

COMMISSION OF THE EUROPEAN COMMUNITIES

COM(82) 685 final

Brussels, 28 October 1982

Amended proposal for a
Second Directive

on the protection of workers from the risks related to exposure
to agents at work: Asbestos

(Submitted by the Commission to the Council pursuant to the
second paragraph of Article 149 of the EEC Treaty)

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Amended proposal for a second directive on the protection of workers
from the risks related to exposure to agents at work: Asbestos

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paragraph of Article 149 of the EEC Treaty)

ORIGINAL PROPOSAL

AMENDED PROPOSAL

Article 1 unchanged

Article 2

Article 2

For the purpose of this Directive,
asbestos means any of the following
fibrous silicates:

For the purpose of this Directive:
1. Asbestos means any of the following
fibrous silicates:

- Actinolite, CAS number 13768-00-8,
- Amosite, CAS number 12172-73-5,
- Anthophyllite, CAS number 17068-78-9,
- Chrysotile, CAS number 12001-29-5,
- Crocidolite, CAS number 12001-28-4,
- Tremolite, CAS number 14567-73-8,

- Actinolite, CAS number 77536-66-4*
- Amosite, CAS number 12172-73-5*
- Anthophyllite, CAS number 77536-67-5*
- Chrysotile, CAS number 12001-29-5,
- Crocidolite, CAS number 12001-28-4,
- Tremolite, CAS number 77536-68-6*

or any mixture containing any one or
more of the foregoing.

or any mixture containing any one or
more of the foregoing.

2. Measurement means sampling and
analysis. For the purposes of
analysis, the definition of fibres
is given in Annex II.10.

Article 3

Article 3

This directive shall apply to workers
exposed to asbestos at work, including
those exposed where asbestos is
extracted, manipulated, treated,
transformed, loaded, unloaded, applied
removed or demolished, and exposed
to any other process which involves
the manufacture of articles comprised
wholly or partly of asbestos.

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workers exposed to asbestos at work,
including those exposed where asbestos
is extracted, manipulated, treated,
transformed, loaded, unloaded, applied,
removed or demolished, and exposed
to any other process which involves
the manufacture of articles comprised
wholly or partly of asbestos.

2. For the purpose of this directive,
a worker shall be deemed to be exposed
to asbestos if, during a 40-hour week,
he is exposed for longer than a total
of 4 working hours to a concentration
of more than 0.1 fibres/ml of blue
asbestos or 0.5 fibres/ml of any other
type of asbestos in the air at his
place of work.

ORIGINAL PROPOSAL
Article 4

AMENDED PROPOSAL
Article 4

Paragraph 1 and 2 unchanged

3. Whenever possible the use of crocidolite shall be avoided and all measures shall be taken to reduce the amounts of crocidolite used at work to a minimum.

3. The marketing and use of crocidolite shall be authorized only in compliance with point 5.1 in the Annex to Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (asbestos).

Remainder of paragraph 3 unchanged

Article 5

Article 5

The manufacturing, processing, storage and disposal of asbestos other than crocidolite, shall be the subject of a notification system run by the relevant authority of the Member State. Workers and their representatives in undertakings or establishments shall have access to the notification concerning their own undertaking or establishment.

The extraction, processing, storage and disposal of asbestos shall be the subject of a notification system run by the relevant authority of the Member State. Workers and their representatives in undertakings or establishments shall have access to the notification concerning their own undertaking or establishment.

Article 6

Article 6

The entry of asbestos into the air at work shall be reduced to the minimum that is reasonably practicable. The measures to be taken shall include the following:

The entry of respirable asbestos fibres into the air at work shall be reduced to the minimum that is reasonably practicable. The measures to be taken shall include the following:

Remainder of Article 6 unchanged

Article 7

Article 7

The areas in which the activities referred to in Article 3 take place shall be:

The areas in which the activities and level of exposure referred to in Article 3 take place shall be:

Remainder of Article 7 unchanged

Article 8

Article 8

1. Sampling of asbestos in air shall be planned and carried out regularly and shall be representative of worker exposure. Personal samplers sampling at a rate of 1 litre/minute and using membrane filters shall be the reference sampling method; other sampling methods giving equivalent results may be used.

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Paragraphs 2 to 6 unchanged

Paragraph 7 deleted

Paragraphs 8 to 11 change to 7 to 10

Paragraph 11. Measurements shall be carried out in accordance with the reference method given in Annex II to this Directive.

Article 9 unchanged

Article 10

Where a total sampling period of four hours or less is used to measure asbestos in the air at work, compliance with the limit values laid down in Article 9 can be considered as being assured if the results of analysis are below:

Article 10

Where a total sampling period of four hours or less is used to measure asbestos in the air at work, the limit values laid down in Article 9 shall apply on the same basis, i.e. for a period of four hours or less:

Remainder of Article 10 unchanged

Article 11 unchanged

Article 12

Where the limit values laid down in Article 9 are exceeded or it is foreseen that they will be exceeded

- a) the relevant authority of the Member State, workers and/or their representatives in undertakings or establishments shall be informed,
- b) workers shall be issued with personal protective equipment of an approved type which shall be worn, and
- c) warning signs shall be put up.

Article 12

Where the limit values laid down in Article 9 are exceeded or it is foreseen that they will be exceeded

- a) the relevant authority of the Member States, workers and/or their representatives in undertakings or establishments shall be informed,
- b) workers shall be issued with personal protective equipment, approved by the responsible authorities which shall be worn, and
- c) warning signs shall be put up.

Articles 13 and 14 unchanged

Article 15

1. No worker shall be exposed for the first time or continue to be exposed to a risk of ill health from inhaling asbestos at work if it is considered that following an assessment of his health such a risk is contra-indicated. This assessment shall:

Article 15

1. No worker shall be exposed for the first time or continue to be exposed to inhaling asbestos at work if, following a medical check, it is considered that this could lead to a deterioration in his health. This medical check shall:

Articles 15.1 a) and 15.1 b) unchanged

- c) list other possible toxic substances with which he has come into contact.

Paragraphs 2 and 3 unchanged

ORIGINAL PROPOSAL

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Article 16

Article 16

Paragraphs 1 and 2 unchanged

3. Working or protective clothing shall remain at work, it may however be transferred elsewhere in closed impermeable containers marked as containing asbestos to be laundered in special facilities

3. Working or protective clothing shall remain at work, it may however be transferred elsewhere in closed impermeable containers marked as containing asbestos to be laundered in special facilities within the undertaking.

Should no special laundry exist in the undertaking for the washing of working clothes, this work shall be contracted out to a specialized firm which must be advised in writing and in advance of the risks involved, so that identical precautions may be taken for its employees as for the workers working with asbestos.

Article 17

Article 17

1. Workers shall be adequately instructed for the work they are to carry out. Such instruction shall include:

1. Workers shall be adequately instructed for the work they are to carry out and about the risks involved. Such instructions shall include:

Articles 17.1 a) and 17.1 b) unchanged

2. The information shall be updated on the basis of scientific findings.

Paragraph 2 changes to Paragraph 3

Article 18

Article 18

1. The relevant authority of the Member State shall collect the statistics of all workers' sickness absences attributed to asbestos, which last longer than three days.

deleted

1. Forms of lung cancer caused by asbestos shall be regarded unconditionally as occupational diseases.

Paragraph 2 and 3 unchanged

Articles 19 to 21 unchanged

ORIGINAL PROPOSAL

AMENDED PROPOSAL

ANNEX

ANNEX 1

Point 1 unchanged

2. Succinct description by the applicant or notifier of:

a) types and amounts of asbestos used;

2. Succinct description by the applicant or notifier of:

a) types and amounts of asbestos used in the production process or present in the factory in other forms;

Subparagraphs (b) to (d) unchanged

3. Other dangerous substances used.

3. Other substances used which are toxic or otherwise a danger to health.

Points 4 to 6 unchanged.

ANNEX II

Technical specifications governing the reference method for the measurement of asbestos in air at the workplace which defines the quantitative meaning of the limit values given in Article 9 of this Directive.

1. Sampling requirements

- 1.1 Samples shall be taken within the individual worker's breathing zone: i.e. within a hemisphere of 300 mm radius extending in front of the face and measured from the mid-point of a line joining the ears.
- 1.2 Membrane filters (mixed esters of cellulose or cellulose nitrate) of pore size 0.8 to 1.2 micrometre with printed squares and a diameter of 25 mm shall be used.
- 1.3 An open-faced filter holder fitted with a cylindrical metal cowl extending between 33mm and 44mm in front of the filter exposing a circular area of at least 20 mm in diameter shall be used. In use, the cowl shall point downwards.
- 1.4. A portable battery-operated pump carried on the worker's belt or in a pocket shall be used. The flow shall be smooth and the rate initially set at 1.0 l/min \pm 5%. The flow rate shall be maintained

with $\pm 10\%$ of the initial rate during the sampling period.

1.5 The sampling time shall be measured to within 2%.

2. Analysis requirements

2.1 The optimal fibre-loading on filters shall be in the range 100-400 fibres/mm².

2.2 The whole filter shall be placed on a microscope slide, made transparent using the acetone-triacetin method, and covered with a glass coverslip.

2.3 A binocular microscope shall be used for counting and shall have the following features:

- koehler illumination;
- its substage assembly shall incorporate an Abbe or achromatic phase-contrast condenser in a centring focussing mount. The phase contrast centring adjustment shall be independent of the condenser centring mechanism;
- a 40 times par-focal positive phase contrast achromatic objective with a numerical aperture of 0.65 - 0.70 and phase ring absorption in the range 65 - 85%;
- 12.5 times compensating eyepieces; at least one eyepiece must permit the insertion of a graticule and be of the focussing type;
- a Walton-Beckett circular eyepiece graticule with an apparent diameter in the object plane of 100 micrometres ± 2 micrometre when using the specified objective and eyepiece checked against a stage micrometre.

2.4 The microscope shall be set up according to the manufacturer's instructions, and the detection limit checked using a "phase contrast test slide". Up to Code 5 on the AIA test slides or up to block 5 on the HSE/NPL Mark 2 test slide must be visible when used in the way specified by the manufacturer. This procedure shall be carried out at the beginning of the day of use.

ORIGINAL PROPOSAL

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2.5 Samples shall be counted in accordance with the following rules:

- a countable fibre shall be any object which is longer than 5 micrometres with a breadth of less than 3 micrometres and a length/breadth ratio of more than 3/1. Counting of fibres shall be carried out by means of optical microscopes using phase contrast.
- a countable fibre with both ends within the graticule area shall be counted as one fibre: a fibre with only one end within the area shall count as half;
- graticule areas for counting shall be chosen at random within the exposed area of the filter;
- an agglomerate of fibres which at one or more points on its length appears to be solid and undivided but at other points appears to divide into separate strands (a split fibre) is one countable fibre if it meets the above definition the diameter being measured across the undivided part, not the split part;
- in any other agglomerate of fibres in which individual fibres touch or cross each other (a bundle), these fibres shall be counted individually if they can be distinguished sufficiently to determine that they meet the above definition. If no individual fibres meeting the definition can be distinguished, the bundle is a countable fibre if as a whole it meets the above definition;
- if more than one-eighth of a graticule area is covered by an agglomerate of fibres and/or particles, the graticule area must be rejected and another counted;
- 100 fibres shall be counted with a minimum of 20 graticule areas examined or 100 graticule areas examined.

ORIGINAL PROPOSAL

AMENDED PROPOSAL

- 2.6. The mean number of fibres per graticule is calculated by dividing the number of fibres counted by the number of graticule areas examined. The contribution to the count due to marks on the filter and contamination shall be kept below 3 fibres/100 graticule areas and shall be assed using blank filters.

Concentration in air = (number per graticule area x exposed area of filter)/(graticule area x volume of air collected).