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, as well as 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 meter 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 before commencing construction of the landfill site or a stage thereof shall prepare a feasibility study of the landfill site construction. The feasibility study shall include the following information:

7.1. information regarding 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, as well as types of entrepreneurial activity and characterisation of the infrastructure;

7.1.2. sources of waste generation, quantity 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 infrastructure of waste management;

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 regarding changes in the quantity of waste to be generated and disposed of at the landfill site, composition and types during the intended period of operation;

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 influence thereof on paying capacity of the inhabitants;

7.1.7. conformity of the construction plan of the landfill site with the conditions of the regional waste management plan;

7.1.8. public information regarding the waste management system and tasks to be solved within the framework thereof;

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

7.3. information regarding the possible place for construction of the landfill site;

7.3.1. conformity with the development programme and territorial planning of the relevant administrative territory, if any has been drawn up;

7.3.2. data of engineering-geological and hydro-geological surveys;

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

7.3.4. need to change the land use type;

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

7.5. description of structures (also engineering structures for environmental protection) planned at the landfill site;

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

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

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

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

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

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 for the drawing up of a detail design.

10. A submitter of a project shall draw up a detail design 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 Environment State Bureau regarding the final report has been received.

11. In drawing up the detail design for a landfill site, the construction design conditions for a landfill site laid down in Chapter 3 of this Regulation shall be taken into account. In order to commence construction design, the information regarding the results of the hydrological, geological, hydro-geological and engineering-geological investigation, as well as the following documents shall be required:

11.1. documents certifying land ownership rights or rights of use;

11.2. minutes of the public consultations on the construction plan and a decision of the relevant local government on its consent to the construction of the landfill site;

11.3. a situation plan;

11.4. a topographical plan of the land parcel;

11.5. a planning and architectural task.

12. The technical design of the landfill site shall be performed in accordance with the requirements of the laws and regulations governing construction.

13. Construction work of a landfill site shall be performed in accordance with the requirements of the laws and regulations governing construction. A landfill site shall be accepted for service in accordance with the laws and regulations regarding the acceptance of structures for service.

14. Before commencing the operation of a landfill site the board shall inspect the landfill site to assess the conformity thereof with the issued permit for performing A or B category polluting activities.

3. Conditions for Construction Design of Landfill Sites

15. A designer shall be responsible for complying with the conditions of the construction design when preparing a building design. A designer shall take decisions on technical solutions to fulfil the conditions of the construction design.

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 of a landfill site for municipal and hazardous waste shall not exceed 10^{-9} m/s, and in the case of a landfill site for inert waste – not more than 10^{-7} m/s. 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 of a landfill site 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 the long-term safe storage of waste. One or several waste disposal compartments shall be provided for when drawing up a building design of the zone, in which waste is unloaded, compacted and disposed of.

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 waste water 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. ramparts in conformity with the planned waste disposal height.

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 meters, ensuring that the rock filtration ratio is not more than 10^{-9} m/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 meter, ensuring that the rock filtration ratio is not more than 10^{-9} m/s;

23.3. for landfill sites for inert waste the thickness of the insulating layer shall be not less than one meter, ensuring that the rock filtration ratio is not more than 10^{-7} m/s.

24. If the natural insulating layer 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 meters 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 natural or artificial insulating layer of landfill sites, an artificial hydro-insulating layer and at least 0.5 meters thick layer of well-filtrating soil or material shall be installed, the filtration ratio of which is at least 10^{-3} m/s with drainage pipes or a drainage system for the collection and drainage of leachate, as well as ensuring the possibility of washing the drainage system.

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 quantity of leachate and pollution variations depending on the quantity of precipitation and the season.

28. A collecting system for landfill site gases shall be designed for all the municipal waste landfill sites 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 site 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 a an economic zone.

31. The landfill site shall be separated from the surrounding territory with a fence at least two meters high. At the landfill site, information regarding the landfill site operator shall be placed, stating the contact details of the operator (address, contact telephone, electronic mail address and website address of the landfill site) and the working hours of the landfill site (the time when waste is accepted at the landfill). 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.

32. A greenery area shall be arranged around a landfill site or parts thereof in places, where it is determined by the requirements of construction 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 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 worn tyres and cut tyres, with the exception of whole worn 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 1,400 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.

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

36. Before acceptance of waste an operator shall obtain a description of the waste from the waste supplier (Annex 1), providing a certification that the delivered waste conforms to the conditions of the permit (for performing A or B category polluting activities) issued for the operation of the landfill site, as well as to 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. If a contract has been entered into between a supplier and an operator regarding the disposal of waste at 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, as well as the action in cases, if the waste delivered fails to conform to the requirements of the contract. If the referred-to contract has not been entered into, a separate description of waste shall be submitted for each waste load.

37. Waste shall be accepted for disposal at 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 criteria for the acceptance of waste referred to in Sub-chapter 4.2, 4.3 or 4.4 of this Regulation.

38. The operator of a landfill site shall check visually the waste before and after unloading of waste at the landfill site or waste dump, as well as ensure the conformity testing of waste to determine the conformity of waste delivered with the description of waste and the criteria for the acceptance of waste referred to in Sub-chapter 4.2, 4.3 or 4.4 of this Regulation.

39. In order to determine the conformity of waste with the criteria for waste acceptance 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 and analysis shall be used for the sampling of waste and analyses. Sample taking of waste, chemical analyses for preparation of descriptions of waste and conformity testing shall be performed by laboratories which are accredited by the Latvian National Accreditation Bureau (hereinafter – the Accreditation Bureau) of the limited liability company "Standardization, Accreditation and Metrology Centre" in accordance with the standard LVS EN ISO/IEC 17025:2005 "General requirements for the competence of testing and calibration laboratories" and regarding which information has been published on the website of the Accreditation Bureau www.latak.lv, or laboratories or authorities to which a competent authority of a member state of the European Union, the European Economic Area, 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.

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 criteria for the acceptance of waste;

40.3. if a laboratory has provided an opinion in writing that it is impossible to carry out 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 waste landfill site shall ensure that sampling of hazardous waste is performed before the unloading of hazardous waste. The sampling and analyses of hazardous waste shall be performed by laboratories. 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.

42. If it is determined that the waste delivered is not disposable at 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 of a landfill site shall mange 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 noise;

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.

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.

45. A landfill operator shall ensure employee working conditions in accordance with the laws and regulations regarding safety at work, as well as training regarding the technical aspects of waste management. A hazardous waste landfill site operator shall ensure that measures for reducing the hazardousness of hazardous waste 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.

46. The operator shall register the activities performed with waste in a journal (Annex 4) of the landfill site operation. 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 for each load of waste that has been accepted for disposal at the landfill site.

47. Within two months after the end of a calendar year the operator of a landfill site shall submit an annual report to the board and local government in the administrative territory of which the landfill site is located. If requested, the annual report shall be submitted to the local governments in the administrative territory of which the municipal waste was collected and disposed of at the relevant landfill site. The annual report shall include the following information:

47.1. the amount and types of waste accepted and disposed of at the landfill site in accordance with the laws and regulations regarding waste classification and characteristics making waste hazardous;

47.2. the amount and types of waste or recyclable materials taken out of the landfill site, as well as the sites for recycling, storage or disposal;

47.3. operation of the landfill gas collection system and the amounts and composition of the gas collected;

47.4. volume measurements of the disposed of waste in conformity with Annex 5 to this Regulation;

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

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

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, as well as 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, as well as 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. These samples shall be taken by the laboratories referred to in Paragraph 39 of this Regulation in accordance with the standard LVS ISO 5667–11:1993 "Water quality – Sampling – Part 11: Guidance on sampling of groundwaters".

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

53. In order to control pollution of surface waters in the protective 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 protective zone of a landfill site or waste dump. At least one borehole for the sampling of ground waters 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. For the calculation of the volume of leachate from the landfill site, the water balance method shall be used, 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.

4.2. Waste Acceptance Criteria at Landfill Sites for Municipal Waste

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

57.1. household waste;

57.2. stable, solidified or vitrified, chemically inactive 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 for the relevant landfill site;

57.3. municipal waste of any other origin which conforms to the waste acceptance criteria referred to in Annex 6 to this Regulation.

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 which make 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 which make waste hazardous;

58.3. similar municipal waste of other origin.

59. Municipal waste containing gypsum shall be disposed of at a landfill site storage, 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 separate compartments of landfill sites for municipal waste or at 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 at landfill sites where only waste containing asbestos is disposed of:

60.1. waste does not contain other harmful substances except 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 at 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. A landfill operator shall check visually waste or packaging and labelling of packaged waste before waste acceptance and after unloading of waste at the landfill site in which only construction waste containing asbestos is disposed of, in order to determine the conformity of the waste delivered with the description of the waste.

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 Landfill Sites for Inert Waste

63. At landfill sites for inert waste it is permitted to dispose of inert waste only.

64. Inert waste referred to in Annex 7 to this Regulation is allowed to be accepted at a landfill site for 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 of waste generation. 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 a landfill site for inert waste.

65. Construction and demolition waste polluted with hazardous substances shall not be accepted at a landfill site for inert waste.

66. If a class of waste is not included in Annex 6 to this Regulation, chemical analyses thereof shall be performed in order to determine whether the waste conforms to the limit values laid down in Annex 3 to this Regulation for waste acceptance at a landfill site for 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 at a landfill site for hazardous waste, which is referred to in the permit for performance of category A or B polluting activities issued for 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 regarding the methods used for waste treatment;

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

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 at a landfill site for hazardous waste, the operator shall ensure the performance of chemical analyses of the hazardous waste 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

70. A regional environmental board shall take a 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 operator of the respective landfill site has been received which provides information on the reasons for closing the landfill site or a part thereof.

71. In the cases laid down in the laws and regulations regarding re-cultivation of waste dumps that do not conform to the requirements of laws and regulations, the board shall, upon written application from the operator of the landfill site or a local government, issue technical regulations regarding measures to be performed for the closure, re-cultivation, monitoring of a landfill site or a part thereof and activities after closure, or measures to be performed for the re-cultivation or monitoring of a waste dump and activities after closure.

6. Re-cultivation of Landfill Sites and Waste Dumps

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, as well as if:

73.1. the assessed amount of waste disposed of does not exceed 50 000 t (approximately 100 000 m^3);

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, as well as if:

74.1. the assessed amount of waste disposed of does not exceed 175 000 t (approximately 350 000 m^3);

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, as well as if:

75.1. the assessed amount of waste disposed exceeds 175 000 t (approximately 350 000 m^3);

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

76. The requirements laid down for landfill sites of category II shall be applied to the re-cultivation of landfill sites for inert waste, but for the re-cultivation of landfill sites for municipal and hazardous waste – the requirements laid down for landfill sites of category III shall be applied.

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

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

79. The following documents shall be required to commence the construction design for re-cultivation of a closed landfill site or waste dump:

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

79.2. information regarding documents certifying land ownership rights or rights of use;

79.3. a map of the location of the landfill site or waste dump;

79.4. a situation plan;

79.5. a topographical plan of the territory to be re-cultivated;

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

79.7. information regarding the content and amount of waste disposed of;

79.8. information regarding the geological and hydro-geological conditions of the territory;

79.9. inventory files, results of the monitoring, detail designs of the landfill site or waste dump;

79.10. a planning and architecture task;

79.11. technical provisions.

80. The detail design for the re-cultivation of a closed landfill site or 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 or waste dump in accordance with the re-cultivation conditions referred to in Paragraph 85 of this Regulation.

81. Re-cultivation of a closed landfill site or waste dump shall be performed in accordance with regional waste management plans, the requirements of the laws and regulations governing construction and in accordance with 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.

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 materials shall be used 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 m thick layer of soil with low water permeability or an appropriate anti-filtration layer, the filtration ratio of rocks of which is 10^{-7} m/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 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 of the waste dump surface 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 m thick layer of soil with low water permeability or appropriate anti-filtration layer, the filtration ratio of rocks of which is 10^{-9} m/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 m thick and the filtration ratio of rocks of which is 10^{-3} m/s. If the drainage layer is made from soil, then it shall be covered with a fertile soil layer and greening shall be performed. If the drainage layer is made from 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.

83. A waste dump, landfill site or a part thereof shall be considered re-cultivated after the board has performed its final inspection of the closed waste dump, landfill site or a part thereof after re-cultivation and has evaluated the reports provided by the operator, as well as the decision of the board has entered into effect regarding the re-cultivation of the waste dump, landfill site or a part thereof. The re-cultivated landfill site or waste dump shall be accepted for service in accordance with the laws and regulations regarding acceptance of structures for service.

84. The board shall determine 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.

85. The board shall determine the duration of maintenance and monitoring measures, which shall not be less than 20 years for a re-cultivated waste dump and 30 years for a re-cultivated landfill site or a part thereof, taking into account the possible effect on the environment 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.

86. After re-cultivation of a waste dump, landfill site or a part thereof the operator shall ensure the management, control and monitoring of the waste dump, landfill site or a part thereof in accordance with Paragraphs 84 and 85 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 underground water in the vicinity of the re-cultivated waste dump, landfill site or a part thereof, making use of the services of certified laboratories.

87. The operator shall inform the board regarding any negative effect on the environment discovered by the control and monitoring. Based on the received information, the board shall take a decision on the measures to be taken and the time periods for work performance, in order to eliminate the discovered negative effect on the environment.

7. Closing Provisions

88. In landfill sites it is allowed to dispose of 75% of the weight of biodegradable municipal waste and of the weight of other waste which is similar to municipal waste due to the composition or features thereof (hereinafter – biodegradable municipal waste), generated in 1995 or during the last year before 1995 and regarding which standardised *Eurostat* data are available.

89. Starting from 16 July 2013 it is allowed to dispose of 50% of the weight of biodegradable municipal waste generated in 1995 or during the last year before 1995 and regarding which standardised *Eurostat* data are available.

90. Starting from 16 July 2020 it is allowed to dispose of 35% of the weight of biodegradable municipal waste generated in 1995 or during the last year before 1995 and regarding which standardised *Eurostat* data are available.

Informative Reference to European Union Directive

This Regulation contains legal norms arising from Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.

Prime Minister V. Dombrovskis

Minister for Environmental Protection and Regional Development E. Sprūdžs