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GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO. 85 OF 1993)

### DRAFT AMENDED ASBESTOS REGULATIONS

The Minister of Labour intends, in terms of section 43 of the Occupational Health and Safety Act, 1993, (Act No. 85 of 1993), on the recommendation of the Advisory Council for Occupational Health and Safety, to make the regulations contained in the Schedule.

Interested persons are invited to submit any substantiated comments or representations on the proposed regulations to the Director General of Labour, Private Bag X117, Pretoria, 0001 (for the attention of the Chief Director: Occupational Health and Safety), within 90 days of the date of publication of this notice.

**M M S MDLADLANA**  
**MINISTER OF LABOUR**

### SCHEDULE

#### DRAFT AMENDED ASBESTOS REGULATIONS 1999

##### DEFINITION:

1. In these regulations "**the Act**" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), and any expression to which a meaning has been assigned in the Act shall have the meaning so assigned and, unless the text otherwise indicates

"**action level**" means a time weighted airborne concentration of a substance in a workplace that is distinctly below the occupational exposure limit for that substance, and at or above which level certain prescribed preventive measures must be taken;

"**action level for asbestos**" means an action level of 0,1 regulated asbestos fibres per millilitre of air, measured according to MDHS 39/4;

"**annexure**" means an annexure to these regulations;

"**approved asbestos contractor**" means a specialist mandatory or employer conducting demolition work, who is approved by the chief inspector;

"**approved inspection authority**" means an inspection authority approved by the chief inspector for the monitoring of asbestos concentrations in the air;

"**asbestos**" means any of the following minerals:

Amosite  
Chrysotile  
Crocidolite  
Fibrous actinolite  
Fibrous anthophyllite  
Fibrous tremolite  
and any mixture containing any of these minerals;

"**asbestos dust**" means airborne or settled dust, which contains or is likely to contain regulated asbestos fibres;

"**demolition work**" includes demolition, alteration, stripping, removing, repair or high-pressure water jetting of any structure containing asbestos lagging or insulation or any products containing asbestos, or gleaning any spilt asbestos or products containing asbestos, but excluding work performed on the fabric of a workplace, building, plant or premises;

"**EH 42**" means the Guidance Note EH 42 of the Health and Safety Executive of the United Kingdom: *Monitoring Strategies for Toxic Substances*, 1989 HSE ISBN 0 11885412 7, as revised from time to time;

"**exposed**" means exposed to airborne regulated asbestos fibres whilst at the workplace, and "exposure" has a corresponding meaning;

"**IOHSA**" means the Institute for Occupational Hygienists of South Africa;

"**MDHS 39/4**" means the Methods for the Determination of Hazardous Substances 39/4 of the Health and Safety Executive of the United Kingdom: *Asbestos fibres in air, sampling and evaluation by phase contrast microscopy (PCM)* under the Control of Asbestos at Work Regulations, 1995 HSE ISBN 0 7176 0913 8, as revised from time to time;

"**MDHS 77**" means the Methods for the Determination of Hazardous Substances 77 of the Health and Safety Executive of the United Kingdom: *Asbestos in bulk material, sampling and identification by polarised light microscopy (PLM)*, 1994 HSE ISBN 0 11 751 384 9 as revised from time to time;

"**measurement programme**" means a programme according to the monitoring strategy as contemplated in EH 42;

"**monitoring**" means the planning and carrying out of a measurement programme and the recording of the results thereof;

"**OESSM**" means the *Occupational Exposure Sampling Strategy Manual*, published by the National Institute for Occupational Safety and Health (NIOSH), Publication No. 77-173 of 1977, United States of America: Department of Health, Education and Welfare;

"**OEL**" or "**occupational exposure limit**" means a limit value set by the Minister for a stress factor in the workplace as revised from time to time by notice in the *Government Gazette*;

"**occupational exposure limit for asbestos**" means an occupational exposure limit of 0,2 regulated asbestos fibres per milliliter of air averaged over any continuous period of four hours measured in accordance with MDHS 39/4;

"**provincial director**" means the provincial director as defined in regulation 1 of the General Administrative Regulations;

"**raw**" means not yet processed;

"**regulated asbestos fibre**" means a particle of asbestos with a length-to-diameter ratio greater than 3 to 1, a length greater than 5 micrometres and a diameter less than 3 micrometres;

"**respiratory protective equipment**" means a device which is worn over at least the mouth and nose to prevent the inhalation of air which is not safe, and which is of a type or conforms to a standard approved by the Minister;

"**respirator zone**" means an area where the concentration of airborne regulated asbestos fibres exceeds the OEL for asbestos, without the use of respiratory protective equipment;

"**SABS 0228**" means the Code of Practice for the Identification and Classification of Dangerous Substances and Goods, SABS 0228, published by the South African Bureau of Standards (SABS);

"**SABS 0229**" means the Code of Practice for Packaging of Dangerous Goods for Road and Rail Transportation in South Africa, SABS 0229, published by the South African Bureau of Standards (SABS);

**"short-term exposure limit"** means the concentration to which workers can be exposed continuously for a short period of time, which is a 10-minute Time-Weighted Average (TWA) exposure for asbestos, which should not be exceeded at any time during the working day even if the 4-hour TWA is within the OEL-TWA;

**"short term exposure limit for asbestos"** means an exposure limit of 0,6 regulated asbestos fibres per millilitre of air averaged over any 10 minutes.

## **SCOPE OF APPLICATION**

2. (1) Subject to the provisions of subregulation, these regulations shall apply to all persons who carry out work at a workplace which may expose any person to the inhalation of asbestos fibres in raw mineral form or asbestos fibres which are or were present in any substance processed at that workplace

(2) The provisions of regulations 4(1), 4(2), 4(3), 4(4), 4(5), 6, 7 and 8 shall not apply in the case of-

- a. a self-employed person; or
- b. a person who visits a workplace as contemplated in subregulation (1).

## **NOTIFICATION OF ASBESTOS WORK**

3. No employer shall carry out any asbestos-related work unless he or she has notified the provincial director in writing thereof prior to the commencement of such work.

## **INFORMATION AND TRAINING**

4. (1) An employer shall, before any employee is exposed or may be exposed, after consultation with the health and safety committee established for that section of the workplace, ensure that the employee is adequately and comprehensively informed and trained, on both practical aspects and theoretical knowledge, with regard to-

- a. the contents and scope of these regulations;
- b. the potential sources of exposure;
- c. the potential risk to health caused by exposure to asbestos, including the health risks to employees' families and others which could result from taking home asbestos contaminated equipment and clothing, and the dramatically increased risk of lung cancer for asbestos workers who also smoke;
- d. the measures taken by the employer to protect an employee against any risk from exposure;
- e. the precautions to be taken by the employee to protect himself or herself against the health risks associated with the exposure, including the wearing and use of protective clothing and respiratory protective equipment;
- f. the necessity, correct use, maintenance and limitations of protective equipment, facilities and engineering control measures provided;
- g. the assessment of exposure, the purpose of air sampling, the necessity for medical surveillance and the long term benefits of undergoing such surveillance;
- h. the occupational exposure limit and action level and their meaning;
- i. the importance of good housekeeping at the workplace and personal hygiene;
- j. the safe working procedures regarding the use, handling, processing, and storage of any material containing asbestos, including the correct use of control measures to limit the spread of asbestos fibres outside the work area and to limit the exposure of workers inside the work area as far as is reasonably practicable;
- k. procedures to be followed in the event of a spillage or any other similar emergency situation which could take place by accident;
  - l. procedures for reporting and correcting defects;
- m. waste disposal;
- n. procedures for record keeping; and
- o. aspects contemplated in regulation 5.

(2) Refresher training must be given on aspects stipulated in subregulation (1) at least every year or at intervals as may be recommended by the health and safety committee: Provided that training should be given more frequently if-

- a. work methods change;
- b. the type of equipment used to control exposure changes; or
- c. the type of work carried out changes significantly.

(3) The training should be provided by somebody who is competent in doing so and who has adequate personal practical experience and theoretical knowledge of all aspects of the work being carried out by the employer.

(4) An employer shall ensure as far as is reasonably practicable that mandatories of himself or herself or any other persons that may be affected by asbestos exposure at the workplace other than employees, are given adequate information, instruction and training.

(5) The employer shall keep a record of any training that was performed, both practical and theoretical.

(6) An employer or a self-employed person shall give written instructions of the procedures contemplated in subregulation (1)(j) to the drivers of vehicles carrying the asbestos or asbestos-containing material.

(7) An employer or a self-employed person shall ensure that he or she or any person who in any manner assists them in the carrying out or the conducting of their business, has the necessary information and has undergone sufficient training in order for them to identify the potential risks and the precautions which should be taken.

#### **DUTIES OF PERSONS WHO MAY BE EXPOSED**

**5.** A person who is or may be exposed, shall obey any lawful instruction given by or on behalf of the employer or a self-employed person, regarding-

- a. the prevention of asbestos dust from becoming airborne;
- b. the wearing and use of personal protective equipment and clothing;
- c. the wearing of monitoring equipment to measure personal exposure;
- d. the reporting for health evaluations and biological tests as required by these regulations;
- e. the cleaning up and disposal of any material containing asbestos;
- f. housekeeping at the workplace, personal hygiene, good environmental and health practices, including eating, drinking and smoking in designated places provided; and
- g. information and training received as contemplated in regulation 4.

#### **ASSESSMENT OF POTENTIAL EXPOSURE**

**6.** (1) An employer or self-employed person shall ensure that an immediate assessment is carried out and thereafter at intervals not exceeding two years to determine if any employee may be exposed by inhalation or any other route of intake which may be of significance.

(2) The assessment contemplated in subregulation (1) shall be carried out by -

- a. an approved inspection authority who is approved for asbestos; or
- b. a person who is registered with IOHSA and who is not an approved inspection authority, whose ability to do the measurements is verified by an approved inspection authority, in accordance with the provisions of regulation 7(3).

(3) An employer shall inform the relevant health and safety representative or relevant health and safety committee in writing of the arrangements made for the assessment contemplated in subregulation (1), give them reasonable time to comment thereon and ensure that the results of the assessment are made available to the relevant representative or committee who may comment thereon.

(4) When making the assessment, the employer or self-employed person shall take into account such matters as

- a. the possibility of any material containing asbestos being used, processed, handled or stored;
- b. the type of asbestos to which an employee may be exposed;
- c. what health effect the asbestos may have on the employee;

- d. the nature and degree of exposure which may occur in the course of the work;
- e. where the asbestos may be present, the extent to which an employee may be exposed, and the state in which the asbestos may be bound;
- f. the nature of the working, processing and any reasonable deterioration in, or failure of, any control measures;
- g. assessing the details of expected exposures, noting-
  - i. whether they are liable to exceed the action level or the OEL;
  - ii. whether the expected exposure is above the OEL, so that the appropriate respiratory protective equipment can be selected before engineering controls are implemented;
  - iii. if such exposures are intermittent, including the frequency and duration of exposures;
  - iv. the number of employees exposed and anyone other than employees who may be exposed and their expected exposure values; and
  - v. where applicable, results which may be available from any previous monitoring performed;
- h. the steps to be taken to reduce exposure to the lowest level reasonably practicable and the steps taken to reduce the release of asbestos into the environment;
- i. where appropriate, procedures for dealing with emergencies; and
- j. procedures for the removal of asbestos waste from the workplace and the disposal thereof.

(5) If the assessment made in accordance with subregulation (4) indicates that any employee may be exposed to concentrations equal to or greater than the action level, the employer shall ensure that air monitoring and medical surveillance are carried out in accordance with the provisions of regulations 7 and 8 respectively and that the exposure be controlled as contemplated in regulation 10.

(6) An employer shall review the assessment required by subregulation (1) forthwith if-

- a. there is reason to suspect that the previous assessment is no longer valid; or
- b. there is doubt about the efficiency of control measures, or when technological or scientific advances allow for more efficient control methods; or
- c. there has been a significant change in a process involving asbestos or in the methods, equipment or procedures in the use, handling, processing, storing or control of asbestos;

and the provisions of subregulations (2) and (3) shall apply.

## **AIR MONITORING**

**7. (1)** The employer contemplated in regulation 6 (4) shall ensure that the measurement programme of the airborne concentrations of the asbestos fibres to which an employee is exposed is-

- a. carried out in accordance with the provisions of these regulations;
- b. carried out only after the relevant health and safety representative or relevant health and safety committee has been informed thereof and given a reasonable opportunity as mutually agreed upon to comment thereon;
- c. carried out by-
  - i. an approved inspection authority who is approved for asbestos monitoring; or
  - ii. a person who is registered at IOHSA and who is not an approved inspection authority, whose ability to do the measurements is verified by an approved inspection authority, in accordance with the provisions of subregulation (3):  
Provided that the approved inspection authority or a person registered with IOHSA who is not an approved inspection authority, whose ability to do the measurement is verified by an approved inspection authority, shall participate in a recognised proficiency testing programme for asbestos counting;
- d. taken in accordance with MHDS 39/4, using the standards for asbestos, other than chrysotile asbestos alone, for all forms of asbestos measured;

- e. representative of the exposure of employees to the airborne asbestos fibres in accordance with the provisions of subregulation (2).

(2) In order to comply with the provisions of subregulation (1)(d), an employer shall:

- a. ensure that the measurement programme, in the case of a group measurement, makes provision for the selection of the number of persons for a sample to be done as contemplated in chapters 3 and 4 and Technical Appendix A of OESSM: Provided that measurements of exposure shall be by personal sampling: Provided further that static sampling may be used for checking control measures.
- b. if the most exposed employee can be identified and the assessment indicates that this employee's exposure will be less than the action level prescribed for asbestos then -  
  
a level 1 sampling strategy may be used as contemplated in EH42 and described in Chapter 3.1.1 of OESSM.
- c. when the most exposed employee cannot be identified or the assessment indicates that this employee's exposure may exceed the action level prescribed for asbestos then -  
  
at least a level 2 sampling strategy shall be used, as contemplated in EH42 and described in Chapter 3.1.2 of OESSM. Provided that such sample size shall be chosen to ensure that the most exposed employee falls within the top 10% of exposed employees within the group taken at the 95% confidence level.
- d. ensure that representative measurements are carried out at least every 12 months: Provided that whenever the OEL which has been prescribed for asbestos is exceeded, the provisions of regulation 10 shall apply.

(3) In order to comply with the provisions of subregulation (1)(c)(ii), an employer shall obtain the services of an approved inspection authority who is approved for asbestos monitoring who shall, at intervals not exceeding 12 months, do the verification

- a. by examining the measurement and analysis equipment of the employer;
- b. by questioning the person to be verified regarding the measurement programme;
- c. by carrying out the measurement programme required by subregulation (2) for any one group, simultaneously with the person to be verified;
- d. by entering the results of the assessment of air monitoring as contemplated in regulation 6(4) and subregulation (2) respectively, in the record required by regulation 11; and
- e. by making a statement as to whether the person contemplated in regulation 6(2)(b) or subregulation (1)(c)(ii), as the case may be, is recommended to carry out the assessment or measurement programme as required by regulation 6(4) or subregulation (2).

## **MEDICAL SURVEILLANCE**

**8.** (1) The employer shall ensure that an employee is under medical surveillance if-

- a. the employee is exposed or is likely to be exposed to a level of asbestos which may exceed the action level; or
- b. the occupational health practitioner recommends that the relevant employee should be under medical surveillance, in which case the employer may call on an occupational medicine practitioner to ratify the appropriateness of such recommendation.

(2) In order to comply with the provisions of subregulation (1), the employer shall, as far as is reasonably practicable, ensure that a structured medical surveillance programme be drawn up by an occupational medicine practitioner which shall include at least:

- a. An initial health evaluation carried out by an occupational health practitioner immediately or within 14 days after a person commences employment, which comprises-
  - i. an evaluation of the employee's medical and occupational history;
  - ii. medical tests which may include chest X-rays, pulmonary function testing or a

- physical examination;
- iii. any other essential medical examination which in the opinion of the occupational medicine practitioner is desirable in order to enable such practitioner to do a proper evaluation; and

b. subsequent to the initial health evaluation contemplated in paragraph (a), evaluations of the relevant employee as contemplated in paragraph (a) (ii) and (iii), at intervals not exceeding two years, or at shorter intervals specified by an occupational medicine practitioner.

(3) The employer shall not permit or allow an employee who has been certified unfit for work by an occupational medicine practitioner to work in a workplace or part of a workplace in which he or she will be exposed or is likely to be exposed: Provided that the relevant employee may be permitted to return to work if he or she is certified fit for that work beforehand by an occupational medicine practitioner.

(4) The employer shall record and investigate the incident contemplated in subregulation (3) in compliance with the provisions of regulation 8 of the General Administrative Regulations.

## **RESPIRATOR ZONE**

**9.** The employer shall ensure-

- a. that any workplace or part of a workplace under his or her control, where the concentration of asbestos fibres in the air is, or may be, such that the exposure of employees in that workplace exceeds the OEL without the wearing of respiratory protective equipment, is zoned as a respirator zone;
- b. that a respirator zone is clearly demarcated and identified by notice indicating that the relevant area is a respirator zone and that respiratory protective equipment and protective clothing as contemplated in regulation 16 must be worn there; and
- c. that no person enters or remains in a respirator zone unless he or she wears the required respiratory protective equipment and protective clothing.

## **CONTROL OF EXPOSURE TO ASBESTOS**

**10.** (1) The employer shall ensure that the exposure of an employee is either prevented, or, where this is not reasonably practicable, adequately controlled: Provided that the control of the exposure shall be regarded as adequate if the level of exposure is below the OEL or if the relevant area is zoned and the level of exposure is reduced to below the OEL by means of adequate respiratory protective equipment, but only after the level has been reduced to a level as low as is reasonably practicable by any other means than respiratory protective equipment.

(2) Where reasonably practicable, the employer shall control the exposure of an employee-

- a. by using a substitute for asbestos or asbestos-containing material;
- b. by limiting the number of employees who will be exposed or may be exposed;
- c. by limiting the period during which an employee will be exposed or may be exposed;
- d. by limiting the amount of asbestos fibres which may contaminate the working environment;
- e. by introducing engineering measures for the control of exposure, including the following:
  - i. Process separation, automation or enclosure;
  - ii. bonding of asbestos fibres with other material to prevent the release of asbestos fibres;
  - iii. the installation of local extraction ventilation systems to processes, equipment or tools for the control of emissions of airborne asbestos fibres;
  - iv. the use of wet methods where appropriate;
  - v. separate workplaces for carrying out different processes; and
  - vi. an indicator to enable early corrective action to be taken;
- f. by introducing appropriate work procedures which an employee must follow where materials are used, processed, handled or stored which could give rise to the exposure of an employee, and those procedures shall include written instructions to ensure-

- i. that asbestos is safely handled, used and disposed of;
- ii. that process machinery, installations, equipment, tools and local extraction and general ventilation systems are safely used and maintained; and
- iii. that early corrective action regarding the control of asbestos exposure can be taken.

## **CLEANLINESS OF PREMISES AND PLANT**

**11.** Every employer shall take steps to ensure, as far as is reasonably practicable, that-

- a. all workplaces are maintained in a clean state and are free of asbestos waste and, whenever asbestos is accidentally spilled or asbestos dust is accidentally released into the workplace, that remedial measures are taken immediately before work is resumed;
- b. all machinery, plant and equipment, as well as all external surfaces of ventilation equipment and all internal surfaces of buildings, are kept free of asbestos dust;
- c. cleaning is carried out by vacuum-cleaning equipment with a filtration efficiency of at least 99 per cent for particles one micrometre in size, or in such other manner that asbestos dust neither escapes nor is discharged into the air to such an extent that it contaminates any workplace or the environment;
- d. the vacuum-cleaning equipment is regularly serviced and all its external surfaces are kept in a clean state and free from asbestos dust; and
- e. where the use of vacuum-cleaning equipment is impracticable, such surfaces are dampened and that employees undertaking such cleaning are wearing appropriate protective clothing and respiratory protective equipment, and no other persons are present unless they also wear protective clothing and respiratory protective equipment.

## **CONTROL OF EXPOSURE TO ASBESTOS OF PERSONS OTHER THAN EMPLOYEES**

**12.** (1) The employer shall ensure that the release of asbestos fibres into any environment or water system complies with the provisions of the National Water Act, 1998 (Act No. 36 of 1998), the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965), and the Environment Conservation Act, 1989 (Act No. 73 of 1989).

(2) With respect to asbestos fibres which may be released into any environment or water system which may affect the health of persons other than those in his or her employment, the employer shall ensure-

- a. with regard to airborne emissions-
  - i. that all work performed with asbestos be controlled as far as is reasonably practicable; and
  - ii. that suitable filtration systems are used to keep the release of airborne asbestos into the environment to levels as low as is reasonably practicable;
- b. with regard to water contaminated with asbestos-
  - i. that any water that is contaminated with asbestos as a result of work being performed by an employer is passed through a filtration system before being released into any environment or water system; and
  - ii. that a suitable water filtration system is used which will ensure that the number of asbestos fibres being released or entering into any environment or water system is reduced as far as is reasonably practicable;
- c. that any substance which formed part of the filtration system, when discarded, is disposed of as asbestos waste; and
- d. that bulk asbestos, which may be an agglomerate of fibres, which is released, placed, or disposed of in any way into any environment or water system is reduced to levels that are as low as is reasonably practicable.

## **ASBESTOS THAT FORMS PART OF THE FABRIC OF THE WORKPLACE, BUILDINGS, PLANT OR PREMISES**



**13.** (1) Where asbestos forms part of the fabric of the workplace, buildings, plant or premises, the employer shall ensure that he or she-

- a. takes reasonable steps to determine the location of materials likely to contain asbestos and records the location of asbestos in such workplace, buildings, plant or premises;
- b. presumes materials contain asbestos unless a reasoned argument to the contrary can be made; and
- c. makes and maintains a written record of the location of asbestos and presumed asbestos material in a documented asbestos inventory.

(2) An employer shall inform the relevant health and safety representative or relevant health and safety committee in writing of the arrangements made for the identification and location procedure contemplated in subregulation (1), give them reasonable time to comment thereon and ensure that the documented asbestos inventory is made available to the relevant representative or committee who may comment thereon.

(3) The health or safety representative, or a person nominated by the health and safety committee, shall be entitled to take part in the identification and location procedure.

(4) With regard to disputes as to whether any substance is in fact asbestos, the health and safety representative or nominated person may require that a sample be taken of such substance and the true nature of the substance be determined in accordance with MDHS 77 by an approved inspection authority who is approved for asbestos monitoring: Provided that the cost of the identification in terms of MDHS 77 shall be borne by the employer.

(5) The employer shall regularly examine the condition of asbestos and presumed asbestos materials for deterioration or damage.

(6) The employer shall assess the risk of exposure from asbestos and presumed asbestos materials and document the action necessary to ensure that-

- a. any material known or presumed to contain asbestos, which may create a risk of exposure because of its state and location, is repaired or, if necessary, removed: Provided that, if the removal constitutes demolition work, the asbestos shall be removed in accordance with regulation 20;
- b. any material known or presumed to contain asbestos is maintained in a good state of repair and where necessary, a planned maintenance program is implemented;
- c. information about the location and condition of material known or presumed to contain asbestos is given to anyone likely to disturb it; and
- d. procedures and arrangements are in place so that work that may disturb material known or presumed to contain asbestos complies with all other requirements of these regulations.

#### **ASBESTOS CEMENT SHEETING AND RELATED PRODUCTS**

**14.** (1) An employer or self-employed person who works with or has asbestos roof sheeting, wall panelling, gutters, fascia boards and related products at his or her workplace shall ensure that-

- a. if any footwork is performed; suitable roof ladders or duck boards or crawling boards are used in accordance with regulation 12 of the General Safety Regulations;
- b. any water, which contains asbestos fibres as a result of the above procedures, shall be treated in accordance with regulation 12(2) (b) and (c);
- c. written work procedures are laid down which shall be followed when these products are removed, cut, drilled or cleaned which may give rise to the release of asbestos into the environment;
- d. the work procedures contemplated in paragraph (c) must be available for perusal by the relevant health and safety representative or relevant health and safety committee and for inspection by an inspector;
- e. removal work is conducted under controlled conditions in accordance with regulation 10;
- f. cutting or drilling is performed under controlled conditions, that cutting is done with a suitable slow-speed mechanical cutter, that wet methods are used where possible and that waste of any form, including dust, is collected and disposed of in accordance with regulation 19: Provided

that any wastewater, which contains asbestos fibres as a result of the aforementioned procedures, shall be treated in accordance with regulation 12(2) (b) and (c);

- g. new painting is carried out with a suitable paint or sealant where possible to prevent-
  - i. the necessity for cleaning these products when they have become weathered; and
  - ii. exposure of persons to asbestos fibres when the products are in use;
- h. cleaning is done under controlled conditions ensuring that-
  - i. dry-brushing or scraping or sanding or abrasion techniques are not used;
  - ii. where reasonably practicable, high-pressure water jetting is not used and, if it is used, that suitable control methods are used to control water run-off: Provided that water which is deflected off a roof which contains asbestos fibres shall be controlled at the source and not allowed to contaminate the surrounding environment in any way; and
  - iii. when fungicidal solution or moss killer, is applied to allow a standing time of 24 hours or any other period specified by the manufacturer, and to use a low-pressure hose after such period to keep the sheets wet whilst employing a stiff broom or any similar means to remove any moss or lichens.

## **RECORDS**

### **15. The employer shall-**

- a. keep records of the results of all assessments, and air monitoring, medical surveillance reports and the asbestos inventory required by regulations 6, 7, 8 and 13(c), respectively: Provided that personal medical records shall only be made available to an occupational health practitioner;
- b. subject to the provisions of paragraph (c), make the records contemplated in paragraph (a), excluding personal medical records, available for inspection by an inspector;
- c. allow any person, subject to formal written consent of an employee, to peruse the records with respect to that particular employee;
- d. make the records of all assessments, and air monitoring, and the asbestos inventory available for perusal by the relevant health and safety representative or relevant health and safety committee;
- e. keep all records of assessments and air monitoring, and the asbestos inventory for a minimum period of 30 years;
- f. keep all medical surveillance records for a minimum period of 30 years and, if the employer ceases activities, hand over or forward by registered post all these records to the relevant provincial director: Provided that these records shall contain at least the following information:
  - i. Surname, forenames, sex, date of birth, name of spouse or closest relative and where available, permanent address and postal code;
  - ii. a record of types of work carried out with asbestos and, where relevant, its location, the starting and ending dates of exposure and average duration of exposure in hours per week;
  - iii. a record of any work with asbestos prior to this employment; and
  - iv. medical surveillance reports;
- g. keep a record of the tests and investigations carried out in terms of regulation 17 (b) and of any repairs resulting from these tests and investigations, and keep the record for at least three years; and
- h. keep a record of training given to an employee being exposed to asbestos as required in terms of regulation 4(5) for as long as the employee remains employed at that workplace.

## **PERSONAL PROTECTIVE EQUIPMENT AND FACILITIES**

**16. (1)** If it is not reasonably practicable to ensure that the exposure of an employee is adequately controlled as contemplated in regulation 10, the employer shall provide the employee with approved respiratory protective equipment and clothing.

**(2)** Where respiratory protective equipment is provided, the employer shall ensure that

- a. the relevant equipment is capable of keeping the exposure level to below the OEL for asbestos;
- b. the relevant equipment is correctly and properly used;
- c. information, instruction, training and supervision that are necessary with regard to the use of the equipment is provided to the employees; and
- d. the equipment is kept in good condition and efficient working order.

(3) The employer shall, as far as is reasonably practicable-

- a. issue no personal protective equipment to an employee, unless such equipment is decontaminated and, if necessary, sterilised;
- b. provide separate containers or storage facilities for personal protective equipment when not in use; and
- c. ensure that all personal protective equipment, when not in use, is stored only in the place provided therefor.

(4) The employer shall, as far as is reasonably practicable, ensure that all asbestos-contaminated personal protective equipment is cleaned and handled in accordance with the following procedures:

- a. Where the equipment is cleaned on the premises of the employer, care shall be taken to prevent contamination during handling, transport and cleaning.
- b. Where the equipment is sent off the premises to a contractor for cleaning purposes-
  - i. the equipment shall be packed in impermeable containers;
  - ii. the container shall be tightly sealed and have clear indication thereon that the content thereof is contaminated with asbestos fibres; and
  - iii. the relevant contractor shall be fully informed of the requirements of these regulations and the precautions to be taken for the handling of the asbestos contaminated equipment.
- c. Water that is used for decontamination or cleaning of equipment shall be filtered in accordance with regulation 12(2)(b) before being released into any water system.

(5) Subject to the provisions of subregulation (4)(b), the employer shall ensure that no person removes dirty or contaminated personal protective equipment from the premises: Provided that where contaminated personal protective equipment has to be disposed of, it shall be treated as asbestos waste as contemplated in regulation 19.

(6) Subject to the provisions of the Facilities Regulations, the employer shall, where reasonably practical, provide employees using personal protective equipment as contemplated in subregulation (1), with-

- a. adequate washing facilities which are readily accessible and located in an area where the facilities will not become contaminated, in order to enable the employees to meet a standard of personal hygiene 'consistent with the adequate control of exposure, and to avoid the spread of asbestos fibres;
- b. two separate lockers separately labelled "protective clothing" and Personal clothing", respectively, and ensure that the clothing is kept separately in the locker concerned; and
- c. separate "clean" and "dirty" change rooms.

## **MAINTENANCE OF CONTROL MEASURES**

**17.** The employer shall ensure that-

- a. all control equipment and facilities provided in terms of regulations 10, 11 and 12, are maintained in good working order; and
- b. thorough examinations and tests of engineering control measures are carried out at intervals not exceeding 24 months by an approved inspection authority or by a person who is registered with IOHSA but who is not an approved inspection authority, whose ability to do such examinations and tests is verified by an approved inspection authority.

## **LABELLING, PACKAGING, TRANSPORTATION AND STORAGE**

**18.** The employer shall, in order to avoid the spread of asbestos fibres, take steps, as far as is reasonably practicable, to ensure that-

- a. the asbestos in storage or distributed is properly identified and classified in accordance with SABS 0228;
- b. a container or a vehicle in which asbestos is transported is clearly identified, classified and packed in accordance with SABS 0228 and SABS 0229; and
- c. any container which contains asbestos is clearly labelled, in the form of Annexure 1, with regard to the content thereof.

## **DISPOSAL OF ASBESTOS**

**19.** The employer shall as far as is reasonably practicable-

- a. recycle all asbestos waste;
- b. ensure that all asbestos waste is placed in containers that will prevent the likelihood of exposure during handling;
- c. ensure that all vehicles, re-usable containers or any other similar articles which have been in contact with asbestos waste are cleaned and decontaminated after use in such a way that such vehicles, containers or similar articles do not cause a hazard inside or outside the premises concerned;
- d. ensure that all asbestos waste which can cause exposure, is disposed of only on sites specifically designated for this purpose in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), in such a manner that it does not cause a hazard inside or outside the site concerned;
- e. ensure that all the employees occupied in the collection, transport and disposal of asbestos waste, who may be exposed to that waste, are provided with suitable personal protective equipment; and
- f. ensure that, in cases where the services of a contractor for the disposal of asbestos waste is used, a provision is incorporated into the contract stating that the contractor shall also comply with the provisions of these regulations.

## **DEMOLITION**

**20.** Any person who intends to have demolition work to be carried out, shall-

- a. before the commencement of such work, take steps to ensure that-
  - i. demolition work is carried out by a person who is an approved asbestos contractor;
  - ~
  - ii. all asbestos and asbestos-containing materials likely to become airborne are identified;
  - iii. a plan of work is submitted for approval to an approved inspection authority at least 30 days prior to the commencement of such work: Provided that an approved inspection authority may at its discretion allow a shorter period of time for such submission: Provided further that an approved inspection authority may approve standardised procedures for routine alterations or repairs;
  - iv. the plan of work is drawn up by an approved inspection authority, in which case the stipulated time period shall not apply;
  - v. a copy of the approved plan of work, which has been signed by the approved inspection authority, the employer and, if the person performing such work is not the employer, the mandatory of the employer, shall be submitted to the provincial director at least 14 days prior to commencement of demolition work: Provided that an inspector may allow a shorter period for such submission; and
  - vi. copies of approved standardised procedures for demolition work are submitted to the provincial director at least 14 days prior to commencement of such work;
- b. during and after the completion of demolition work take steps to ensure that-
  - i. all asbestos and materials containing asbestos are handled and disposed of in a safe manner;

- ii. all employees exposed or likely to be exposed are issued with appropriate personal protective equipment and that such equipment is properly worn; and
- iii. the premises, structure or area are thoroughly checked to ensure that all asbestos waste has been removed.

### **PROHIBITION**

**21.** No person shall, as far as is reasonably practicable-

- a. use compressed air or permit the use of compressed air to remove asbestos dust from any surface or person;
- b. smoke, eat, drink or keep food or beverages in a respirator zone or permit any other person to smoke, eat, drink or keep food or beverages in such zone; or
- c. apply asbestos by means of spraying or any other similar process or require or permit any other person to apply asbestos by means of such process.

### **OFFENCES AND PENALTIES**

**22.** Any person who contravenes or fails to comply with any provision of regulation 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 or 21 shall be guilty of an offense and liable on conviction to a fine or imprisonment for a period not exceeding 12 months and, in the case of a continuous offense, to an additional fine of R200 for each day on which the offense continues or to additional imprisonment of one day for each day on which the offense continues: Provided that the period of such additional imprisonment shall in no case exceed 90 days.

### **SHORT TITLE**

**23.** These regulations shall be called the Draft Amended Asbestos Regulations, 1999.