DEPARTMENT OF LABOUR

Government Notice. R: 155 10 February 2002

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

Asbestos Regulations, 2001

The Minister of Labour has under section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), after consultation with the Advisory Council for Occupational Health and Safety, made the regulations in the Schedule.

SCHEDULE

Definitions

1. In these Regulations, any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned and, unless the text otherwise indicates—

"approved asbestos inspection authority" means an approved inspection authority for the monitoring of asbestos concentrations in the air;

"asbestos" means any of the following minerals:

- (a) Amosite
- (b) Chrysotile
- (c) Crocidolite
- (d) Fibrous actinolite
- (e) Fibrous anthophyllite; and
- (f) Fibrous tremolite,

or any mixture containing any of these minerals;

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

"asbestos waste" means an undesirable or superfluous asbestos-containing byproduct, emission or residue of any process or activity that has been—

- (a) discarded by any person;
- accumulated and stored by any person with the purpose of eventually discarding it with or without prior treatment connected with the discarding thereof; or
- (c) stored by any person with the purpose of recycling, re-using or extracting a usable product from such matter.

"asbestos work" means work that exposes or is likely to expose any person to asbestos dust:

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"demolition work" includes demolition, alteration, stripping, removing, repair, gleaning of any spilt asbestos, or high-pressure water jetting of any structure containing asbestos lagging or insulation, but does not include work performed on asbestos cement sheeting and related products and asbestos cement products that form part of the structure of a workplace, building, plant or premises;

"exposed to asbestos" means exposed or likely to be exposed to asbestos dust while at the workplace, and "exposure" has a corresponding meaning;

"HSG 173" means the Monitoring Strategies for Toxic Substances, HSG 173, published by the Health and Safety Executive of the United Kingdom;

"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;

"measurement programme" means a programme according to the monitoring strategy as contemplated in OESSM and HSG 173;

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

"occupational exposure limit" or "OEL" means a limit value set by the Minister for a stress factor in the workplace;

"OESSM" means the *Occupational Exposure Sampling Strategy Manual*, published by the National Institute for Occupational Safety and Health (NIOSH), United States of America: Department of Health, Education and Welfare;

"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 published under Government Notice R. 1449 of September 1996;

"registered asbestos contractor" means a mandatory or employer conducting demolition work, who is registered with the chief inspector;

"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 that is not safe, and which device conforms to a standard approved by the Minister; "respirator zone" means a respirator zone contemplated in regulation10(a);

"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 milliliter of air averaged over any 10 minutes;

"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

Scope of application

- **2**.(1) Subject to subregulation 2, these Regulations shall apply to every employer and self-employed person who carries out work at a workplace that may expose any person to asbestos dust at that workplace.
- (2) Regulations 5(1), 5(2), 5(3), 5(4), 5(6), 7(2), 8, 9, 11(2)(f), 14(2), 14(3), 14(4) 16(c), 16(f) and 17(6) shall not apply in the case of self-employed persons.

Notification of asbestos work

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

Exposure to asbestos

4. Subject to regulation 17(1) no employer or self-employed person shall require or permit any person to work in an environment in which he or she would be exposed to asbestos in excess of the prescribed occupational exposure limit.

Information and training

- **5**.(1) An employer shall, before any employee is exposed or may be exposed to asbestos dust, 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, including the recognition of derelict asbestos-containing materials;
 - (c) the potential health risk 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 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, which precautions include 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 and limitations thereof:
 - (h) the occupational exposure limit and its 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, which procedures include the correct use of control measures to limit the spread of asbestos dust 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 an accidental spillage or any other similar emergency situation likely to result in the release of asbestos dust;
 - (I) procedures for reporting and correcting defects likely to result in the release of asbestos dust;

- (m) safe disposal of asbestos waste;
- (n) procedures for record keeping; and
- (o) matters contemplated in regulation 6.
- (2) Refresher training on matters contemplated in subregulation (1) shall be given at least every year or at more frequent intervals that may be recommended by the health and safety committee.
 - (3) Training should be given more frequently than once a year if—
 - (a) work methods change;
 - (b) the type of work carried out changes significantly; or
 - (c) the type of equipment used to control exposure changes.
- (4) Training shall be provided by somebody who is competent to provide it and has adequate personal practical experience and theoretical knowledge of all aspects of the work being carried out by the employer.
- (5) An employer or a self-employed person shall ensure, as far as is reasonably practicable, that his or her mandatory or any person other than employees who may be exposed to asbestos at the workplace are given adequate information, instruction and training.
- (6) An employer shall keep a record of any training, both practical and theoretical, that was given to an employee.
- (7) An employer or a self-employed person shall give instructions in writing of the procedures contemplated in subregulation (1)(k) to the drivers of vehicles carrying asbestos or asbestos-containing material, that has the potential of causing environmental pollution or affecting human health.

Duties of persons who may be exposed

- **6**. Any person who is or may be exposed to asbestos in the workplace, 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 to asbestos:

- (d) the reporting for medical surveillance as required by Regulation 9;
- (e) the cleaning up and disposal of nay 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 contemplated in regulation 5.

Assessment of potential exposure

- 7.(1) An employer or self-employed person shall cause—
 - (a) his or her undertaking to be assessed within six months after the commencement of these regulations, and thereafter at intervals not exceeding two years, to determine if any person may be exposed to asbestos; and
 - (b) the assessment results contemplated in paragraph (a) to be recorded as required by regulation 16.
- (2) An employer contemplated in subregulation (1) shall, before causing an assessment to be made, consult with the relevant health and safety representative or relevant health and safety committee and thereafter inform them in writing of the arrangements made for the assessment, give them reasonable time to comment thereon and ensure that the results of the assessment are made available to them for comment.
- (3) When making the assessment contemplated in subregulation (1)(a), the employer or self-employed person shall take the following into account:
 - (a) The presence of any material containing asbestos being used, processed, handled or stored;
 - (b) where asbestos may be present, the ease with which the asbestos dust may be released and the extent to which a person may be exposed;
 - (c) the nature of the work, process and any likely deterioration in or failure of any control measures;
 - (d) the details of expected exposures, in particular—
 - (i) whether the expected exposure is above the OEL for asbestos, so that the appropriate respiratory protective equipment can be selected pending the implementation of engineering control measures:

- (ii) whether such exposures are intermittent, including the frequency and duration of exposures;
- (iii) the number of employees exposed and any other person who may be exposed, and their expected exposure values; and
- (iv) where applicable, results which may be available from any previous monitoring performed at that workplace;
- (e) the steps to be taken to reduce exposure to the lowest level reasonably practicable and the steps to be taken to reduce the release of asbestos dust into the environment;
- (f) procedures for dealing with emergencies; and
- (g) procedures for the removal of asbestos waste from the workplace, and the disposal thereof.
- (4) If the assessment or any of its reviews made in accordance with subregulation (1) and (5) indicates that any person is likely to be exposed to asbestos, the employer or self-employed person shall ensure that the exposure is adequately controlled as contemplated in regulation 11.
- (5) An employer or self-employed person shall forthwith review the assessment required by subregulation (1) if—
 - (a) there is reason to believe that the previous assessment is no longer valid:
 - (b) control measures are no longer efficient;
 - (c) technological or scientific advances allow for more efficient control methods; or
 - (d) there has been a significant change in—
 - (i) work methods;
 - (ii) the type of work carried out; or
 - (iii) the type of equipment used to control exposure;

and subregulations (2) and (3) shall apply.

Air monitoring

8.(1) Where exposure is in excess of half the OEL for asbestos, an employer shall ensure that a measurement programme of the concentration of airborne regulated asbestos fibres to which an employee is exposed, is—

- (a) carried out in accordance with these Regulations;
- (b) carried out only after the relevant health and safety representative or relevant health and safety committee has been informed thereof and was given a reasonable opportunity, as mutually agreed upon, to comment thereon:
- (c) carried out by—
 - (i) an approved asbestos inspection authority; or
 - (ii) a person whose ability to do the measurements is verified by an approved asbestos inspection authority;
- (d) representative of the exposure of employees to the airborne asbestos fibres in accordance with subregulation (2); and
- (e) verified in accordance with subregulation (3) if the measurements are carried out by a person contemplated in subregulation (1)(c)(ii).
- (2) In order to comply with the provisions of subregulation (1)(d), an employer shall ensure—
 - (a) that the measurement programme—
 - (i) 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 table A-2 of Technical Appendix A of the OESSM: Provided that measurements of exposure shall be by personal sampling taken in accordance with MDHS 39/4: Provided further that in so far as any provision of the OESSM and the MDHS 39/4 is repugnant to a provision of the Occupational Health and Safety Act, 1993, and these Regulations, the provisions of the Act and these Regulations shall take precedence; and
 - (ii) if in the case of the most exposed employee measurement, the exposure exceeds the OEL for asbestos, then any other employee whose exposure could be above the OEL for asbestos is identified and that measurements representative of typical exposure shall be carried out on every employee identified; and
 - (b) that representative measurements contemplated in subregulation 1(d) are carried out at least every 12 months: Provided that whenever the OEL for asbestos is exceeded, regulation 11 shall apply.

- (3) In order to comply with subregulation (1)(e), an employer shall obtain the services of an approved asbestos inspection authority who shall, at intervals not exceeding 12 months, do the required verification—
 - (a) by examining the measurement and analysis equipment of the employer;
 - (b) by questioning the person contemplated in subregulation (1)(c)(ii) regarding the measurement programme;
 - (c) by carrying out, together with the person contemplated in subregulation (1)(c)(ii), the measurement programme required by subregulation (2) for any one group; and
 - (d) by ensuring that the results of the measurement and investigation as contemplated in subregulation (2) and (3) respectively, have been recorded as required by regulation 16.

Medical surveillance

- **9**.(1) An employer shall ensure that an employee is under the medical surveillance of an occupational medical practitioner if—
 - (a) an employee is exposed or is likely to be exposed to asbestos dust exceeding the OEL for asbestos; or
 - (b) an occupational medicine practitioner certifies that the relevant employee should be under medical surveillance.
- (2) In order to comply with subregulation (1), an 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 the following:
 - (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 examinations and tests which should include chest X-rays, pulmonary function testing and an appropriate physical examination; and
 - (iii) any other essential medical examination which in the opinion of the occupational medicine practitioner is necessary 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) An 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 to asbestos dust: 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) Where the reason for the employee being certified unfit as contemplated in subregulation (3) is as a result of exposure to asbestos in that workplace, the employer shall record and investigate the incident in compliance with regulation 8 of the General Administrative Regulations.

Respirator zone

- **10**. An employer or self-employed person shall ensure that—
 - (a) any workplace or part of a workplace under his or her control, where the concentration of regulated asbestos fibres in the air is, or may be, such that the exposure of persons in that workplace exceeds the OEL for asbestos without the wearing of respiratory protective equipment, is zoned as a respirator zone;
 - (b) a respirator zone is clearly demarcated and identified by notice indicating that the relevant area is a respirator zone and that the respiratory protective equipment and protective clothing contemplated in regulation 17 must be worn there;
 - (c) no person enters or remains in a respirator zone unless he or she wears the required respiratory protective equipment and protective clothing; and
 - (d) the reason why the OEL for asbestos is exceeded is identified and action is taken, as soon as is reasonably practicable, to lower the concentration of asbestos in the air by means other than respiratory protective equipment, so that it does not exceed the OEL for asbestos.

Control of exposure to asbestos

- **11**.(1) An employer or self-employed person shall ensure that the exposure of a person to asbestos 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—
 - (a) at or below the OEL for asbestos; or

- (b) above the OEL for asbestos but the reason has been identified and action is taken, as soon as is reasonably practicable to lower exposure by means other than respiratory protective equipment, so that it does not exceed the OEL for asbestos.
- (2) Where reasonably practicable, an employer or self-employed person shall control the exposure of a person—
 - (a) by using a substitute for asbestos;
 - (b) by limiting the number of persons who will be exposed or may be exposed;
 - (c) by limiting the period during which persons will be exposed or may be exposed;
 - (d) by limiting the amount of asbestos dust that may contaminate the working environment;
 - (e) by introducing, inter alia, the following engineering control measures for the control of exposure:
 - (i) Process separation, automation or enclosure;
 - (ii) bonding of asbestos fibres with other material to prevent the release of asbestos dust;
 - (iii) the installation of local extraction ventilation systems to processes, equipment or tools for the control of emissions of asbestos dust:
 - (iv) the use of wet methods where appropriate;
 - (v) separate workplaces for carrying out different processes; and
 - (vi) a fault indicator to enable early corrective action to be taken;and
 - (f) by introducing appropriate written work procedures that an employee must follow to ensure that —
 - (i) asbestos is safely handled, used and disposed of;
 - (ii) process machinery, installations, equipment, tools and local extraction and general ventilation systems are safely used and maintained; and
 - (iii) early corrective action regarding the control exposure.

Cleanliness of premises and plant

12. Every employer or self-employed person shall take steps to ensure, as far as is reasonably practicable, that—

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- (a) 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) machinery, plant and equipment, as well as external surfaces of ventilation equipment and 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 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, the relevant surfaces are first dampened and that persons undertaking such cleaning are wearing appropriate protective clothing and respiratory protective equipment.

Control of exposure to asbestos of persons other than employees

- **13**.(1) An employer or self-employed person shall ensure that the release of asbestos dust into any environment or water system complies with the provisions of the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965), the Environment Conservation Act, 1989 (Act No. 73 of 1989), the National Water Act, 1998 (Act No. 36 of 1998), and the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- (2) In respect of asbestos dust which may be released from a workplace into any environment or water system which may affect the health of persons other than persons at his or her workplace, an employer or self-employed person shall ensure—
 - (a) with regard to airborne emissions—
 - (i) that all work performed with asbestos be controlled as far as is reasonably practicable; and

- that suitable filtration systems are used to control the release of asbestos dust into the environment to levels as low as is reasonably practicable;
- (b) with regard to the contamination of water with asbestos—
 - that any water that is contaminated with asbestos as a result of work being performed 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 asbestos being released or entering into any environment or water system are reduced as far as is reasonably practicable;
- (c) that contaminated parts of the filtration system, when discarded, are disposed of as asbestos waste; and
- (d) that appropriate measures are taken to prevent the release of asbestos dust into the environment arising from the transport of asbestos.

Asbestos that forms part of structure of workplace, building, plant or premises

- **14**.(1) Where asbestos forms part of the structure of a workplace, building, plant or premises, the employer or self-employed person shall—
 - (a) take reasonable steps to ensure that he or she determines the location of asbestos in such workplace, buildings, plant or premises, where that asbestos is likely to release asbestos dust that could impact on health or pollute the environment;
 - (b) make and maintain a written inventory of the location of asbestos in such workplace, buildings, plant or premises.
- (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 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 contemplated in subregulation (1).
- (4) With regard to any dispute as to whether any substance is in fact asbestos, the health and safety representative or a person nominated by the employees may

require that a sample of that substance be taken and the true nature of the substance be determined by an approved asbestos inspection authority: Provided that the cost of the identification shall be borne by the employer.

- (5) The employer or self-employed person shall regularly examine the condition of asbestos recorded in the inventory for deterioration or damage.
- (6) The employer or self-employed person shall assess the risk of exposure to such asbestos as contemplated in subregulation (1) and document the action necessary to ensure that—
 - (a) information about the location and condition of material containing asbestos is given to anyone likely to disturb it;
 - (b) any material containing asbestos is maintained in a good state of repair and that, where necessary, a planned maintenance program is implemented;
 - (c) any material containing asbestos and 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 21; and
 - (d) procedures and arrangements are in place so that work that may disturb the material complies with all other requirements of these Regulations.

Asbestos cement sheeting and related products

- **15**.(1) An employer or self-employed person who erect, maintain, alter, renovate, repair, dismantle or add asbestos-cement roof sheeting, wall paneling, gutters, fascia boards and related products to a building shall ensure that—
 - if any roof work is performed, suitable roof ladders or duckboards or crawling boards are used in accordance with regulation 12 of the General Safety Regulations published by Government Notice No. R. 1031 of 30 May 1986;
 - (b) written work procedures are laid down and followed to prevent the release of asbestos dust into the environment:
 - (c) any water which contains asbestos dust as a result of the activities contemplated in subregulation (1), shall be treated in accordance with regulation 13(2)(b) and (c);
 - (d) the work procedures contemplated in paragraph (b) shall 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 regulations 11 and 13;
- cutting or drilling is performed under controlled conditions in accordance with regulation 11 and 13, including the use of wet methods where possible, and a suitable slow-speed cutter is used, provided that a respirator shall be used by the operator and others at risk of exposure;
- (g) asbestos waste of any form, including dust, is collected and disposed of in accordance with regulation 20;
- (h) once installed and where reasonably practicable, the relevant items are painted or otherwise sealed with a protective coating to limit the release of asbestos dust, combat weathering and inhibit growth of lichen or moss;
- (i) cleaning is done under controlled conditions ensuring that—
 - (i) dry-brushing, scraping, sanding or abrasion techniques are not used;
 - (ii) where reasonably practicable, high-pressure water jetting is not used unless in conjunction with a suitable profiled hood that limits dispersal of contaminated water and, if the said jetting is used, that suitable control methods are used in accordance with regulation 13(2)(b); and
 - (iii) when fungicidal solution or moss killer is applied, a standing time of 24 hours or any other period specified by the manufacturer is allowed, and a low-pressure hose is used after such period to keep the sheets wet whilst employing a stiff broom or any similar means to remove any moss or lichens.

Records

16. An employer shall—

- (a) keep records of the results of all assessments, air monitoring, medical surveillance reports and the asbestos inventory required by regulations 7, 8, 9 and 14(1)(b), respectively: Provided that personal medical records shall only be made available to an occupational health practitioner;
- (b) subject to 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 consent in writing 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 40 years;
- (f) keep all medical surveillance records for a minimum period of 40 years and, if the employer ceases activities relating to asbestos work, shall hand over or forward by registered post all these records to the relevant provincial director: Provided that those records contain at least the following information:
 - Surname, forenames, gender, 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) dates of medical surveillance reports;
- (g) keep a record of the tests and investigations carried out in terms of regulation 18 (b) and of any repairs resulting from the relevant tests and investigations, and keep that record for at least three years; and
- (h) keep a record of training given to an employee in terms of regulation 5(5) for as long as the employee remains employed at the workplace in which he or she is being exposed to asbestos.

Personal protective equipment and facilities

- **17.**(1) An employer or self-employed person shall provide—
 - (a) all persons exposed to asbestos at the workplace with suitable protective clothing; and
 - (b) a person with suitable respiratory protective equipment to ensure that the person's exposure is adequately controlled as contemplated in regulation 11(1).

- (2) Where respiratory protective equipment is provided, the employer or selfemployed person shall ensure that—
 - (a) the relevant equipment is capable of keeping the exposure level at or 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 are provided to the persons; and
 - (d) the equipment is kept in good condition and efficient working order.
- (3) An employer or self-employed person shall, as far as is reasonably practicable—
 - issue no personal protective equipment to a person, unless such equipment is cleaned, decontaminated and, where appropriate, sterilised;
 - (b) provide separate containers or storage facilities for personal protective equipment when not in use; and
 - (c) ensure that all personal protective equipment not in use is stored only in the place provided.
- (4) An employer or self-employed person shall, as far as is reasonably practicable, ensure that all personal protective equipment contaminated with asbestos dust is cleaned and handled in accordance with the following procedures:
 - (a) Where the equipment is cleaned on the premises of the employer or self-employed person, 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 clearly labeled in the form of Annexure 1; and
 - (iii) the relevant contractor shall be informed of these Regulations and the precautions to be taken for the handling of the asbestos contaminated equipment; and

- (c) water that is used for decontamination or cleaning of equipment shall be filtered in accordance with regulation 13(2)(b) before being released into any water system.
- (5) Subject to subregulation (4)(b), an employer or self-employed person shall ensure that no person removes dirty or contaminated personal protective equipment from the workplace: Provided that where personal protective equipment contaminated with asbestos dust has to be disposed of, it shall be treated as asbestos waste as contemplated in regulation 20.
- (6) Subject to the provisions of the Facilities Regulations published by Government notice R. 1593 of 12 August 1988, the employer shall, where reasonably practical, provide employees who use 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 dust;
 - (b) two separate lockers labeled "protective clothing" and "personal clothing" respectively, and shall ensure that the clothing is kept separately in the lockers concerned; and
 - (c) separate change rooms labeled "clean change room" and "dirty change room", with suitable barrier and bathing facilities between to prevent the contamination of personal clothes with asbestos dust.

Maintenance of control measures

- **18**. An employer or self-employed person shall ensure that—
 - (a) all control equipment and facilities provided in terms of regulations 11, 12, 13, and 17 are maintained in good working order; and
 - (b) 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 whose ability to do such examinations and tests is verified by an approved inspection authority.

Labeling, packaging, transportation and storage

- **19**. An employer or self-employed person shall, in order to avoid the spread of asbestos dust, take steps, as far as is reasonably practicable, to ensure that—
 - (a) the asbestos in storage or being distributed is properly identified, classified and handled in accordance with SABS 0228;

- 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 article or substance which contains asbestos is clearly labeled, in the form of Annexure 1.

Disposal of asbestos

- **20**. An employer or self-employed person shall as far as is reasonably practicable ensure that—
 - (a) all asbestos waste is placed in containers that will prevent the likelihood of exposure during handling;
 - (b) 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 workplace concerned;
 - (c) 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), and the National Environmental Management Act,1998 (Act No. 107 of 1998), and in such a manner that it does not cause a hazard inside or outside the site concerned;
 - (d) all persons 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
 - (e) where the services of a contractor for the disposal of asbestos waste are used, a provision is incorporated into the contract stating that the contractor shall also comply with the provisions of these Regulations.

Demolition

- 21. Any person who intends to have demolition work carried out, shall—
 - (a) before the commencement of that work, take steps to ensure that—
 - (i) demolition work is carried out by a person who is a registered asbestos contractor;
 - (ii) all asbestos materials likely to become airborne are identified;
 - (iii) a plan of work is submitted for approval at least 30 days prior to the commencement of that work to an approved asbestos

inspection authority who may at its discretion allow a shorter period of time for such submission and may approve standardised procedures for routine alterations or repairs: Provided that the stipulated time period shall not apply if the plan of work is drawn up by an approved asbestos inspection authority;

- (iv) a copy of the approved plan of that work, which has been signed by the approved asbestos inspection authority, the employer and, if the person performing that work is not the employer or self-employed person, the mandatory of the employer or self-employed person, is submitted to the provincial director at least 14 days prior to commencement of such demolition work: Provided that an inspector may allow a shorter period for such submission; and
- copies of approved standardised procedures for demolition work are submitted to the provincial director at least 14 days prior to commencement of that work; and
- (b) during and after the completion of demolition work, take steps to ensure that—
 - all asbestos and materials containing asbestos are handled and disposed of in accordance with these regulations;
 - (ii) all persons exposed to or likely to be exposed to asbestos are issued with appropriate personal protective equipment and that such equipment is used properly; and
 - (iii) the premises, structure or area are thoroughly checked to ensure that all asbestos waste has been removed.

Prohibition

22. No person shall—

- (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 an area not specifically designated for it or require or permit any other person to smoke, eat, drink or keep food or beverages in such area; 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

23. Any person who contravenes or fails to comply with any provision of regulations 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13(2), 14, 15, 16, 17,18, 19, 20, 21 or 22 shall be guilty of an offence and liable on conviction to a fine not exceeding R1000 or imprisonment for a period not exceeding 12 months and, in the case of a continuous offence, to an additional fine of R200 for each day on which the offence continues or to additional imprisonment of one day for each day on which the offence continues: Provided that the period of such additional imprisonment shall in no case exceed 90 days.

Repeal of regulations

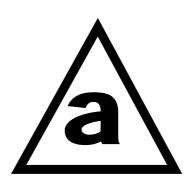
24. The Asbestos Regulations published under Government Notice No. R. 773 of 10 April 1987, as Government notice No. R. 1637 of 4 August 1989, are hereby repealed.

Short title

25. These Regulations shall be called the Asbestos Regulations, 2001.

ANNEXURE 1

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993



WARNING!!! ASBESTOS INHALATION OF ASBESTOS DUST IS DANGEROUS TO HEALTH. FOLLOW THE SAFETY INSTRUCTIONS