L.N. 123 of 2003

OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ACT

(CAP. 424)

Protection of Workers from the Risks related to Exposure to Asbestos at Work Regulations, 2003

IN EXERCISE of the powers conferred by article 12 of the Occupational Health and Safety Authority Act, 2000, the Deputy Prime Minister and Minister for Social Policy, in consultation with the Occupational Health and Safety Authority, has made the following regulations:-

Title, scope and applicablity.

1. (1) The title of these regulations is the Protection of Workers from the Risks related to Exposure to Asbestos at Work Regulations, 2003.

(2) The scope of these regulations is to protect workers against risks to their health, including the prevention of such risks, arising or likely to arise from exposure to asbestos at work. These regulations lay down limit values and other specific requirements.

(3) (a) These regulations shall apply to activities in which workers are or may be exposed in the course of their work to dust arising from asbestos or materials containing asbestos.

(b) These regulations shall not apply to sea or air tansport.

Interpretation.

2. In these regulations, unless the context otherwise requires:

Cap. 424.

"Act" means the Occupational Health and Safety Authority Act;

"asbestos" means the following fibrous silicates:

– Actinolite, CAS (Chemical Abstract Service) No 77536-66-4,

– Asbestos grunerite (amosite) CAS No 12172-73-5,

– Anthophyllite, CAS No 77536-67-5,

– Chrysotile, CAS No 12001-29-5,

– Crocidolite, CAS No 12001-28-4,

– Tremolite, CAS No 77536-68-6.

"Authority" means the Occupational Health and Safety Authority established by virtue of article 8 of the Act;

"doctor" means a medical practitioner, specialised in respiratory medicine, who is appointed by an employer to examine workers exposed to asbestos.

Assessment of risk.

3. (1) In the case of any activity likely to involve a risk of exposure to dust arising from asbestos or materials containing asbestos, the risk must be assessed in such a way as to determine the nature and degree of the workers' exposure to dust arising from asbestos or materials containing asbestos.

(2) If the assessment referred to in paragraph 1 shows that the concentration of asbestos fibres in the air at the place of work in the absence of any personal protective equipment is, at a level as measured or calculated:

(a) for chrysotile:

- lower than 0.20 fibres per cm^3 in relation to an eight-hour reference period, and, or

- lower than a cumulative dose of 12 fibre-days per cm^3 over a three-month period;

(b) for all other forms of asbestos either alone or in mixtures, including mixtures containing chrysotile:

- lower than 0.10 fibres per cm^3 in relation to an eight-hour reference period, and, or

- lower than a cumulative dose of 6 fibre-days per cm^3 over a three-month period, regulations 4, 7, 12, 13 (2), 14 and 15 shall not apply.

(3) The assessment provided for in Regulation 3 (1) shall be the subject of consultation with the workers and, or their representatives within the undertaking or establishment and shall be

revised where there is reason to believe that it is incorrect or there is a material change in the work.

Notification system.

4. Subject to Regulation 3 (2), the following measures shall be taken:

(1) The activities referred to in Regulation 1 (3) (a) must be covered by a notification system administered by the Authority, and no work involving asbestos or of material containing asbestos may commence before the Authority is thus notified.

(2) This notification must include at least a brief description of the types and quantities of asbestos, the activities and processes involved, the products manufactured, if any, and a plan of work as is required under regulation 11.

(3) Without prejudice to any other applicable law or regulation, workers and, or their representatives in undertakings or establishments shall have access to the documents which are the subject of notification concerning their own undertaking or establishment.

(4) Each time an important change occurs in the activity involving asbestos or materials containing asbestos, a new notification must be submitted.

Prohibition of asbestos by means of spraying.

5. The application of asbestos by means of the spraying process and working procedures that involve using low-density (less than 1g/cm3) insulating or soundproofing materials which contain asbestos are prohibited.

Limitations.

6. For all activities referred to in regulation 1 (3) (a), the exposure of workers to dust arising from asbestos or materials containing asbestos at the place of work must be reduced to as low a level as is reasonably practicable and in any case below the limit valuse laid down in regulation 8, in particular through the following measures if appropriate:

(a) The quantity of asbestos used in each case must be limited to the minimum quantity which is reasonably practicable.

(b) The number of workers exposed or likely to be exposed to dust arising from asbestos or materials containing asbestos must be limited to the lowest possible number.

(c) Work processes must, in principle, be so designed as to avoid the release of asbestos dust into the air.

(d) If this is not reasonably practicable, the dust should be eliminated as near as possible to the point where it is released.

(e) All buildings and, or plant and equipment involved in the processing or treatment of asbestos must be capable of being regularly and effectively cleaned and maintained.

(f) Asbestos and any material containing asbestos must be stored and transported in suitable, sealed double packing approved by the Malta Environment and Planning Authority for such purpose.

(g) Waste must be collected and removed from the place of work as soon as possible in suitable sealed packing with labels indicating that it contains asbestos. Such waste shall then be dealt with in accordance with applicable laws and regulations that regulate the disposal of toxic or hazardous material.

Measurement and sampling.

7. Subject to regulation 3 (2), the following measures shall be taken:

(1) (a) In order to ensure compliance with the limit values laid down in Regulation 8, the measurement of asbestos in the air at the place of work shall be carried out in accordance with the reference method described in Schedule I or any other method giving equivalent results. Such measurement must be planned and carried out regularly, with sampling being representative of the personal exposure of the worker to dust arising from asbestos or materials containing asbestos.

(b) For the purposes of measuring asbestos in the air, as referred to in the preceding paragraph, only fibres with a length of more than five micrometres and a length, divided by breadth ratio greater than 3: 1 shall be taken into consideration.

(2) Sampling shall be carried out after consulting the workers and, or their representatives in undertakings or establishments.

(3) Sampling shall be carried out by suitably qualified personnel. The samples taken shall be subsequently analysed in laboratories equipped to analyse them and qualified to apply the necessary identification techniques.

(4) The amount of asbestos in the air shall be measured as a general rule at least every three months and, in any case, whenever a technical change is introduced. The frequency of measurements may, however, be reduced to once a year where there is no substantial change

in conditions at the place of work, and the results of the two preceding measurements have not exceeded half the limit values fixed in regulation 8:

Provided that where groups of workers are performing identical or similar tasks at the same place and are thus being exposed to the same health risk, sampling may be carried out on a group basis.

(5) The duration of sampling must be such that representative exposure can be established for an eight-hour reference period over one shift by means of measurements or time-weighted calculations. The duration of the various sampling processes shall be determined also on the basis of point 6 of Schedule I.

Application of certain limit values.

8. The following limit values shall be applied:

(a) concentration of chrysotile fibres in the air at the place of work:

0.60 fibres per cm^3 measured or calculated in relation to an eight-hour reference period;

(b) concentration in the air at the place of work of all other forms of asbestos fibres, either alone or in mixtures, including mixtures containing chrysotile:

0.30 fibres per cm^3 measured or calculated in relation to an eight-hour reference period.

Exceeding of limit values.

9. (1) Where the limit values laid down in regulation 8 are exceeded, the reasons for the limits being exceeded must be identified and appropriate measures to remedy the situation must be taken as soon as possible.

Work may not be continued in the affected area until adequate measures have been taken for the protection of the workers concerned.

(2) In order to check the effectiveness of the measures mentioned in the first paragraph of sub-regulation (1) of this regulation, a further determination of the asbestos-in-air concentrations shall be carried out immediately.

(3) Where exposure cannot reasonably be reduced by other means and where the wearing of individual respiratory protective equipment proves necessary, this may not be permanent and shall be kept to the strict minimum necessary for each worker.

Other instances where limit values may be exceeded.

10. (1) In the case of certain activities in respect of which it is foreseeable that the limit values laid down in regulation 8 will be exceeded and in respect of which technical preventive measures for limiting asbestos-in-air concentrations are not reasonably practicable, the employer shall determine the measures intended to ensure protection of the workers while they are engaged in such activities, in particular the following:

(a) workers shall be issued with suitable respiratory equipment and other personal protective equipment, which must be worn; and

(b) warning signs shall be put up indicating that it is foreseeable that the limit values laid down in regulation 8 will be exceeded.

(2) The workers and/or their representatives in the undertaking or establishment shall be consulted on these measures before the activities concerned are carried out.

Plan for demolition work.

11. (1) A plan of work shall be drawn up before demolition work or work on removing asbestos and, or asbestos-containing products from buildings, structures, plant or installations or from ships is started.

(2) The plan referred to in sub-regulation (1) must prescribe the measures necessary to ensure the safety and health of workers at the place of work.

The plan must in particular specify that:

(a) as far as is reasonably practicable, asbestos and, or asbestos-containing products are removed before demolition work starts;

(b) the personal protective equipment referred to in regulation 10 (1) (a) is provided, where necessary.

(3) The plan shall include information on the following:

(a) the nature and probable duration of the work,

(b) the place where the work is to be carried out,

(c) the methods applied where the work involves asbestos or of materials containing asbestos,

(d) the characteristics of the equipment used for:

- protection and decontamination of those carrying out the work,

- protection of other persons present on or near the worksite.

(4) The plan referred to in sub-regulation (1) must be notified to the Authority before the start of the projected work, and the Authority may require additional preventive or protective measures to be taken so as to better safeguard the health and safety of workers or third parties.

Appropriate measures.

12. (1) In the case of all activities referred to in regulation 1 (3) (a), and subject to regulation 3 (2), appropriate measures shall be taken to ensure that:

(a) the places in which the above activities take place shall:

(i) be clearly demarcated and indicated by warning signs;

(ii) not be accessible to workers other than those who by reason of their work or duties are required to enter them;

(iii) constitute areas where there should be no smoking;

(b) areas are set aside where workers can eat and drink without risking contamination by asbestos dust;

(i) workers are provided with appropriate working or protective clothing;

(ii) this working or protective clothing remains within the undertaking. It may, however, be laundered in establishments outside the undertaking which are equipped for this sort of work if the undertaking does not carry out the cleaning itself; in that event the clothing shall be transported in closed containers;

(iii) separate storage places are provided for working or protective clothing and for street clothes;

(iv) workers are provided with appropriate and adequate washing and toilet facilities, including showers in the case of dusty operations;

(v) protective equipment shall be placed in a well-defined place and shall be checked and cleaned after each use; appropriate measures shall be taken to repair or replace defective equipment before further use.

(2) Workers may not be charged with the cost of measures taken pursuant to this regulation.

Information to workers.

13. (1) In the case of all activities referred to in regulation 1 (3) (a), appropriate measures shall be taken to ensure that workers and their representatives in the undertaking or establishment receive adequate information concerning:

– the potential risks to health from exposure to dust arising from asbestos or materials containing asbestos,

– the existence of statutory limit values and the need for the atmosphere to be monitored,

– hygiene requirements, including the need to refrain from smoking,

– the precautions to be taken as regards the wearing and use of protective equipment and clothing,

– special precautions designed to minimize exposure to asbestos.

(2) In addition to the measures referred to in sub-regulation (1), and subject to regulation 3 (2), appropriate measures shall be taken to ensure that:

(a) workers and, or their representatives in the undertaking or establishment have access to the results of asbestos-in-air concentration measurements and can be given explanations of the significance of those results;

(b) if the results exceed the limit values laid down in regulation 8 the workers concerned and their representatives in the undertaking or establishment are informed as quickly as possible of the fact and the reason for it and the workers and/or their representatives in the undertaking or establishment are consulted on the measures to be taken or, in an emergency, are informed of the measures which have been taken.

Health surveillance.

14. Subject to regulation 3 (2) the following measures shall be taken:

(1) An assessment of each worker's state of health, including a specific examination of the chest, must be carried out prior to the beginning of exposure to dust arising from asbestos or materials containing asbestos at the place of work, and for this purpose, a doctor carrying out such an examination may be guided by the practical recommendations of Schedule II.

(2) A new assessment must be carried out at least once every three years for as long as exposure continues, and a record of the health of each individual thus examined must be established by the doctor:

Provided that the doctor shall pass to the employer the results of these assessments and any recommendations made, under strict confidential cover, and the employer shall give to the worker copies of such assessments and recommendations to the worker concerned.

(3) Following the clinical surveillance referred to in this regulation, the doctor responsible for the medical surveillance of the workers should advise on, or determine any individual protective or preventive measures to be taken; these may include, where appropriate, the withdrawal of the worker concerned from all exposure to asbestos. The doctor may refer any particular case to the Authority for specific instructions.

(4) Information and advice must be given to workers regarding any assessment of their health which they may undergo following the end of exposure.

(5) The worker concerned or the employer may request a review of the assessments referred to in sub-regulations (1) and (2).

Maintenance of health register.

15. (1) The employer must enter the names of the workers responsible for carrying out the activities referred to in regulation 1 (3) (a) in a register, indicating the nature and duration of the activity and the exposure to which they have been subjected. The doctor and, or the Authority shall have access to this register. Each worker shall have access to the results in the register which relate to him personally. The workers and, or their representatives shall have access to anonymous, collective information in the register.

(2) The register referred to in sub-regulation (1) of this regulation and the medical records referred to in regulation 14 (1) shall be kept for at least 30 years following the end of exposure.

Register of recognised caes of asbestosis and, or mesothelioma.

16. The Authority shall keep a register of confirmed cases of asbestosis and mesothelioma, and for this purpose, any Government Department, agency or entity that is notified by any means whatsoever of the occurrence of a case of asbestosis and, or mesothelioma, shall inform the Authority of such notification, and shall also give the Authority all other relevant details known to the Department, Agency or entity.

Saving.

17. These Regulations shall be without prejudice to any other regulation, or any conditions made or imposed by any other competent authority in Malta concerning the importation, use, transport, disposal, storage or export of asbestos or of any material containing asbestos.

Onus of proof.

18. In any proceedings for an offence under these regulations consisting of a failure to comply with a duty or requirement to do something, or to do something so far as is reasonably practicable, it shall be for the accused to prove (as the case may be) that it was not practicable or not reasonably practicable to do more than was in fact done to satisfy the duty or requirement, or that there was no better practicable means than was in fact used to satisfy the duty or requirement.

Offences.

19. Any person who knowingly or recklessly interferes with the process of providing a safe and healthy place of work, shall be guilty of an offence.

SCHEDULE I

Reference method referred to in regulation 7 (1) for the measurement of asbestos in air at the place of work

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.

2. Membrane filters (mixed esters of cellulose or cellulose nitrate) of pore size 0.8 to 1.2 micrometres with printed squares and a diameter of 25 mm shall be used.

3. An open-faced filter holder fitted with a cylindrical cowl extending between 33 and 44 mm 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.

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 litres per minute ± 5 %. The flow rate shall be maintained within ± 10 % of the initial rate during the sampling period.

5. The sampling time shall be measured to within a tolerance of 2 %.

6. The optimal fibre-loading on filters shall be within the range 100 to 400 fibres/mm2.

7. In order of preference, the whole filter, or a section of the filter, shall be placed on a microscope slide, made transparent using the acetone-triacetin method, and covered with a glass coverslip.

8. 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 focusing mount. The phase-contrast centring adjustment shall be independent of the condenser centring mechanism,

– a 40 times bar-focal positive phase-contrast achromatic objective with a numerical aperture of 0.65 to 0.70 and phase ring absorption within the range 65 to 85 %,

– 12.5 times compensating eyepieces; at least one eyepiece must permit the insertion of a graticule and be of the focusing type,

– a Walton-Beckett circular eyepiece graticule with an apparent diameter in the object plane of 100 micrometres ± 2 micrometres, when using the specified objective and eyepiece, checked against a stage micrometer.

9. 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.

10. Samples shall be counted in accordance with the following rules:

– a countable fibre is any fibre referred to in the second subparagraph of point 1 of regulation 7 which does not touch a particle with a maximum diameter greater than three micrometers,

– any countable fibre with both ends within the graticule area shall be counted as one fibre; any 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 solid and undivided but at other points is divided into separate strands (a split fibre) is counted as a single fibre if it conforms with the description in the second subparagraph of point 1 of regulation 7 and indent 1 of this paragraph, the diameter measured being that of the undivided part, not that of the split part,

– in any other agglomerate of fibres in which individual fibres touch or cross each other (a bundle), the fibres shall be counted individually if they can be distinguished sufficiently to determine that they conform with the description in the second subparagraph of point 1 of regulation 7 and indent 1 of this paragraph. If no individual fibres meeting the definition can be distinguished, the bundle is considered to be a countable fibre if, taken as a whole, it conforms with the description in the second subparagraph of point 1 of regulation 7 and indent 1 of this paragraph,

– 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, which will enable a minimum of 20 graticule areas to be examined, or 100 graticule ares shall be examined.

11. The mean number of fibres per graticule is calculated by dividing the number of fibres counted by the number of graticule areas examined. The effect on the count of

marks on the filter and contamination shall be kept below three fibres/100 graticule areas and shall be assessed using blank filters.

Concentration in air = (number per graticule area multiplied by the exposed area of filter) divided by (graticule area mutiplied by volume of air collected).

SCHEDULE II

Practical recommendations for the clinical assessment of workers, as referred to in regulation 14 (1)

1. Current knowledge indicates that exposure to free asbestos fibres can give rise to the following diseases:

– asbestosis,

– mesothelioma,

– bronchial carcinoma,

– gastro-intestinal carcinoma.

2. The doctor responsible for the medical surveillance of workers exposed to asbestos and, or the Authority must be familiar with the exposure conditions or circumstances of each worker.

3. Clinical surveillance of workers should be carried out in accordance with the principles and practices of occupational medicine; it should include at least the following measures:

– keeping records of a worker's medical and occupational history,

– a personal interview,

– a clinical examination of the chest,

– a respiratory function examination.

Further examinations, including a standard format radiograph of the chest and laboratory tests such as a sputum cytology test, are desirable. These examinations should be decided upon for each worker when he is the subject of medical surveillance, in the light of the most recent knowledge available to occupational medicine.

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