

Republic of Latvia

Cabinet

Regulation No.301

Adopted 19 April 2011

## **Regulations Regarding Environmental Pollution from Production of Asbestos and Asbestos-based Products and Management of Asbestos Waste**

*Issued pursuant to  
Section 17, Paragraph eight of the Waste Management Law and  
Section 11, Paragraph two, Clause 6 of the Law On Pollution*

### **I. General Provisions**

1. This Regulation prescribes:

- 1.1. the procedures for prevention and reduction of environmental pollution resulting from the production of asbestos and asbestos-based products;
- 1.2. procedures for the management of asbestos waste.

2. These Regulations apply to persons carrying out activities with asbestos (fibrous hydro-silicate material in pure form) or material containing asbestos fibres - crocidolite (blue asbestos), actinolite, anthophyllite, chrysotile (white asbestos), amosite (brown asbestos), tremolite, and also raw asbestos (a product resulting from the primary crushing of asbestos ore).

3. A person who carries out actions with asbestos (hereinafter - the operator) shall, in conformity with the laws and regulations regarding the procedures for declaring polluting activities of category A, B and C and issuing permits for the performance of category A and B polluting activities, request and obtain a permit for performance of category A and B polluting activities (hereinafter - the permit). The limit values for emission into the air and water and requirements for the asbestos waste management laid down in this Regulation shall be indicated in the permit, if the operator carries out or is intended to carry out such activities:

- 3.1. to produce asbestos or manufacture asbestos-based products by utilising such equipment in which more than 100 kilograms of asbestos or raw asbestos is used or treated per year, as well as industrial treatment and production of asbestos, asbestos cement, asbestos-cement products, asbestos-containing and friction increasing products, asbestos filters, asbestos paper and cardboard, asbestos jointing, packaging and reinforcement materials, asbestos floor coverings and asbestos fillers;

- 3.2. to dispose and process waste containing asbestos.

4. It is prohibited to place on the market and use asbestos and products containing asbestos fibres in conformity with Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (hereinafter - the Regulation 1907/2006).

## **II. Detection of Limit Values for Emission of Asbestos and Performance of Measurements**

5. The limit value for asbestos emission into the air is 0.1 milligrams of asbestos per one cubic meter of air discharged.
6. In the permit, the regional environmental board of the State Environmental Service shall specify the periodicity of measurements of asbestos emission into the air. Measurements shall be taken not less than once every six months. If an operator does not take regular measurements, the limit value abovementioned in Paragraph 6 of this Regulation shall be applicable to the total emission of solid particles. A chart specifying the places of sampling shall be attached to the permit.
7. Waste water resulting from the utilisation of asbestos shall be purified prior to discharge thereof into a body of water in accordance with the conditions included in the permit.
8. The limit value for asbestos emission into water shall be 30 grams from the total amount of suspended matter per one cubic meter of waste water discharged.
9. In the permit the regional environmental board of the State Environmental Service shall specify the emission limit for each installation, expressed as a total amount of suspended matter discharged into water per one tonne of the product.
10. In the permit, the regional environmental board of the State Environmental Service shall specify the periodicity of measurements of asbestos emission into water, and also the sampling locations.
11. In order to control the conformity of emission to the limit values laid down in this Regulation and to emission limits laid down in the permit, an operator and the State Environmental Service shall utilise methods of sampling and analyses laid down in the Annex of this Regulation, or other methods as a result of utilisation of which equivalent results are achieved. Analysis shall be carried out by the laboratories which are accredited by the limited liability company "Standardization, Accreditation and Metrology Centre" Latvian National accreditation Bureau and comply with the Latvian national standard LVS EN ISO/IEC 17025:2005 A "General requirements for the competence of testing and calibration laboratories".

## **III. Activities with Products Containing Asbestos**

12. Buildings, structures or equipment, in which are materials containing asbestos, shall be destroyed and materials containing asbestos shall be treated in conformity with the laws and regulations regarding labour protection requirements in work with asbestos, including preventing the release of asbestos fibres or dust into the environment.

## **IV. Management of Asbestos Waste**

13. In the transportation and disposal of waste containing asbestos fibres or dust, the carrier or operator shall treat, package and cover the waste so that the release of asbestos fibres or dust into the environment is prevented.

14. A waste holder shall ensure packaging and labelling of waste containing asbestos (fibres or dust) in accordance with Annex XVII to Regulation 1907/2006.

15. Construction waste containing asbestos and other waste containing asbestos may be disposed of only in separate compartments of landfill sites for municipal waste or at landfill sites where only waste containing asbestos is disposed of in conformity with the laws and regulations regarding procedures for construction of landfill sites and management thereof.

16. The fulfilment of this Regulation shall be controlled by the State Environmental Service and regional environmental boards of the State Environmental Service.

#### **V. Final Provision**

17. Cabinet Regulation No. 332 of 25 April 2006, Regulations Regarding Environmental Pollution from Production of Asbestos and Asbestos-based Products and Management of Asbestos Waste, is repealed (Latvijas Vēstnesis, 2006, No. 68).

#### **Informative Reference to Directive of the European Union**

This Regulation contains legal norms arising from Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos.

Prime Minister

V. Dombrovskis

Minister for Environmental Protection and Regional Development

R. Vējonis

## **Methods of Sampling and Analysis**

### **I. Methods of Sampling and Analysis of Asbestos Emission into Water**

1. Reference method:

1.1. the reference method shall be filtering through a 0.45 µm filter membrane, followed by drying at a temperature of 105 °C and weighing. Results shall be expressed as mg/l. By utilising the reference method, the total amount of suspended matter (filterable matter from a non-precipitated sample) shall be determined;

1.2. samples shall represent emission over a 24 hour time period;

1.3. the precision of results shall be ±5 % and reproducibility shall be ±10 %.

### **II. Methods of Sampling and Analysis of Emission into the Air**

2. Gravimetric method:

2.1. with the gravimetric method, it is possible to measure the total amount of solid particles emitted through the discharge ducts;

2.2. if measurements of concentration are necessary, the concentration of asbestos in solid particles shall be measured or evaluated;

2.3. sampling shall be conducted before any dilution of the flow to be measured;

2.4. in order to check the conformity to the limit value of emission, at least two measurements shall be taken under the same isokinetic conditions. The results of measurements may not differ for more than 20%;

2.5. sampling shall be conducted under such operating conditions which in accordance with technical documentation of the equipment comply with normal operating conditions of the equipment;

2.6. sampling shall be conducted at a place with an even flow of air. If possible, the person taking samples shall prevent turbulence and remove obstacles that might disrupt the flow of air;

2.7. in air ducts where samples are taken, adequate apertures and platforms shall be provided;

2.8. before the commencement of sampling, air temperature and pressure as well as the flow rate in the air duct shall be measured. Air temperature and pressure shall normally be measured along the sampling line at a normal flow rate. If necessary, water vapour concentration shall also be measured so that the results can be amended accordingly;

2.9. when taking a sample of air from an air duct carrying asbestos dust, the asbestos content in solid particles retained in the filter shall be filtered and measured:

2.9.1. the sampling tube shall first be checked to ensure that it is airtight and there are no leaks that might cause measurement errors. The head of the sampler shall be carefully sealed and the sampler pump started up. The rate of leakage shall not exceed 1% of normal sample flow;

2.9.2. sampling shall be conducted under isokinetic conditions;

2.9.3. the duration of sampling shall depend on the type of process being monitored and on the sampling tube utilised, but the duration of sampling shall be sufficient to ensure collection of the necessary quantity of matter;

2.9.4. if the sampler filter is not in the immediate proximity of the sampler head, the matter precipitated in the probe shall be collected;

2.9.5. the sampler head and number of places for sampling shall be determined in accordance with the Latvian National Standard LVS ISO 9096 "Stationary source emissions - Manual determination of mass concentration of particulate matter";

2.10. a sampler filter appropriate to the technique of analysis shall be chosen. For the gravimetric method, only glass fibre filters shall be utilised. Filtration efficiency shall be at least 99 % and it shall be determined by utilising the DOP test with an aerosol that creates particles of 0.3 µm in diameter;

2.11. an appropriate balance of high precision shall be utilised. In order to ensure accurate results, filters shall be carefully conditioned before and after the sampling;

2.12. temperature, pressure and air flow, dimensions of air ducts, volumes sampled, and also the method of calculation utilised to obtain the results shall be recorded for each sample. Results shall be expressed in conformity with a normal temperature (273 K) and normal pressure (101.3 kPa).

### 3. A method for fibre counting:

3.1. if the fibre counting method is utilised for the purpose of checking the conformity of emission to the limit value specified in Paragraph 6 of this Regulation, a conversion factor shall be utilised – two fibres per millilitre equals 0.1 mg/m<sup>3</sup> asbestos dust;

3.2. asbestos fibre is a fibre which is more than three micrometers in breadth and more than five micrometers in length and having a length-to-breadth ratio of more than 3:1 and which is counted by phase contrast optical microscope utilising a fibre-counting method in conformity with the laws and regulations regarding labour protection requirements in work with asbestos;

3.3. a fibre-counting method shall be chosen that enables measuring of fibre concentration in exhaust gases;

3.4. sampling shall be conducted before any dilution of the flow to be measured;

3.5. sampling shall be conducted under such operating conditions which in accordance with technical documentation of the equipment comply with normal operating conditions of the equipment;

3.6. sampling shall be conducted at a place with an even flow of air. If possible, the person taking samples shall prevent turbulence and remove obstacles that might disrupt the flow of air;

3.7. in air ducts where samples are taken adequate apertures and platforms shall be provided;

3.8. before the commencement of sampling, air temperature and pressure as well as the flow rate in the air duct shall be measured. Air temperature and pressure shall normally be measured along the sampling line at a normal flow rate. If necessary, water vapour concentration shall also be measured so that the results can be amended accordingly;

3.9. when taking a sample of air from an air duct carrying asbestos dust, the asbestos content in solid particles retained in the filter shall be filtered and measured:

3.9.1. the sampling tube shall first be checked to ensure that it is airtight and there are no leaks that have caused measurement errors. The head of the sampler shall be carefully sealed and the sampler pump started up. The rate of leakage shall not exceed 1% of normal sample flow;

3.9.2. sampling shall be conducted inside the emission duct under isokinetic conditions;

3.9.3. the duration of sampling shall depend on the type of process being monitored and on the sampling nozzle utilised, but the duration of sampling shall be sufficient to ensure that the sample collection filter carries 100-600 countable asbestos fibres per 1 mm<sup>2</sup>;

3.9.4. the sampler head and number of places for sampling shall be determined in accordance with the Latvian National Standard LVS ISO 9096 "Stationary source emissions - Manual determination of mass concentration of particulate matter";

3.10. a sampler filter that is appropriate to the technique of measurement shall be chosen. For the fibre counting method, membrane filters (with a membrane of mixed esters of cellulose or cellulose nitrates) of nominal pore size 5 µm, with printed squares and 25 mm in diameter shall be used. The sampling filter shall have a filtration efficiency of 99 % with respect to countable asbestos fibres;

3.11. temperature, pressure and air flow, dimensions of air ducts, volumes sampled, as well as the method of calculation utilised to obtain the results shall be recorded for each sample. Results shall be expressed in conformity with a normal temperature (273 K) and normal pressure (101.3 kPa).

Minister for Environmental Protection and Regional Development

R.Vējonis