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GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

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

DRAFT AMENDED LEAD 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.

MMS MDLADLANA MINISTER OF LABOUR

SCHEDULE

DRAFT AMENDED LEAD REGULATIONS, 1999

1. DEFINITIONS

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 to in the Act shall have the meaning so assigned and, unless the context otherwise indicates

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

"action level for lead" means an action level of 0,075 mg of airborne lead, other than for tetraethyl lead, per cubic meter of air, and in the case of tetra-ethyl lead it means an action level of 0,05 mg airborne lead per cubic meter of air, measured in accordance with a safety standard incorporated into these regulations under section 44 of the Act;

- a. the monitoring of lead concentrations in the air; or
- b. the analysis of blood lead or urinary lead concentrations;

"EH 42" means Guidance Note EM 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;



[&]quot;annexure" means an annexure to these regulations;

[&]quot;approved inspection authority" means an inspection authority approved by the chief inspector for

[&]quot;**construction work**" means construction work as defined in regulation 1 of the General Administrative Regulations;

[&]quot;exposed" means exposed to lead whilst at the workplace and "exposure" has a corresponding



meaning;

- "General Administrative Regulations" means the General Administrative Regulations published under Government Notice No. R.1449 of 6 September 1996 in terms of section 43 of the Act;
- "health safety standard" means the health safety standards that have been incorporated into these regulations in terms of section 44 of the Act;
- "intake" includes inhalation, ingestion and any other means of absorption;
- "IOHSA" means the Institute for Occupational Hygienists of South Africa;
- "lead" means lead, lead alloys and lead compounds that can be absorbed in any way by any person;
- "lead paint" means any paint, primer, paste, spray, stopping, filling, or other material used in painting, which when treated in accordance with the safety standards, yields to an aqueous solution of hydrochloric acid, a quantity of soluble lead compound exceeding, when calculated as lead monoxide, five percent of the dry weight of the portion taken for analysis;
- "measurement programme" means a programme according to the monitoring strategy as contemplated in EM 42;
- "monitoring" means the planning, carrying out and recording of a measurement programme;
- "**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 lead, other than for tetra-ethyl lead", means an exposure limit of 0,15 mg of lead per cubic metre of air, measured in accordance with a safety standard;
- "occupational exposure limit for lead, in the case of tetra-ethyl lead", means an exposure limit of 0,10 mg of lead per cubic metre of air, measured in accordance with a safety standard;
- **"provincial director"** means the provincial director as defined in regulation 1 of the General Administrative Regulations;
- "respiratory protective equipment" means a device that is worn over at least the mouth and nose to prevent the inhalation of air that is not safe, and which is of a type, or conforming to a standard, approved by the Minister;
- "respirator zone" means an area where the concentration of airborne lead exceeds 0,1 mg of lead per cubic metre of air, without the use of respiratory protective equipment;
- "SABS 0228" means the South African Bureau of Standards's Code of Practice for the Identification and Classification of Dangerous Substances and Goods;
- "SABS 0229" means the South African Bureau of Standards's Code of Practice for Packaging of Dangerous Goods for Road and Rail Transportation in South Africa;
- "SABS 0400" means the South African Bureau of Standards's Code of Practice for the Application of the National Building Regulations;
- "SABS SM 1164" means the South African Bureau of Standards's standard method for the determination of lead (inorganic and tetra-alkyl) in the workplace air by atomic absorption and spectrophotometry.

SCOPE OF APPLICATION

2. (1) Subject to the provisions of subregulation (2), these regulations shall apply to every employer and self-employed person at a workplace where lead is produced, processed, used, handled or stored in a form in which it can be inhaled, ingested or absorbed by any person in that workplace.





- (2) The provisions of these regulations shall not apply to an employer or self-employed person at a workplace where the exposure to lead
 - i. is lower than the action level, except where there is a substantial risk that lead could be absorbed or ingested by a person in that workplace; and
 - ii. is such that no substantial adverse change is likely to occur in the work practice that may lead to an increase in the exposure to lead.

EXPOSURE TO AIRBORNE LEAD

3. Save for the provisions of regulation 12(1), no employer shall require or permit any employee to work in an environment in which he or she would be exposed in excess of the prescribed occupational exposure limits for lead.

INFORMATION AND TRAINING

- **4.** (1) An employer shall, before any employee is 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, both practically and theoretically, 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 lead, including the health risks to employees, families and others that could result from taking home lead-contaminated equipment and clothing, and the dramatically increased risk of lead poisoning in workers who also smoke;
 - d. the measures taken by the employs, 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 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 of medical surveillance and the long term benefits of undergoing such surveillance;
 - h. the occupational exposure limits and action levels and their meaning;
 - i. the importance of good housekeeping in the workplace and personal hygiene;
 - j. the safe working procedures regarding the use, handling, processing and storage of any material containing lead, including the correct application of control measures to limit the spread of lead outside the work area; and to limit the exposures off workers inside the work area as far as is reasonably practicable;
 - k. the procedures to be followed in the event of spillages or any other similar emergency or situation which could arise by accident;
 - 1. the procedures for reporting and correcting defects;
 - m. waste disposal;
 - n. the procedures for record keeping; and
 - o. all other matters 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. Training should be given more frequently if
 - a. working 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 to provide it and has adequate practical experience and theoretical knowledge of all aspects of the work being carried out by the employer.
 - (4) An employer and self-employed person shall ensure as far as is reasonably practicable that their





mandatories or any other persons that may be affected by lead 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 is 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 lead or lead-containing material.
- (7) An employer or a self-employed person shall ensure that he himself or she herself or any person who in any manner assists him or her in the carrying out or the conducting of his or her business, has the necessary information and has undergone sufficient training for him or her to identify the potential risk and the precautions that should be taken.

DUTIES OF PERSONS WHO MAY BE EXPOSED

- **5.** Every employee who is exposed shall obey any lawful instruction given by or on behalf of the employer regarding
 - a. the prevention of lead being released into the environment;
 - b. the wearing and use of personal protective equipment;
 - c. the wearing of monitoring equipment to measure personal exposure to airborne lead;
 - d. reporting for medical surveillance as required by the regulations;
 - e. the notification of pregnancy to the occupational health practitioner;
 - f. the cleaning up and disposal of materials containing lead;
 - g. housekeeping at the workplace, personal hygiene and environmental and health practices; and
 - h. information and training as contemplated in regulation 4.

ASSESSMENT OF POTENTIAL EXPOSURE

- **6.** (1) An employer or self-employed person shall, after consultation with the relevant health and safety representative or relevant health and safety committee, cause an immediate assessment to be made and thereafter at intervals not exceeding two years, to determine if any employee may be exposed by any route of intake.
 - (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 assessment contemplated in subregulation (1), 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, the employer or self-employed person shall keep a record of the assessment and take into account such matters as
 - a. the type of lead to which an employee may be exposed;
 - b. what effects the lead can have on an employee;
 - c. where the lead may be present and in what physical form it is likely to be;
 - d. the route of intake by which and the extent to which an employee can be exposed;
 - e. the nature of the work, process and any reasonable deterioration in, or failure of, any control measures.
 - (4) If the assessment made in accordance with subregulation (3) indicates that any employee may be exposed to lead, the employer shall ensure that monitoring is carried out in accordance with the provisions of regulations 7 and 8 and that the exposure is controlled as contemplated in regulation 11.
 - (5) 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 has been a change in a process involving lead or in the methods, equipment or procedures in the use, handling, control or processing of lead;





and the provisions of subregulations (2), (3) and (4) shall apply.

AIR MONITORING

- 7. (1) Where the inhalation of lead is concerned, an employer contemplated in regulation 6(4) shall ensure that the measurement programme of the airborne concentrations of the lead 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 to comment thereon;
 - c. carried out by:
 - i. an approved inspection authority; or
 - ii. a person who is registered with IOHSA and whose ability to do the measurements is verified by an approved inspection authority, in accordance with the provisions of subregulation (3);
 - d. representative of the exposure of employees to the airborne lead 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 done 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 lead 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 limit prescribed for lead then -
 - At least a level 2 sampling scheme 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 that has been prescribed for lead is exceeded, the provisions of regulation 11 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 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 measurement and investigation as contemplated in subregulations (2) and (3) respectively, in the record required by regulation 10; and
 - e. by making a statement as to whether the person contemplated in subregulation (1)(c)(ii) is recommended to carry out the measurement programme as required by





subregulation (2).

MEDICAL SURVEILLANCE

- **8.** (1) Every employer shall ensure that every employee is under the medical surveillance of an occupational medicine practitioner if
 - a. the employee is employed in a respirator zone;
 - b. the employee is exposed to tetra-alkyl lead; or
 - c. the occupational medicine practitioner certifies that the employee should be under medicine surveillance.
 - (2) In order to comply with the provisions of subregulation (1), the employer shall ensure that
 - a. an initial medical examination is carried out immediately before or within 14 days after a person commences employment, which comprises:
 - i. An evaluation of the employee's medical and occupational history;
 - ii. clinical examinations;
 - iii. in the case of lead, other than tetra-alkyl lead, measurement of the employee's blood lead and haemoglobin concentrations and other relevant biological tests at the discretion of the occupational medicine practitioner: Provided that the measurement of blood lead concentrations shall be repeated during the third and the sixth month after commencement of employment: Provided further that when monitoring of zinc protoporphyrine in blood expressed in ?g ZPP/g haemoglobin is performed at intervals not exceeding two months, only annual blood lead concentration measurements are required; and
 - iv. subject to the provisions of subregulation (2)(a)(iii), biological monitoring, which shall consist of measurement of blood lead concentration for employees exposed to lead, other than tetra-alkyl lead, at intervals as prescribed in the Table below are carried out periodically after the expiry of the first six months of employment: Provided that in the case of females who are capable of procreation all such measurements are carried out at three-monthly intervals;

Blood lead ?g/100 ml	Maximum intervals between blood lead measurements
Under 20	12 months
20 - 39	6 months
40 - 59	3 months
60 and over	At the discretion of the occupational medicine practitioner;

v. in the case of tetra-alkyl lead, immediate measurement of the employee's urinary lead concentration and thereafter at intervals as prescribed in the Table:

Urinary lead ?g/litre	Maximum intervals between blood lead measurements
Under 20	6 weeks
120 - 149	1 week
150 and over	At the discretion of the occupational medicine practitioner;

b. clinical examinations and relevant biological tests are carried out at the discretion of the occupational medicine practitioner;





- c. (i) where the blood lead concentration of an employee is equal to or greater than 60 ?g/100 ml, the employer has the test repeated, and if the results of the repeat test corrected for the haematocrit value, with reference to a standard value for men of 43 % and of 38 % for women, is greater than 60 ?g/100 ml, that the employee is certified as unfit for work in an area which exposes him or her to lead: Provided that the occupational medicine practitioner, if he or she deems it necessary, may certify an employee who has a blood lead concentration of less than 60 ?g/100 ml as unfit for work in an area in which he or she is exposed to lead;
 - ii. where the urinary lead concentration of an employee is equal to or greater than 150 ?g/l, the employer has the test repeated, and if the results of the repeat test are greater that 150 ?g/l, that the employee is certified as unfit for work in an area which exposed him or her to lead: Provided that the occupational medicine practitioner, if he or she deems it necessary, may certify an employee who has a urinary lead concentration of less than 150 ?g/l as unfit for work in an area in which he or she is exposed to lead; and
 - iii. where the ZPP in blood value of an employee is equal to or greater than 10 ?g ZPP/g haemoglobin, the employer has the test repeated, and if the results of the repeat test are the same or higher, than the employee is certified as temporarily unfit for work in an area which exposes him or her to lead: Provided that the occupational medicine practitioner, if he or she deems it necessary, may certify an employee who has a ZPP in blood value of less than 10 ?g/g haemoglobin but higher than 8 ?g ZPP per gram haemoglobin as unfit for work in an area in which he or she is exposed to lead.
- (3) The employer shall ensure that no employee certified by the occupational medicine practitioner as unfit for work in an area which exposes him or her to lead, returns to such work until
 - i. the occupational medicine practitioner certifies in writing that the employee is fit for such work; and
 - ii. the employee's blood lead concentration is less than 50 ?g/100 ml; or
 - iii. the ZPP value is less than 6 ?g/g haemoglobin; or
 - iv. the employee's urinary lead concentrations is less than 130 ?g/l.
- (4) The employer shall ensure that
 - i. a woman who is capable of procreation and who carries out work that exposes her to lead, is suspended from such work when her blood lead concentration exceeds 40 ?g/100 ml or her urinary lead concentration exceeds 75 ?g/l, or if she becomes pregnant; and
 - ii. the employee contemplated in subregulation (4)(i) is not permitted to return to work that will expose her to lead unless her blood lead concentration is less than 30 ?g/100 ml or her urinary lead concentration is less than 65 ?g/l.
- (5) Where it is found that any employee had to be removed from his or her workplace owing to the provisions of subregulation 2(c)(i), 2(c)(ii), 2(c)(iii) and 4(i), the employer shall record and investigate the incident in accordance with 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 lead 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 as contemplated in regulation 12 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.





RECORDS

10. The employer shall-

- a. keep records of the results of all assessments, air monitoring, medical surveillance reports and maintenance of control measures required regulations by 6, 7, 8 and 14(b): Provided that personal medical records shall only be made available to an occupational medicine practitioner or 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. subject to formal written consent of an employee, allow any person to peruse the records with respect to that particular employee;
- d. make the records of all assessments and air monitoring 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 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 lead and, where relevant, its location, with starting and finishing dates and with average duration of exposure in hours per week;
 - iii. a record of any work with lead prior to this employment; and
 - iv. dates of medical examinations:
- g. keep all records of the tests and investigations carried out in terms of regulation 14(b) and of any repairs resulting from these tests and investigations, for at least three years; and
- h. keep a record of training given to an employees, in terms of regulation 4(5) for as long as the employee remains employed at the workplace in which he or she is being exposed to lead.

CONTROL OF EXPOSURE TO LEAD

- 11. (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 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 lead or lead-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 lead that 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. the installation of local extraction ventilation systems to processes, equipment or tools for the control of emissions of airborne lead;
 - iii. the use of wet methods where appropriate;
 - iv. separate workplaces for different processes; and
 - v. the ready identification of early corrective action to be taken;
 - f. by introducing appropriate work procedures that an employee must follow where materials are used, processed, handled or stored that could give rise to the exposure





of an employee and that shall include written instruction to ensure that-

- i. lead 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 of lead exposure can be readily taken.
- (3) The employer shall ensure that the release of lead 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).

PERSONAL PROTECTIVE EQUIPMENT AND FACILITIES

- **12.** (1) If it is not reasonably practicable to ensure that the exposure of an employee is adequately controlled as contemplated in regulation 11 (1), the employer shall
 - a. in the case of airborne lead, provide the employee with suitable respiratory protective equipment and protective clothing; and
 - b. in the case of tetra-alkyl leads, which can be absorbed through the skin, provide the employee with suitable lead impermeable protective equipment.
 - (2) Where respiratory protective equipment is provided, the employer shall ensure that
 - a. the relevant equipment is capable of keeping the exposure to below the OEL for the type of lead;
 - b. the relevant equipment is correctly selected and properly used;
 - c. information, instruction, training and supervision that are necessary with regard to the use of the equipment is known to the employees; and
 - d. the equipment is kept in good condition and efficient working order.
 - (3) An employer shall, as far as is reasonably practicable
 - a. issue no used personal protective equipment to an employee, unless the relevant protection equipment is properly 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 not in use is stored only in the place provided therefor.
 - (4) An employer shall, as far as is reasonably practicable, ensure that all 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 containers shall be tightly sealed and have clear indication thereon that the contents thereof are contaminated; 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 contaminated equipment.
 - (5) Subject to the provisions of subregulation (4)(b), an 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 lead waste as contemplated in regulation 17.





- (6) Subject to the provisions of the Facilities Regulations, an employer shall, where reasonably practicable, 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 lead;
 - b. two separate lockers, labelled Protective clothing" and "personal clothing, respectively located in the "dirty" and "clean" change rooms, respectively, and ensure that the clothing is kept separately in the locker concerned; and
 - c. separate "clean" and "dirty" change rooms K the employer uses or processes lead to the extent that the lead could endanger the health of persons outside the workplace.

CLEANLINESS OF PREMISES AND PLANT

- 13. Every employer shall as far as is reasonably practicable take steps to ensure that
 - a. all workplaces are kept in a clean state and free of lead waste and, when lead is accidentally spilled or airborne lead is accidentally released into the workplace, corrective measures are taken immediately, before any work is continued;
 - b. leaning is carried out by vacuum-cleaning equipment with a filtration efficiency of at least 99 per cent for particles 1 micrometer in size, or by some other means so that lead dust neither escapes nor is released into the air in such a manner that it contaminates any workplace or the environment:
 - c. the vacuum-cleaning equipment is regularly serviced and all its external surfaces are kept in a clean state and free from visible lead dust; and
 - d. where the use of vacuum-cleaning equipment is not reasonably practicable, surfaces which are to be cleaned are dampened and that employees undertaking such cleaning wear appropriate protective clothing and respiratory protective equipment.

MAINTENANCE OF CONTROL MEASURES

- **14.** The employer shall ensure
 - a. that all control equipment and facilities provided in terms of regulations 10, 11, 12 and 13 are maintained in good working order; and
 - b. that thorough examinations and tests of engineering control measures are carried out at intervals not exceeding 24 months by an approved inspection authority approved for such examinations and tests or by a person who is registered with IOHSA and whose ability to do the measurements and tests is verified by such an approved inspection authority.

PROHIBITIONS

- **15.** (1) No person shall use compressed air to blow away particles of lead from any surface or require or permit any other person to use compressed air to blow away particles of lead from any surface.
 - (2) No person shall smoke, eat, drink or keep food or beverages in a respirator zone or require or permit any other person to smoke, eat, drink or keep food or beverages in such zone.
 - (3) Lead paint shall not be
 - a. used for the interior painting of buildings;
 - b. scraped or rubbed down from a surface by a dry process;
 - c. removed by burning; or
 - d. used on furniture.

LABELLING, PACKAGING, TRANSPORTATION AND STORAGE

16. An employer shall, in order to avoid the spread of contamination of lead, take steps, as far as is reasonably practicable, to ensure that





- a. the lead in storage or distributed is properly identified, classified and handled in accordance with SABS 0228;
- b. a container of a vehicle in which lead is transported is clearly identified, classified and packed in accordance with SABS 0228 and SABS 0229.

DISPOSAL OF LEAD WASTE

- 17. An employer shall as far as is reasonably practicable
 - a. recycle all lead waste;
 - b. ensure that all collected lead waste is placed into containers that will prevent the likelihood of exposure during handling;
 - c. ensure that all vehicles, re-usable containers and covers that have been in contact with lead waste are cleaned and decontaminated after use in such a way that such vehicles, containers or covers do not cause a hazard inside or outside the premises concerned;
 - d. ensure that all lead waste that 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 employees occupied in the collection, transport and disposal of lead waste, who may be exposed to that waste, are provided with suitable personal protective equipment; and
 - f. ensure that H the services of a waste disposal contractor are used, a provision is incorporated into the contract stating that the contractor shall also comply with the provisions of these regulations.

OFFENCES AND PENALTIES

18. 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 or 17 shall be guilty of an offense and liable on conviction to a fine or to imprisonment for a period not exceeding six months and, in the case of a continuous offense, to an additional fine of R200 for each day on which the offense continues or 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

19. These regulations shall be called the Draft Amended Lead Regulations, 1999.

