

SUBSIDIARY LEGISLATION 549.18

**PREVENTION AND REDUCTION OF
ENVIRONMENTAL POLLUTION BY
ASBESTOS REGULATIONS**

28th June, 2002

LEGAL NOTICE 228 of 2001, as amended by Legal Notice 426 of 2007.

1. The title of these regulations is the Prevention and Reduction of Environmental Pollution by Asbestos Regulations. Citation.

2. For the purpose of these regulations and unless the context otherwise requires: Definitions.

"asbestos" means the following fibrous silicates:

- (a) crocidolite (blue asbestos) - CAS No. 12001-28-4
- (b) actinolite - CAS No. 77536-66-4
- (c) anthophyllite - CAS No. 77536-67-5
- (d) chrysotile (white asbestos) - CAS No. 12001-29-56.2
- (e) amosite (brown asbestos) - CAS No. 12172-73-5
- (f) tremolite - CAS No. 77536-68-66.1;

"competent authority" means the Department for Environment Protection under the guidance of the Director for Environment Protection and such other body or person as the Minister responsible for the environment may by order in the Gazette prescribe and different bodies or persons may be designated as a competent authority for different provisions and different purposes of these regulations;

"raw asbestos" means the product resulting from the primary crushing of asbestos ore;

"use of asbestos" means activities which involve the handling of raw asbestos per year and which concern:

- (a) the production of raw asbestos ore excluding any process directly associated with the mining of the ore; or
- (b) the manufacturing and industrial finishing of the following products using raw asbestos: asbestos cement or asbestos-cement products, asbestos friction products, asbestos filters, asbestos textiles, asbestos paper and card, asbestos jointing, packaging and reinforcement materials, asbestos floor coverings, and asbestos fillers;

"waste" means any substance or object as defined in article 2 of the Environmental Protection Act;

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"working of products containing asbestos" means activities other than the use of asbestos, which are liable to release asbestos into

the environment.

Measures to reduce
asbestos waste.

3. (1) No person may make use of asbestos.

(2) The competent authority shall ensure that asbestos emissions into the air, asbestos discharges into the aquatic environment, and solid asbestos waste are, as far as reasonably practicable, reduced at source and prevented.

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(3) In the case of existing and new plants, the requirement in subregulation (1) that best available technology not entailing excessive costs be used to reduce and eliminate emissions of asbestos into the air, established in regulation 11 of the Combating of Air Pollution from Industrial Plants Regulations, shall be applied.

Limit values.

4. (1) Without prejudice to regulation 3, the competent authority shall take the necessary measures to ensure that the concentration of asbestos emitted through the discharge ducts into the air during use of asbestos does not exceed a limit value of 0,1 mg/m³ (milligrams of asbestos per m³ of air discharged).

(2) The competent authority may exempt from the obligation referred to in subregulation (1) the plants emitting less than 5,000 m³/hour total gaseous discharges, where the discharge of asbestos into the air is not more than 0,5 grams per hour at any time under normal operating conditions. When this exemption applies, the competent authority shall take appropriate measures in order to ensure that the thresholds referred to in subregulation (1) are not exceeded.

Measures that are
taken by the
competent
authority.

5. The competent authority shall ensure that:

(a) all aqueous effluent arising in the manufacture of asbestos cement shall be recycled unless the plant operator proves to the satisfaction of the authority that such recycling is not economically feasible; the competent authority shall take the measures necessary to ensure that the disposal of liquid waste containing asbestos does not result in pollution of the aquatic environment and other sectors including the air.

Provided that the competent authority shall apply the limit value of 30 grams of total suspended matter per m³ of aqueous effluent discharged;

(b) for each plant concerned, specify the volume of discharges into water of the total quantity of suspended matter discharged per tonne of product taking account of the specific situation of the plant:

Provided that these limits shall apply at the point where the waste waters leave the industrial plant;

(c) all asbestos containing materials are to be adequately maintained by the user or operator, as appropriate;

(d) all aqueous effluent arising in the manufacture of asbestos paper or board shall be recycled:

Provided that the authority may allow the discharge of

aqueous effluent containing not more than 30 grams of suspended matter per m³ of water during routine cleaning or maintenance of the plant.

6. (1) The competent authority shall ensure that measurements are taken at regular intervals, of emissions into the air and of discharges of aqueous effluent from facilities to which the limit values provided for in regulations 4 and 5 shall apply.

Measurement of asbestos emissions.

(2) For the purposes of checking compliance with the said limit values the competent authority shall adopt the sampling and analysis procedures and methods in conformity with those described in the Annex or with any other procedure or method which gives equivalent results.

7. The competent authority shall ensure that:

Products containing asbestos.

- (a) activities involving the working of products containing asbestos do not cause significant environmental pollution by asbestos fibres or dust;
- (b) the demolition of buildings, structures and installations containing asbestos and the removal therefrom of asbestos or materials containing asbestos involving the release of asbestos fibres or dust do not cause significant asbestos environmental pollution.

8. The competent authority shall ensure that:

Transport, etc., of asbestos waste.

- (a) in the course of the transport and deposition of waste containing asbestos fibres or dust, no such fibres or dust are released into the air and no liquids which may contain asbestos fibres are spilled;
- (b) where waste containing asbestos fibres or dust is landfilled at sites licensed for the purpose, such waste is so treated, packaged or covered, with account being taken of local conditions, that the release of asbestos particles into the environment is prevented.

9. Any person shall be guilty of an offence under these regulations if:

Offences under these regulations.

- (a) he fails to comply with any provision of these regulations or with any order lawfully given in terms of any provision of these regulations; or
- (b) he contravenes any restriction, prohibition or requirement imposed by or under these regulations; or
- (c) he acts in contravention of any of the provisions of these regulations; or
- (d) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of these regulations or to fail to comply with any such provisions (including any order lawfully given in terms of any of the provisions of these regulations) or to contravene any restriction,

prohibition or requirement imposed by or under the said regulations.

Penalties.
Amended by:
L.N. 426 of 2007.

10. Any person who commits an offence against these regulations shall, on conviction, be liable:

- (a) on a first conviction to a fine (*multa*) of not less than one thousand and one hundred and sixty-four euro and sixty-nine cents (€1,164.69) but not exceeding two thousand and three hundred and twenty-nine euro and thirty-seven cents (€2,329.37);
- (b) on a second or subsequent convictions, to a fine (*multa*) of not less than two thousand and three hundred and twenty-nine euro and thirty-seven cents (€2,329.37) but not exceeding four thousand and six hundred and fifty-eight euro and seventy-five cents (€4,658.75) or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment:

Provided that whenever any person is found guilty of committing an offence under these regulations by means of a vehicle, the owner of the said vehicle, where applicable, is held liable in the same manner and degree:

Provided further that the court shall order any person who has been found guilty of committing an offence against these regulations to pay for the expenses incurred by the public entities and/or other persons acting on their behalf involved in the implementation of these regulations and restitution of the environment as a result of the said offence, the revocation of the permit issued by the Police and the confiscation of the *corpus delicti*.

Applicability of the
Criminal Code.
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11. (1) The provisions of articles 23 and 30(1) of the Criminal Code shall, *mutatis mutandis*, apply to proceedings, in respect of offences against these regulations, so however that the disqualification from holding or obtain a licence, permit or authority shall in no case be for less than one year.

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(2) Notwithstanding the provisions of article 370 of the Criminal Code, proceedings for an offence against these regulations shall be taken before the Court of Magistrates (Malta) or the Court of Magistrates (Gozo), as the case may be, and shall be in accordance with the provisions of the Criminal Code regulating the procedure before the said courts as courts of criminal judicature.

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(3) Notwithstanding the provisions of the Criminal Code, the Attorney General shall always have a right of appeal to the Court of Criminal Appeal from any judgement given by the Court of Magistrates (Malta) or the Court of Magistrates (Gozo) in respect of proceedings for any offence against these regulations.

Language of
Annex.

12. The Annex of these regulations is being published in English together with the English version of these regulations.

ANNEX

METHODS OF SAMPLING AND ANALYSES

A. DISCHARGE OF AQUEOUS EFFLUENT

The reference method of analysis to determine total suspended matter (filterable matter from the non-precipitated sample) as expressed in mg/l shall be filtering through a 0,45 mm filter membrane, drying at 105°C and weighing.*

Samples shall be taken in such a way as to be representative of the discharge over a 24-hour period.

This determination shall be conducted to a precision[†] of $\pm 5\%$ and an accuracy[‡] of $\pm 10\%$.

B. SPECIFICATIONS TO BE MET WHEN SELECTING A METHOD
FOR MEASURING EMISSIONS INTO THE AIR

I. Gravimetric method

1. The method selected shall be a gravimetric method which is capable of measuring the total quantities of dust emitted through the discharge ducts. Account shall be taken of the concentration of asbestos in dust. When concentration measurements are required, the concentration of asbestos in dust shall be measured or evaluated.

The controlling authority shall decide on the periodicity of such measure, according to the characteristics of the plant and of its production, but this should be initially at least every six months. If the competent authority has established that the concentration does not display any significant variation, the frequency of measurement may be reduced. Where periodical measures are not taken, the limit value specified in regulation 4 shall apply to the total dust emissions. Sampling shall be conducted before any dilution of the flow to be measured.

2. The sampling shall be conducted to a precision of $\pm 40\%$ and an accuracy of $\pm 20\%$ at the limit value. The limit of detection must be 20%. At least two measurements under the same conditions shall be made in order to check the compliance with the limit value.

3. Operation of the installation

Measurements shall only be valid if sampling takes place while the installation is operating normally.

4. Selecting the sampling point

Sampling shall take place at a point where there is a laminar flow of air. As far as possible, care shall be taken to avoid turbulence, and obstacles which might disrupt the flow of air.

5. Modifications required for sampling

Suitable apertures shall be made in ducts where sampling is to take place and proper platforms shall be provided.

6. Measurements to be taken before sampling

Before sampling commences, it is first necessary to measure air temperature and

*See Annex V to the Waste from the Titanium Dioxide Industry Regulations.

[†]This item is defined in the Methods of Measurement and Frequencies of Sampling and Analysis of Surface Water Intended for the Abstraction of Drinking Water Regulations, Directive 79/869/EEC as amended by Directive 81/855/EEC.

[‡]*Ibid.*

pressure and the velocity of flow in the duct. Air temperature and pressure shall normally be measured along the sampling line at normal flow rates. Under exceptional conditions, it shall also be necessary to measure the water vapour concentration so that the results can be amended accordingly.

7. General requirements of the sampling procedure

The procedure requires a sample of air from a duct carrying the emissions of asbestos dust to be drawn through a filter, and the asbestos content of the dust retained in the filter to be measured.

7.1. The sampling line shall first be checked to ensure that it is airtight and that there are no leaks which might give rise to measurement errors. The sampler head shall be carefully sealed off and the sampler pump started up. The rate of leakage shall not exceed 1% of the normal sampling flow.

7.2. Normally sampling shall be conducted under isokinetic conditions.

7.3. Duration of sampling shall depend on the type of process being monitored and the sampling line used and the sampling period shall be sufficient to ensure that an adequate quantity of material is collected for weighing. It shall be representative of the full process being monitored.

7.4. When the sampler filter is not in the immediate proximity of the sampler head, it is essential to recover materials deposited in the sampling probe.

7.5. The sampler head and the number of points where samples shall be taken shall be determined in accordance with the national standard adopted.

8. Nature of the sampler filter

8.1. The filter appropriate to the technique of analysis used shall be chosen. For the gravimetric method, glassfibre filters are preferable.

8.2. A minimum filtration efficiency of 99% shall be required, as defined with reference to the DOP test using an aerosol with particles of 0,3 µm diameter.

9. Weighing

9.1. An appropriate high precision balance shall be used.

9.2. In order to achieve the accuracy required for weighing it is essential to condition filters thoroughly before and after sampling.

10. Expression of results

In addition to measurement data, results shall record temperature, pressure and flow data and shall include all relevant information, such as a simple diagram showing the location of sampling points, the dimensions of ducts, the volumes sampled and the method of calculation used to obtain the results. These results shall be expressed at normal temperature (273 K) and pressure (101,3 kPa).

II. Countable fibres method

Where fibre counting procedures are used for the purpose of checking compliance with the limit value in regulation 4, subject to the provisions of regulation 6(3), a conversion factor of two fibres/ml to 0,1 mg/m³ of asbestos dust may be used. For the purposes of these regulations a fibre is defined as any object of length greater than 5 µm, breadth less than 3 µm, and having a length/breadth ratio greater than 3/1, which is countable by phase contrast optical microscopy using the European reference method defined in Annex I of the Protection of Workers from the Risks Related to Exposure to Asbestos at Work Regulations.

A fibre counting method shall meet the following specifications:

1. The method shall be capable of measuring the concentration of countable fibres in the emitted gases.

The controlling authority shall decide on the periodicity of such measures, according to the characteristics of the plant and of its production, but this should be at least every six months. Where periodical measures are not taken, the limit value specified in regulation 4 applies to the total dust emission.

Sampling shall be conducted before any dilution of the flow to be measured.

2. Operation of the installation

Measurement shall only be valid if sampling takes place while the installation is operating normally.

3. Selecting the sampling point

Sampling shall take place at a point where there is a laminar flow of air. As far as possible, care shall be taken to avoid turbulence and obstacles which might disrupt the flow of air.

4. Modifications required for sampling

Suitable apertures shall be made in ducts where sampling is to take place, and proper platforms shall be provided.

5. Measurements to be taken before sampling

Before sampling commences, it is first necessary to measure air temperature and pressure, and the velocity of flow in the duct. Air temperature and pressure shall normally be measured along the sampling line at normal flow rates. Under exceptional conditions, it is also necessary to measure the water vapour concentration so that the results can be amended accordingly.

6. General requirements of the sampling procedure

The procedure requires a sample of air from a duct carrying the emissions of asbestos dust to be drawn through a filter, and the countable asbestos fibres in the dust retained on the filter to be measured.

6.1. The sampling line shall first be checked to ensure that it is airtight, and that there are no leaks which might give rise to measurement errors. The sampling head shall be carefully sealed off and the sampling pump started up. The rate of leakage shall not exceed 1% of the normal sampling flow.

6.2. Sampling of the emitted gases shall be conducted inside the emission duct under isokinetic conditions.

6.3. Duration of sampling shall depend on the type of process being monitored and the size of the sampling nozzle used. The sampling period shall be sufficient to ensure that the sample collection filter carries between 100-600 countable asbestos fibres/mm². It shall be representative of the full process being monitored.

6.4. The sampling head and the number of points where samples must be taken shall be determined in accordance with the national standard adopted.

7. Nature of the sampling collection filter

7.1. The filter appropriate to the technique of measurement shall be chosen. For the countable fibre method, membrane filters (mixed esters of cellulose or cellulose nitrate) of nominal pore size 5 mm, with printed squares and a diameter of 25 mm shall be used.

7.2. The sample collection filter shall have a minimum filtration efficiency of 99% with respect to countable asbestos fibres.

8. Counting of fibres

The fibre counting method shall conform to the European reference method, as set out in Annex I of the Protection of Workers from the Risks Related to Exposure to Asbestos at Work Regulations.

9. Expression of results

In addition to measurement data, results shall record temperature, pressure and flow data and shall include all relevant information, such as a simple diagram showing the location of sampling points, the dimensions of ducts, the volumes sampled and the method of calculation used to obtain the results. These results shall be expressed at normal temperature (273 K) and pressure (101,3 kPa).
