# Collective Bargaining Agreement: Agricultural Industry (Occupational Safety, Health and Environment Code)

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IT is hereby notified that the Minister of Public Service, Labour and Social Welfare has, in terms of section 80(1) of the Labour Act [Chapter 28:01], approved the publication of the Collective Bargaining Agreement set out in the Schedule and registered in terms of section 79 of the Act [Chapter 28:01]:—

#### SCHEDULE

# NATIONAL EMPLOYMENT COUNCIL FOR THE AGRICULTURAL INDUSTRY:

# COLLECTIVE BARGAINING AGREEMENT : AGRICULTURE INDUSTRY (OCCUPATIONAL SAFETY, HEALTH AND ENVIRONMENT CODE)

MADE AND ENTERED in accordance with the Labour Act [Chapter 28:01], as amended from time to time, between the Zimbabwe Agricultural Employers Organisation (ZAEO), Zimbabwe Commercial Farmers Union (ZCFU), Zimbabwe Farmers Union (ZFU), Zimbabwe Tobacco Association (ZTA), Zimbabwe Tea Growers Association(ZTGA), Timber Producers Association(TPA), Zimbabwe Sugarcane Employers Organisation (ZSEO), Commercial Farmers Union (CFU), Zimbabwe Kapenta Producers Association (ZKPA) and Agro and Horticulture employer representatives (herein referred to as "the employers" or "the employers' organisations") of the one part and the General Agriculture and Plantation Workers' Union of Zimbabwe (GAPWUZ), Horticulture General Agriculture and Plantation Workers' Union of Zimbabwe (HGAPWUZ) and Kapenta Workers Union of Zimbabwe (KWUZ) (herein referred to as "the employees" or "the trade unions") of the other part, being parties to the National Employment Council for the Agricultural Industry of Zimbabwe.

THIS FURTHER AGREEMENT shall be deemed to have come into operation on the 1st of May, 2020.

The employer party and the employee party agreed on the following:—  $\,$ 

# OCCUPATIONAL SAFETY, HEALTH AND ENVIRONMENT CODE

#### PART I

#### **PRELIMINARY**

#### Preamble

1. Agriculture is the mainstay of the Zimbabwe economy and the livelihood of our people hence it is imperative that we take all necessary steps to ensure a safe and healthy working environment. This Occupational Safety, Health and Environment Code is aimed to ensure that members of the agriculture sector operate in a matter that is not detrimental to their well-being and that of the general public.

#### Title

2. This occupational health, safety and environment code shall be cited as the Occupational Safety, Health and Environment Code for the Agricultural Industry of Zimbabwe (hereinafter referred to as "the Code").

### Interpretation

#### 3. In this section—

- "accident" means an undesired event giving rise to death, injury, ill health, damage or other loss;
- "agrochemicals" shall include those chemical products which are made to kill insects, fungi and regulate plant growth and may be poisonous and thus may be harmful to people when handled incorrectly or carelessly. These agrochemicals include principally insecticides (insects), fungicides (fungal and bacterial diseases), herbicides (weeds), acaricides (mites), nematicides (nematodes), rodenticides (rodents), molluscicides (snails), avicides (birds), plant growth regulators, repellents and defoliants;
- "commercial fishing" means all fishing operations, including fishing operations on rivers, lakes, canals and other waterbodies, with the exception of subsistence fishing and recreational fishing;
- "cholinestrase monitoring" is the measurement and monitoring of acetylcholinestrase enzyme activity in the blood of exposed persons to pesticides against the person's established baseline (prior to pesticide exposure) with a view to identify overexposure before occurrence of clinical illness;
- "contractor" means a person who renders services to the employer which are related to or connected with those of the employer's undertaking and is not under the general control or management of the employer;

- "dust" shall include that dust frequently generated during preparation of fields for planting, harvesting, cleaning, primary processing, bagging and transportation of farm produce, preparation and handling of hay, production of birds and livestock animals. Furthermore, dust may include such components as straw, bagasse, husks of grain, moulds, fungal and bacterial residues, bioaerosols, endotoxins, pesticides residues, fumigants, faecal matter and particles of silica;
- "employee" means any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration in respect of such employment or work:
- "employer" means any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him or her, and includes the manager, agent or representative of such person who is in charge or control of the work upon which such other person is employed;
- "fisher" means every person employed or engaged in any capacity or carrying out an occupation on board any fishing vessel, including persons working on board who are paid on the basis of a share of the catch but excluding pilots, naval personnel, other persons in the permanent service of a government, shore-based persons carrying out work aboard a fishing vessel and fisheries observers;
- "hazard" means a source or situation with a potential for harm in terms of human injury or ill health, damage to property, damage to the work environment or any combination of these;
- "hazardous substance" means any chemical, waste, gas or gaseous matter, plant, animal or micro-organism which is injurious to health or the environment;
- "health" means a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity;

- "imminent danger" means a dangerous situation which is about to happen or threatening to happen;
- "medical surveillance" means a planned programme of periodic examination (which may include clinical examinations, biological monitoring or medical tests) of employees by a medical practitioner;
- "musculature" refers to system or arrangement of injuries in the body or part of the body or an organ;
- "musculoskeletal injuries" are a range of disorders involving muscles, bones, tendons, blood vessels, nerves and other soft tissues which include carpal tunnel syndrome, tendinitis and tenosynovitis;
- "NSSA" refers to the National Social Security Authority;
- "occupational disease" means a disease known to arise out of exposure in the workplace to hazardous substances or dangerous conditions in processes, trades or occupations;
- "occupational health services" means health or medical functions involved in treating the employer, the employees and their representatives in an undertaking and advising them on the requirements for establishing and maintaining a safe and healthy working environment which facilitate optimal physical and mental health in the workplace;
- "occupational safety" means freedom from unacceptable risk of harm at work:
- "occupational safety and health" is identified as the discipline (or group of disciplines) dealing with the prevention of occupational accidents, work-related injuries and diseases as well as the protection and promotion of the health of employees;
- "occupational safety and health management system" means part of an organisation's management system used to develop and implement the organisation's policy and manage occupational safety and health risks;
- "OSH" refers to Occupational Safety and Health;

- "OSHE" refers to Occupational Safety, Health and Environment;
- "OSHMS" refers to Occupational Safety and Health Management System;
- "percutaneous injury" is the penetration of the skin by a needle or other sharp object which has been in contact with blood, tissue or other body fluid before the exposure;
- "PPC" refers to personal protective clothing;
- "PPE" refers to personal protective equipment;
- "PPE/C" refers to personal protective equipment and clothing;
- "reportable occupational accident" is an accident that causes loss of life or injury to an employee resulting in disablement and employee is certified unfit to work for a day or more;
- "risk" means the likelihood that an injury, ill-health or damage will occur and includes the severity and frequency of occurrence of the injury, ill-health or damage;
- "risk assessment" means the overall process of estimating the magnitude of risk and deciding whether or not the risk is tolerable;
- "skipper" means the fisher having command of a fishing vessel;
- "zoonotic diseases" include anthrax from handling infected animals and tissue, brucellosis from handling placental tissues of infected livestock, campylobacter and cryptosporidium infections contracted from livestock through contaminated food or water resulting in gastrointestinal symptoms such as diarrhoea, leptospirosis contracted from rodents and rabies contracted from infected bites by dogs, wild animals and bats. Zoonotic diseases shall include those diseases which employees may develop from handling infected animal or animal products or contaminated drinking water and disposing of infected faecal material.

### Objectives and scope of this code

- 4.(1) The overall objective of the code is to promote a preventive OSH culture in agriculture production and activities and in particular—
  - (a) raise awareness of hazards and risks associated with agriculture;
  - (b) provide guidance on how to effectively manage and control occupational accidents, injuries and diseases in agriculture production and activities;
  - raise awareness of OSH issues concerning particular groups of employees such as women and young employees; and
  - (d) promote positive attitudes and behaviour towards OSH in agriculture sector in Zimbabwe.
- (2) This Code shall be implemented in all agricultural sectors, such as general agriculture, horticulture, tea/coffee plantation, kapenta, agro-processing, animal husbandry, sugarcane growing/production, wildlife conservancy, timber production, crocodile farming and any other agricultural sectors and activities.
- (3) The Code shall apply to the primary processing of agricultural and animal products, maintenance of machinery, equipment, appliances, tools, agriculture installations, storage, operation or transportations related to agriculture production and any other agricultural activities.
- (4) The provisions of this Code shall apply in respect of all employees in agricultural enterprises, whether seasonal, casual, temporarily employed for limited periods/durations, contractors or permanent employees.
- (5) The Code is applicable to all agricultural enterprises irrespective of size and it is intended provide protection to all employees irrespective of their employment status.

#### PART II

IDENTIFICATION AND MANAGEMENT OF OCCUPATION HAZARDS AND RISKS

Common occupational hazards and risks in agriculture

- 5. Hazards which employers and employees in the agricultural industry work with or are exposed to may be classified as—
  - (a) mechanical hazards arising from use of or other contact with dangerous machinery such as tractors, vehicles, harvesters, cutting and piercing tools;
  - (b) chemical hazards arising from use of or other contact with chemicals such as pesticides, fertilizers, carcinogenic substances such as arsenical and phenoxy-acetic herbicides, antibiotics, other veterinary products and dusts;
  - (c) physical hazards such as excessive noise and vibration, confined spaces such as silos, pits, cellars and tanks and working in tunnels during tobacco curing; slips, trips and falls from heights; bad weather conditions;
  - (d) ergonomic hazards (use of inadequate equipment and tools, awkward body positions or prolonged static postures), lifting and carrying of heavy objects giving rise to musculoskeletal disorders, repetitive work;
  - (e) biological hazards such as transmissible livestock and animal diseases;
  - (f) other hazards such as drowning, fire, lightning strikes, snake bites and attack by animals.

# Duties of employers

# 6. Employers shall—

- (a) provide and maintain safe and healthy workplaces, plant, tools, and other working equipment;
- (b) organise work in order to prevent, so far as reasonably practicable, occupational accidents and diseases and apply relevant standards and guidelines as prescribed, approved or recognised by the OSH regulatory authority, National Social Security Authority;

- (c) set out in writing OSH policy, programmes and other arrangements needed to implement the OSH policy specific to their enterprises and appropriate to their size and nature of their activities;
- (d) adopt a risk management and systems approach to managing workplace safety and health;
- (e) ensure the safe use, handling, storage, transportation of equipment and hazardous substances and safe disposal of hazardous chemicals;
- (f) ensure provision of and proper use by employees of OSH protection systems including personal protective equipment and clothing;
- (g) report all reportable accidents, injuries and diseases to NSSA inspector of workplaces and maintain accidents registers in which accurate lost time for every reportable injury, illness or fatality is entered and shall be made available to the inspector of workplaces on demand;
- (h) define the OSH responsibilities, accountabilities and authority levels of directors, managers, supervisors and others and communicate these clearly to their employees, visitors or any other persons working in the workplace;
- ensure consultation with and the full participation of employees and representatives in the fulfilment of the OSH policy;
- (j) define the necessary OSH competence requirements for all employees and establish arrangements to ensure all managers, supervisors, employees and employees' safety representatives are competent to perform their OSH duties;
- (k) ensure that employees have sufficient information in a form and language that they understand concerning OSH hazards and risks and arrangements for managing them including emergency arrangements;
- (l) identify hazards and assess risks, reducing that following the hierarchy of control measures namely elimination or substitution; reducing the hazard or risk at source

- through engineering controls; minimise the hazard/risk through administrative arrangements such as using safe working procedures, good housekeeping or organisational measures and use of personal protective equipment and clothing;
- (m) organise employees and establish such structures as safety and health committees, recognise employees elected OSH representatives and ensure that OSH committee has employees' representatives and employers' representatives with knowledge and experience in OSH issues;
- (n) organise first aid and emergency preparedness and response arrangements;
- (o) ensure compliance with OSH requirements by contractors and subcontractors working at the agricultural enterprise;
- (p) develop, establish and review procedures to monitor, measure and record OSH performance taking into account the results of investigations of accidents and diseases, dangerous occurrences, OSH compliance audits and reviews of OSH management systems by management; and
- (q) have particular regard for OSH of vulnerable employees in agriculture including casual and seasonal employees, lone employees, women, pregnant women, young employees and take appropriate action to ensure their protection from hazards and risks associated with their work.

# Duties and rights of employees

# 7. (1) Employees shall—

- (a) cooperate with the employer in their efforts to comply with the law or other national OSH policies and with duties and responsibilities placed on the employer pursuant to this code;
- (b) report forthwith to their immediate supervisor or safety and health representative any unusual conditions at the

- workplace, installations, equipment and machinery which they believe could present a hazard or risk to their safety or health or that of other people and which they may not deal with themselves;
- (c) comply with prescribed OSH measures;
- (d) take all reasonable steps to eliminate or control hazards or risks to themselves and others arising during agricultural production and activities including the proper care and use of protective clothing and equipment;
- (e) participate in instruction and training programmes provided by the employer or required by NSSA and shall exhibit behaviour consistent with their training;
- (f) participate and cooperate in exposure monitoring and health surveillance programmes required by NSSA and/ or provided by the employer for the protection of their health.
- (2) Employees, and their representatives where appropriate, shall have the right to—
  - (a) to be informed and consulted on OSH matters;
  - (b) to fair and safe labour practices;
  - (c) to know the OSH hazards and risks and the effects he or she is or likely to suffer due to exposure;
  - (d) to participate in the application and review of OSH measures and select their OSH representatives in their area of operation;
  - (e) to bring to the attention of their representatives, the employer, the National Employment Council for the Agricultural Industry in Zimbabwe and/or NSSA hazards and risks to safety and health arising from agricultural production;
  - (f) to notify NSSA and/or the National Employment Council for the Agricultural Industry in Zimbabwe if they consider the measures taken and means used by the employer are inadequate for the purpose of ensuring safe and healthy working environment;

- (g) to remove themselves from danger when they have reasonable justification to believe that there is an imminent and serious risk to their safety and health and that of other people. Such employees shall inform their supervisor and/or safety and health representatives immediately;
- (h) be informed of medical examinations, including preassignment medical examinations and of the respective health assessments. The medical examination costs shall be met by the employer. The results of the medical examinations shall be communicated individually to the employee concerned and kept confidential and shall not be used to discriminate against employees;
- encourage and support young employees to develop safe work practices and to fully comply with safe working procedures and instructions;
- (j) in the case of safety and or health condition that places them at increased risk of harm, request a transfer to alternative work not exposing them to that increased risk, and if the employee(s) concerned have qualifications or may reasonably be trained for such alternative work, the employer may, where reasonable, accede to such a request without a loss of earnings for the employee.
- (3) Female employees shall have the right, in case of pregnancy or when breastfeeding, to alternative work not hazardous to the health of the unborn or nursing child, where such work is available, in order to prevent exposure to hazards and they shall be entitled to return to their previous jobs at the appropriate time without loss of earnings.
- (4)Employees who remove themselves from danger in accordance with subsection (2)(g) shall not be subjected to discrimination, retaliation and undue consequences by the employer or any other party but the employees shall be obligated to follow due process established and recognised by both employer and employees for occasions where an employee removes himself or herself from danger in the workplace.

- (5) The employer shall periodically provide to employees and their elected representatives appropriate training, and where necessary retraining, on using effective methods for minimising OSH risks, provided that all such trainings shall be done during working hours.
  - (6) When using contractors, the employer shall ensure that—
  - (a) OSH criteria such as a record of good OSH performance and an adequate OSH management system are included in procedure for selecting and evaluating contractors;
  - (b) contracts specify OSH requirements as well as sanctions and penalties in case of non-compliance;
  - (c) contracts include the right for supervisors mandated by the employer to stop work whenever a risk of serious injury is apparent and suspend operations until remedies have been put in place and right to terminate contractors who fail to meet OSH requirements;
  - (d) same safety and training requirements apply to the contractors and their employees as to the employees in the agriculture enterprise;
  - (e) arrangements for reporting work-related injuries and diseases, ill health and incidents among the contractors' employees while performing work for the employer are clearly specified;
  - (d) OSH performance of the contractor activities on site is regularly monitored.

Occupational safety and health management systems

- 8. (1) Occupational safety and health management systems specific to agriculture and appropriate to the size of the agricultural enterprise and nature of activities shall be established and implemented.
- (2) The OSH management system shall contain the key elements namely—OSH Policy;
  - (a) planning for OSHMS covering hazard identification and risk assessment (HIRA) and control, applicable national OSH legislation, setting objectives and targets largely consistent with HIRA process;

- (b) implementation and operation covering defining roles, responsibilities and accountabilities of various players involved in the implementation of the OSHMS, training, competence and awareness issues, communication, consultation and participation, documentation and document control, emergency preparedness and response planning;
- (c) checking and Corrective Action covering performance monitoring and measurement, Accident/Incident and Hazard Reporting and Investigation, Records and Records management and Audit;
- (d) Management review of the occupational safety and health management system.

#### Risk assessment

- 9. (1) A risk assessment process shall involve a careful examination of the working environment to identify hazards (physical, chemical, biological, ergonomic and organisational) and to evaluate the potential harm that they may do. Evaluation of risk shall take into account both the likelihood of the hazard causing harm to persons and the severity of the harm if it were to occur.
- (2) The employer shall make arrangements to identify, evaluate systematically and record the hazards and risks to employees' safety and health that may arise during the course of their work, taking into account such factors as sex, age, disability and reproductive health.
- (3) The carrying out of risk assessment shall take a minimum of five steps namely—
  - (a) identification of hazards;
  - (b) identification of who might be harmed and how;
  - (c) evaluation of the risks and deciding on precautions taking into account the hierarchy of control measures;
  - (d) record the findings, set priorities for improvement and implementation of action to be taken.
  - (e) reviewing and updating the assessment when necessary.

(4) Risk assessment shall be conducted in line with the provisions of Schedule I of this Code.

#### PART III

#### USE OF CHEMICALS IN THE WORKPLACE

#### Chemical safety management

- 10. (1) Any enterprise using agrochemicals shall implement stringent controls to prevent health risks to employers and employees, the general public and the general environment. Hence, all employers shall manage chemicals on the agricultural enterprise, ensuring that the hierarchy of controls is followed namely—
  - (a) elimination;
  - (b) substitution where a more hazardous substance or chemical is substituted with a less hazardous one:
  - (c) engineering control measures in which well-designed systems for storage, issuance and dispensing of chemicals are carried out:
  - (d) administrative controls such as establishing procedures and instructions of operations, restricting entry in chemicals storage areas and areas that have been sprayed with pesticides.
  - (e) provision of appropriate and suitable personal protective equipment and clothing and as last consideration.
- (2) Agrochemicals used shall have comprehensive chemical safety data sheets containing information under 16 headings namely—
  - (a) chemical product and company identification;
  - (b) hazard identification;
  - (c) composition/information on ingredients;
  - (d) first-aid measures;
  - (e) fire-fighting measures;
  - (f) accidental release measures;
  - (g) handling and storage;
  - (h) exposure controls;

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- (i) personal protection;
- (j) physical and chemical properties;
- (k) stability and reactivity;
- (1) toxicological information;
- (m) disposal considerations;
- (n) transport information;
- (o) regulatory information; and
- (p) other information.
- (3) Agrochemicals shall have labels and relevant leaflets with information on proper mixing, loading and application procedures and instructions which shall be followed. Information on the agrochemicals shall include potential health effects and measures to be taken in case of exposure and such information shall be in a language that is appropriate and understandable by all employees.
- (4) Labels shall be easily readable and shall include pictograms easily understood by employees.
- (5) The agrochemical label shall be durable and not be detachable from the containers so that the information remains available to all employees as the chemical passes along the supply chain and throughout the product lifetime.
- (6) Employers shall carry out an assessment of the hazards and risks associated with use, storage and handling of agrochemicals and ensure that measures of controls are put in place ensuring that the hierarchy of control measures as outlined in subsection (1) is followed.

# Information and training on chemical management

- 11. (1) Users of agrochemicals shall identify any problems or hazards associated with use of the agrochemical and if necessary seek advice from agricultural officials, research stations, company advisers or agricultural extension employees.
- (2) The employer shall inform employees of the known hazards associated with agrochemicals used at their workplace.

- (3) The employer shall obtain from their suppliers copies of chemical safety data sheets for all chemical products used on their premises ensuring that the chemical data sheets are readily accessible by all employees.
- (4) The employer shall prepare emergency response forms which shall specify appropriate response including first aid in case there is chemical splashes on skin or other parts of the body or if chemical has been inhaled or ingested.
- (5) The employer shall instruct employees how to use the information on pesticides labels and chemical data sheets.
- (6) The employer shall ensure employees are trained on the correct and effective use of chemicals, proper use and maintenance of personal protective clothing and equipment, preventive work practices and how to deal with emergencies.
- (7) The training and instruction issued to employees shall be reviewed by the employer to check their impact on prevention of exposure to chemicals.
- (8) The employer shall ensure that all chemicals used at work are labelled or marked.
- (9) The employer shall ensure that a record of all chemicals used at the workplace is kept, cross-referenced to the appropriate chemical safety data sheet and that such a record shall be accessible to all employees concerned and their representatives.
- (10) The employer shall ensure that chemicals transferred into other containers or equipment, are indicated in a manner which will make them known to employees their identity, any hazards associated with their use and safety precautions.
- (11) The employer shall ensure that exposure of employees to hazardous chemicals is assessed and that employees are not exposed to chemicals to an extent which exceeds exposure limits.
- (12) The employer shall put in place spraying and post-harvest precautionary measures in areas treated with chemicals, including measures to prevent pollution of food, drinking, washing and irrigation water sources.

# Personal protective equipment and clothing for prevention of exposure to chemicals

- 12. (1) PPE/C shall be utilised to afford adequate protection to the risk and hazards from those chemicals to which the wearer is exposed, throughout the period during which such equipment is necessary taking into account the type of work.
- (2) Personal protective equipment and clothing (PPE/C) may include respiratory protective equipment, chemical protective clothing including gloves and footwear, and equipment to protect eyes and face.
- (3) The employer shall ensure that the equipment is suitable for purpose and that there shall be a sufficient supply readily available in the workplace in appropriate sizes for employees who require it.
- (4) Employees shall be fully instructed by the employer on use of PPE/C and shall use the equipment provided throughout the time they are exposed to the risk and hazard that requires its use for protection as well as maintain it in good condition.
- (5) All PPE/C that is necessary for safety in the use of chemicals shall be provided and maintained, replaced in accordance with the manufacturer's recommended schedule or when the need arises, by the employer at no cost to the employee.
- (6) Washing facilities for those using chemicals and for maintenance and cleaning of personal protective and application equipment shall be provided by the employer.
- (7) The employer shall select respiratory protective equipment upon having taken into account the work involved and its suitability to the wearer and the hazard.
- (8) It shall be prohibited for PPE/C, which is contaminated by chemicals and thus hazardous to health, to be laundered, cleaned or kept at employees' homes.

# Workplace and personal hygiene

13. (1) Employers shall provide adequate washing facilities to enable employees to maintain good personal hygiene and ensure

that there is no spread of chemicals hazardous to health and the environment.

- (2) Face and eye washing facilities and safety showers with clean portable water shall be made available by the employer for employees contaminated by chemical splash.
- (3) Changing facilities for men and women shall be designed in a manner which does not allow contamination of personal clothing with personal protective clothing and equipment.
- (4) The employer shall provide, in consultation with employees and their representatives, areas for drinking and eating away from places contaminated with chemicals hazardous to health. Eating, drinking and smoking shall be prohibited from such contaminated places.
- (5) Employees shall wash their hands and face before eating or drinking following handling of chemicals.

### Emergency preparedness

- 14. (1) The employer shall put in place arrangements to deal with emergencies arising from exposure to hazardous chemicals at all times.
- (2) The employer shall clearly communicate to employees procedures to be followed in case of emergencies due to hazardous chemical exposure and shall further carry out regular training on such procedures.
- (3) Occupational health services shall have chemical safety data sheets on all hazardous chemicals and appropriate antidotes shall be readily available.
- (4) Emergency arrangements shall be made with external emergency services and local authorities to deal with emergencies due to exposure to hazardous chemicals.

# First aid for exposure to chemicals

15. (1) The employer shall put in place adequate first aid arrangements, taking into account toxicity of the chemicals and emergency procedures in place.

- (2) The employer shall ensure that employees on duty have access to personnel trained in first aid and that such personnel hold valid first aid certificates.
- (3) An assessment of first aid needs shall be made by the employer in consultation with employees and their representatives.
- (4) The employer shall ensure that first aid equipment and facilities, such as emergency showers and eyewash stations, shall be appropriate for dealing with chemical exposures and that they are easily accessible to employees to use in case of emergency.

*Transport, storage and disposal of agrochemicals* 

- 16. (1) Agrochemicals shall be transported in their original containers.
- (2) Transfer of agrochemicals into unlabelled containers for distribution or transportation shall be prohibited to prevent a serious health risk to employees, their families, the community and the environment.
- (3) Agrochemicals shall be stored in secure, sheltered, well ventilated spaces to which only authorised personnel is permitted.
- (4) Storage areas of agrochemicals shall not be accessible to pregnant employees, children or animals.
  - (5) Containers shall be placed on platforms or on skids.
- (6) The employer shall ensure that storage facilities shall be fire resistant and leak proof and that in the event of spills, the storage area is embanked.
- (7) It shall be prohibited to smoke in or around storage areas and facilities and the employer shall ensure that signs indicating the prohibition of smoking shall be posted in visible areas around the storage facility.
- (8) Used agrochemical containers shall be washed, triple or pressure rinsed, punctured or crushed so that they may not be used again and they shall be disposed of properly following environmental standards and procedures.

- (9) Containers shall not be rinsed or washed in streams, rivers or ponds. The water used for washing shall be tipped into a hole in the ground, away from dwellings, wells, waterways and crops.
- (10) If containers may not be disposed of immediately, they shall be rinsed and stored securely to prevent theft or misuse, and away from children and animals.
- (11) Used agrochemical containers shall not be used to store food or drinking water for humans or animals because adequate cleansing is very difficult to achieve.

## Measuring, mixing and loading of agrochemicals

- 17. (1) From the label of the agrochemical, the dose rate and mixing instructions which are appropriate for the area to be treated and the application equipment to be used shall be selected.
- (2) The methods adopted for measuring and preparation for use may vary according to the product and the scale of use.
- (3) Ready-for-use solid products, such as dusts and granules, may be tipped or scooped from their packs directly into the hoppers of the application equipment.
- (4) Concentrates, which mix easily with water, may be measured out and then poured directly into sprayer tanks partly filled with water.
- (5) Wettable powders shall, where possible, be pre-mixed ("creamed"), with a small quantity of water before pouring into the sprayer tank and the tank shall subsequently be filled with water to the correct level, and mixed well.
- (6) Sprayers shall not be filled excessively in order to avoid leak during use. If a stock of spray liquid is being prepared, no more than such stock which may be used up during the same day shall be prepared.
- (7) The employer and employee shall take reasonable measures to prevent skin contamination during handling of agrichemicals.
- (8) Any protective clothing as recommended on the product label shall be worn by any person handling agrochemicals or in close

proximity to agrochemicals in a manner which may result in skin exposure.

- (9) If contamination of skin or clothing occurs, the person on whom the contamination took place shall wash off immediately, using copious amounts of water.
- (10) Chemical splashes in the eyes shall be washed out for approximately ten minutes.
- (11) Pesticides shall not be measured out of mixed in or near accommodation facilities, or where livestock are kept.
- (12) Children and animals shall be kept away from areas where pesticides are being measured or mixed.
- (13) Suitable equipment shall be used for measures, such as graduated jugs for liquids, scoops for powders, funnel or filter.
- (14) No person shall use hands as scoops or dip hands and arms into chemical liquids when stirring.
- (15) The cleanest available water shall be used in the measuring, mixing and loading of agrochemicals to avoid blockage of equipment.
- (16) Chemical liquids shall be poured out carefully to avoid spillage and splashes.
- (17) All equipment used in the measuring, mixing and loading of agrochemicals shall not be washed in close proximity to dwellings, wells, water bodies and crops.
- (18) In order to attain the highest level of protection for employees handling agrochemicals, closed mixing and loading systems shall be used whenever possible to transfer the agrochemical formulation from its original container to the mixing vessel or application equipment and permit preparation of final spray mix without direct contact on the part of the employee. However, care shall be taken when cleaning or repairing closed systems to minimise employee exposure.
- (19) Where open mixing and loading is necessary, all label instructions shall be followed and care shall be taken to avoid direct contact with the agrochemical formulation or final spray mix.

- (20) Employers shall ensure that prior to the beginning of work, all equipment is in proper working order and that all employees who mix and load agrochemicals receive training to protect themselves against exposure.
- (21) Respiratory protective equipment, goggles, chemical protective gloves, chemical protective footwear and protective clothing shall be used during mixing and loading as required by the product label.
- (22) Surgical masks or cloth covering the nose and mouth are not protective against inhalation of agrochemical vapours and therefore shall not be used as respiratory protective equipment or clothing.
- (23) Protective gloves and footwear shall be decontaminated before being removed.
- (24) Protective gloves and footwear which show sign of wear or damage shall be discarded.
- (25) Regular types of footwear, including leather work boots, shall not be used in order to avoid absorption of agrochemicals and exposure.

# Application of agrochemicals

- 18.(1) The employer shall take reasonable steps to mitigate the high risk of exposure to which agrochemical applicators are subject through dermal contact, clothing absorption and inhalation during agrochemical applications which ordinarily involve potential lengthy contact with more dilute substances than those handled during mixing and loading.
- (2) The employer shall take reasonable steps to prevent, remove or prohibit, as appropriate, leaks at connection points in hand held application equipment, walking through plants recently treated with agrochemicals and clothing contact with overhanging foliage in order to prevent substantial exposures which may affect human health.
- (3) Closed cabs or other types of enclosures shall be used where possible to minimise applicator exposure.

- (4) Spraying equipment to be mounted on vehicles shall be positioned in such a way that it does not cause instability to the vehicle and the equipment shall not be mounted in a way which results in the operator driving through the drift while spraying.
- (5) Outdoor applications shall be conducted under minimum wind conditions or when wind direction may be used to minimise applicator and bystander exposures.
- (6) Application in green houses or similar enclosures shall be conducted such that wind direction may be used to minimise applicator and bystander exposures.
- (7) The employer shall take into account temperature and humidity when selecting time of day and duration of spraying activity.
- (8) Employers shall ensure that application equipment does not leak and spare parts shall readily be available for maintenance and that all equipment is in good working order prior to application of chemicals.
- (9) Employers shall ensure that applicators are trained in the use of application equipment including calibration and use of PPE/C.
- (10) Respiratory protective equipment, chemical protective gloves and footwear shall be worn during application of chemicals.
- (11) Protective gloves and footwear shall be decontaminated before being removed.
- (12) Label requirements shall be followed with respect to protection against the whole body.

# Normal and early re-entry into sprayed areas

- 19. (1) Appropriate restricted entry intervals (time after application when employees are prohibited from entering treated areas) shall be established by the employer for all agrochemicals in use based on risk assessment done by the workplace or based on some information carried by the label or other appropriate criteria.
- (2) Agrochemical treated areas shall be identifiable during the restricted entry interval with hazard signs or symbols that are easily

understood by all employees and other persons close by and that such signs and symbols or some other format shall convey information on toxicity and restricted entry interval time.

- (3) Early re-entry employees shall wear PPE/C consistent with label requirements to mitigate high risk of exposure to agrochemicals exposures.
- (4) Early re-entry employees shall receive special training regarding hazards associated with early entry into agrochemical treated areas.

### Health surveillance of employees

- 20. (1) Medical surveillance shall be part of a programme involving employees exposed to agrochemicals.
- (2) Medical surveillance shall include medical examinations following an incident of exposure to chemicals hazardous to health, when employees report symptoms of poisoning, upon resumption of work after a prolonged absence for health reasons and after termination of work involving exposure to chemicals.
- (3) As part of overall health surveillance of employees, the employer shall ensure that the workplace has simple techniques for early detection of effects on health and work-related diseases and injuries caused by exposure to hazardous chemicals including questioning employees about health complaints.
- (4) Health surveillance may include examination and investigation to determine levels of exposure among the exposed employees.
- (5) Results of medical examinations, tests or investigations which reveal clinical or preclinical adverse effects shall be used to provide appropriate treatment and measures which improve the working conditions and environment in order to prevent or minimise exposure of employees.
- (6) Results of medical examinations shall not be used to discriminate unfairly against the employee.

- (7) Results of medical examinations shall be explained to employees by professional health personnel indicating implication of such results on the health of the employee.
- (8) Employees shall have access to their own medical records and exposure monitoring results, either personally or through their physicians.
- (9) Results of medical records and exposure monitoring shall be available for health statistics and epidemiological studies ensuring that confidentiality of individual medical and health surveillance information is maintained, where this may assist in the recognition and control of occupational diseases.

# Cholinesterase monitoring

- 21.(1) Employers using organophosphorus or n-methyl carbamate pesticides shall develop and implement a plan for cholinesterase monitoring for pesticides handlers.
- (2) Pesticides handlers expected to measure, mix, load and or apply substantial amounts of these pesticides shall be enrolled for the monitoring programme.
- (3) Pre-employment screening shall be instituted to ensure that those with low-level cholinesterase do no undertake work with organophosphate and carbamates pesticides.
- (4) Baseline (prior to exposure) blood samples shall be collected from pesticides handlers to establish each individual's normal cholinesterase levels.
- (5) Both plasma and red blood cell cholinesterase shall be measured in each blood sample.
- (6) Blood samples shall be regularly drawn from pesticide handlers to determine if cholinesterase levels have been depressed significantly and also done when employees show symptoms of poisoning.
- (7) A cholinesterase depression of at least 20% or more of either plasma or red blood cell shall trigger an investigation to establish the

source(s) of exposure and provide measures to minimise or eliminate exposure.

- (8) A depression of plasma cholinesterase greater than 40% or depression of red blood cell cholinesterase greater than 30% shall trigger removal of the handler from exposure and reassignment to other work until cholinesterase levels return to baseline levels.
- (9) Records of cholinesterase monitoring shall be maintained by the employer.
- (10) The cost associated with cholinesterase monitoring is the responsibility of the employer and shall not be passed on to the employees.

### Environmental protection

- 22.(1) Care shall be taken to protect water sources from agrochemical drift, run-off or rinse from application equipment and containers.
  - (2) Contaminated clothing shall not be washed in open water.
- (3) Buffer zones shall be established by agricultural enterprises to aquatic life and other sensitive environmental areas.
- (4) The following substances shall not be used as they are blacklisted in accordance with Statutory Instrument 268 of 2018 [Environment Management (Control of Hazardous Substances, General Regulations]—
  - (a) Aldrin;
  - (b) Dieldrin;
  - (c) Endrin;
  - (d) Dichlorodiphenyltrichloroethane (DDT);
  - (e) Hexachlorobenzene; and
  - (f) any substance not registered in Zimbabwe.

#### PART IV

#### DUST AND ZOONOTIC EXPOSURES

#### Dust exposure

- 23. (1) The employer shall eliminate or minimise dust and zoonotic exposures through engineering controls where feasible.
- (2) Reasonable steps shall be taken to avoid high levels of dust which may be a source of fire and explosion hazard. Where high levels of dust may not be avoided, reasonable steps shall be taken to mitigate the fire and explosion hazard which is present where an agricultural enterprise has high levels of dust
- (3) The employer shall ensure that work systems and procedures are in place to minimise the hazards to employees from dust and biological exposures.
- (4) The employer shall conduct dust measurements in work environments in order to determine whether levels of exposure do not exceed safe limits.
- (5) The employer shall consider reducing exposure time by rotating employees.
- (6) The employer shall provide appropriate PPE/C such as respiratory protection, coveralls, gloves, goggles and safety boots to minimise exposure to dust.
- (7) Buildings, lagoons or tanks where manure is stored shall be constructed so as to keep levels of exposure of dust or other hazardous gaseous material that employees experience to acceptable levels.
- (8) In confinement facilities, ventilation shall be adequate to protect the employee from unsafe levels of gases such as ammonia and hydrogen sulphide.
- (9) The employer shall ensure that at no time shall the workplace have hydrogen sulphide exceed the occupational exposure limit of ten parts per million (10ppm).
- (10) The employer shall ensure that levels of hydrogen sulphide are assessed regularly through measurements in areas where there

is exposure and to the extent possible alarm systems which signal hydrogen sulphide concentrations approaching dangerous levels are installed.

- (11) The employer shall ensure that employees are trained to enter and work in confined spaces safely and including use of PPE/C in such dangerous places.
- (12) The employer shall ensure that no employee enters a manure pit or similar facility without the use of an externally driven air mask as well as having a safety harness and two co-employees at the surface able to extract the exposed employee if required at a moment's notice.
- (13) The employer shall develop a rescue plan in the event that an employee is overcome by hydrogen sulphide in a confined space such as a manure pit.
- (14) Rescue employees shall not enter a confined space without adequate protection in the event that an employee is overcome by hydrogen sulphide.

# Zoonotic exposures

- 24.(1) The employer shall undertake to eliminate the occurrence of zoonotic diseases through a combination of diseases eradication measures including animal vaccination, human vaccination, provision and maintenance of safe drinking water, proper disposal of human and animal waste, work environment sanitation, labour camp sanitation, cleaning and protection of wounds, prompt treatment or proper disposal of infected animal and animal tissue, proper cleaning and disinfection of contaminated sites and prudent use of antibiotics to minimise growth of resistant strain.
- (2) The employer shall institute and enforce regular hand washing as an effective measure against many of the pathogens involved in zoonotic disease transmission. Water, soap, disinfectants and single use towels shall be provided at places where animals that are, or are suspected of being, infected are kept.
- (3) The employer shall provide specific training in handling live animals, necroscopy of infected animals, and handling of all animal by-products.

(4) The employer shall report outbreaks of communicable infectious diseases in accordance with national requirements.

#### PART V

#### EXPOSURE TO SHARP OBJECTS

Needle stick injuries and sharp exposures

- 25. (1) Employers shall take reasonable steps to minimise the employees' risk of injury from percutaneous needle stick or other sharp objects during tasks that require use of needles and related sharp devices, for example administration of parenteral medications or therapies, such as intravenous, intramuscular and subcutaneous, and performance of veterinary procedures such as surgery, suturing and taking tissue or blood samples.
- (2) Employees who undertake tasks requiring use of needles and related sharp devices shall be made aware by their employers that injuries from needle or sharp punctures carry with them a risk of trauma to underlying tissues, tendons and ligaments and risk of infection from inoculation of blood-borne pathogens.
- (3) The employer shall make available to the employees for use in appropriate situations sharps and needle safety devices and sharps disposal containers that may eliminate or reduce the risk of percutaneous injury before, during and immediately after use of such devices. Such devices include needleless intravenous systems, needles with engineered injury protection such as needles that self- retract.
- (4) Employees shall be prohibited from manually recapping, bending, breaking or clipping of contaminated needles or sharps for which such practices may give rise to harmful needle stick injuries.
- (5) Animals shall be restrained from movement during handling in order to prevent needle stick or sharps injury.

#### **PART VI**

Use of Machinery, Vehicles, Equipment and Tools

Selecting and safely using farm machinery and equipment

26. (1) For the purposes of Part VI of this Code, 'machinery and equipment' shall include those machinery and equipment used in

agriculture such as tractors, combine harvesters, cultivators, harrows, sprayers, and mowers, seeding equipment, balers, wagons, trailers, all-terrain vehicles, augers, boilers and manure spreaders.

- (2) Employees whose work involves the use of machinery, equipment and tools shall be made aware by their employers of the common safety risks associated with use of machinery, equipment and tools, including cuts, bruises, scratches, traumatic injuries, burns, electrocution, fractures and amputations resulting from contact with cutters, gears, moving belts, shafts and moving parts of machinery and burst hydraulic hoses, and the operations during which injuries may incur, such as repairs, maintenance, cleaning and clearing of blockages.
- (3) In selecting tools to be used at an agricultural enterprise, the employer shall take into account the design of the tool and its ability to protect the safety of the employer and the employees.

#### Tractors and all-terrain vehicles

- 27. (1) Reasonable steps shall be taken to ensure that tractors do not contribute to injuries and death in agriculture production and maintenance activities. Versions of tractors which are not fitted with safety equipment such as rollover protective structures and seat belts shall, wherever possible, not be utilised in agricultural enterprises.
- (2) A tractors' rubber tyres, hydraulic systems and powertake-off (PTO) and its default use of a combination of engine speeds and gear ratios shall be maintained and not unduly and unreasonably interfered with.
- (3) Reasonable care shall be taken to avoid accidents, and other undesirable occurrences, associated with use of tractors, including overturns, run-overs, slips and falls during climbing and disembarking, and power-take-off entanglement.
- (4) All-terrain vehicles (ATVs) may be used to transport various farm produce and equipment and occasionally in tractor operation provided that care shall be taken to minimise the hazards associated with use of all-terrain vehicles including rollovers, run-overs and slips and falls during climbing and disembarking the all-terrain vehicles.

- (5) Reasonable care shall be taken to minimise other hazards associated with use tractors and all-terrain vehicles, such as noise and vibration.
- (6) The employer shall conduct a comprehensive risk assessment ensuring that an inventory of all tractors and all-terrain vehicles used at the workplace is established. Furthermore, the employer shall determine whether the tractors or all-terrain vehicles have such necessary safety features as seat belts, rollover protective structures and power-take-off shield, proper brakes and functioning hydraulic hoses, taking into account the terrain where these forms of equipment will be used.
- (7) The employer shall consider elimination of the hazards and risks associated with tractors and all-terrain vehicles through various means which include engineering controls, safe work systems and procedures, training, supervision and induction of employees.
- (8) The employer shall institute competency based training for tractor and all-terrain vehicles including competency based certification of such equipment.
- (9) The employer shall ensure that tractors and all-terrain vehicles in use are fitted with seat belts, power-take-off shields, rollover protective structures and mudguards to protect the employee from movement of the wheels and a muffler able to attenuate noise levels to acceptable levels. If the noise levels may not be reduced to acceptable levels, then ear protection shall be provided.
- (10) The employer shall ensure that brakes, emergency brakes, lights, signal lights and other safety devices are maintained regularly and are in good working order.
- (11) The employer shall ensure that the tractors in use have ladder or steps and handrail to assist the employee to embark and disembark the tractor safely.
- (12) The employer shall ensure that tyre pressure of tractors and all-terrain vehicles are at the correct levels in accordance with the manufacturer's specifications.

- (13) The employer shall ensure that all tractors and all-terrain vehicles are equipped with seating which is designed to reduce the occurrence of musculoskeletal injuries to the employees.
- (14) The employer shall establish strict maintenance and operating procedures, provide training and supervision to ensure effective implementation of tractor and all-terrain vehicle operations.
- (15) The employer shall ensure that the tractor and all-terrain vehicles drivers have an understanding and full appreciation of tractor and all-terrain vehicle's stability and have a high level of awareness of the risks of side roll-over, rear rollover and run-over and how these may be prevented.
- (16) Employers shall be presumed to be aware, and shall further educate employees using tractors and all-terrain vehicles, that—
  - (a) the tractor's or all-terrain vehicle's centre of gravity is central to its stability;
  - adding weights such as lifting fork, front-end loader, side-saddle and rear chemical tanks alters the centre of gravity;
  - (c) moving off a flat plane (level surface) alters the centre of gravity;
  - (d) the centrifugal force may contribute to the overturning when tractors are turning;
  - (e) the rear-axle torque may cause the front end of a tractor to lift off the ground if the rear axle may not rotate;
  - (f) drawbar leverage may occur, for instance when a twowheel drive tractor is pulling a load the tractor's rear tyres push against the ground backward and downward and become a pivot causing the load to tip the tractor rearward; and
  - (g) loads are to be attached to the tractors in accordance with the design specifications.
- (2) Operators shall ensure that by standers are kept away from a distance from areas where tractors are being used and situations

where children might be at risk, the operator shall make specific search for the presence of children close to the tractors and ATVs.

- (3) The employer shall ensure that employees know the "one seat-one rider" rule and enforce it.
- (4) Tractors and all-terrain vehicles shall not be used to transport employees other than the driver and no additional riders are allowed on tractors.
- (5) The employer shall ensure that employees are trained on how to prevent power-take-off injuries and that proper procedures shall be followed to prevent entanglement in power-take-offs.

Other agriculture machinery, equipment and tools

- 28. (1) The employer shall identify hazards, such as cuts, lacerations, accidents, injury, amputations of digits and limbs, disability and death, which may be caused by other equipment including tillage equipment such as ploughs and cultivators, combines, balers, manure spreaders, feed grinders and mowers and hand held tools such as hoes, hammers, picks, sickles and machetes. The employer shall take necessary precautionary measures to mitigate such hazards and further inform employees of the hazards and precautionary measures against such hazards.
- (2) The employer shall ensure that, in circumstances where employees require regular access to parts of the machine and a fixed guard is not possible, an interlocked guard shall be used to ensure that the machine shall not start before the guard is closed and will stop if the guard is opened while the machine is operating. Prior to repair of agriculture equipment, the power to the equipment shall be turned off, movement of rotating parts stopped and safety locks engaged.
- (3) The employer shall ensure that clearing of blockages and other reasons for gaining access to dangerous parts machinery shall be done when machinery is stopped.
  - (4) Unsafe or faulty equipment shall not be used.
- (5) Tools with broken or cracked handles, chisels, and punches with mushroom heads and bents or broken implements shall be replaced.

- (6) The employer shall ensure that employees receive relevant training on the proper coupling/hitching of implements and on the proper mounting for driveline power transmission systems and implements.
- (7) Employees shall be authorised to safely stop the machine if it or any implements is not working safely or if any guards or protective devices are faulty and inform their supervisors as soon as possible.
- (8) Employees shall never operate equipment while under the influence of alcohol or other substances which might affect their ability to operate the equipment.

#### PART VII

#### Use of Energy Sources

#### Electricity and other energy sources

- 29. (1) Employers shall take reasonable steps to ensure that hazards presented by sources of energy, including electrical mechanical, hydraulic, fuel and pneumatic energy are minimised and controlled.
- (2) Employers shall ensure that energy sources and facilities are appropriately labelled and that existing overhead power lines and underground cables are mapped.
- (3) The employer shall ensure that all agriculture equipment undergoing servicing, maintenance or renovation is appropriately isolated, locked out, and labelled with a warning tag.
- (4) Metallic irrigation pipes shall under no circumstances be carried in a vertical position in order to avoid contact with live electrical cables running through the farm.
- (5) The employer shall ensure that the safe control of electricity and other sources of energy is addressed by procedure and carried out by trained persons.

#### PART VIII

#### Noise and Vibration

#### Noise

- 30. (1) Employers shall educate their employees that noise is a safety hazard at work which interferes with communication and making warnings harder to hear. Furthermore, employers shall inform employees that noise may cause or increase fatigue or irritability and it may reduce performance.
- (2) Employers shall educate their employees on the risks of permanent hearing damage resulting from prolonged exposure to high levels of noise or sudden very high noise levels and of temporary hearing loss resulting from short periods of intense exposure to high noise level.
- (3) Employers shall assess the risk of developing noise induced hearing loss to their employees.
- (4) Employers shall identify the sources of noise exposure in various agriculture operations, which sources include use of tractors, chainsaws, grain dryers and contact with animals such as pigs.
- (5) Employers, in consultation with employees, shall seek advice from NSSA regarding occupation exposure limits for noise.
- (6) Employers shall seek advice from suppliers of equipment and machinery on the noise emissions produced by these equipment and machine.
- (7) The employer shall institute noise measurements to ascertain extent of noise exposure to employees making reference to occupational exposure limits.
- (8) A noise map for determination of risk areas shall be established by the employer.
- (9) Employers shall establish a programme to reduce noise levels to below eighty-five A-weighted decibels (85 dB (A)) if levels are high enough to present risk of hearing impairment.

- (10) Upon purchase of equipment and machinery, employers shall specify low noise emission levels as a condition of purchase from suppliers.
- (11) Employers shall reduce noise levels first through engineering measures such as by fitting sound proof enclosures or other acoustic measures. Equipment shall be regularly maintained since worn out equipment could increase noise levels.
- (12) If noise levels may not be reduced through engineering measures, then employees shall be provided with hearing protection such as ear muffs or ear plugs. Others measure shall include reduced time which employees spend in the noisy environment.
- (13) Hearing protection shall be properly used and maintained by the employee.
- (14) Where noise levels exceed the occupational exposure limit of eighty-five A-weighted decibels (85 dB (A)), employees shall regularly receive audiometric testing and employees shall be informed of their audiometric tests.
- (15) A record of audiometric testing for employees shall be kept for a period of forty (40) years.

#### Vibration

- 31. (1) Vibration in the workplace shall be classified as—
  - (a) whole body vibration which is transmitted by sitting or standing on vibrating surfaces such as driving or standing on a tractor, driving on rough or bumpy roads with ATVs, standing on platforms such as on mechanical harvesters. The employer shall inform employees that prolonged exposure to whole body vibration results in severe back pain and other musculoskeletal disorders; or
  - (b) hand-arm vibration which is transmitted through hand held powered tools and equipment such as chainsaws. The employer shall inform employees that prolonged exposure to hand-arm vibration may lead to damage of hand and arm muscles as well as joints and nerves;

- (c) employers shall carry out a risk assessment to identify sources of exposure and assess the risk of musculoskeletal injuries from various tasks and activities giving rise to vibration.
- (2) Based on the risk assessment, the employer shall take measures shall to reduce employee exposure to vibration through such means as damping, fitting anti-vibration mounts or replacing unsuspended tractor cabs with suspended ones, maintenance of equipment regularly, reducing the time spent by employees with vibrating machinery, equipment or tools, provision of anti-vibration gloves and any other such measures.

#### PART IX

#### Provision on Manual and Materials Handling

### Manual and materials handling

- 32. (1) Agriculture work may span a wide range of tasks from arduous to sedentary, from stooping, reaching, bending, repetitive work, to performing work in awkward body position while operating sophisticated agriculture machinery and equipment, provided that reasonable measures shall be taken by the employer to minimise risk of harm to the employee performing work.
- (2) Agriculture operations may be labour intensive provided that reasonable measures shall be taken by the employer to minimise risk of harm to the employee performing labour intensive work.
- (3) Agriculture work may be carried out in hot or cold or humid environments provided that the standard of work expected from employees shall be varied as necessary in cases of hostile weather conditions and that no employee shall be required to work where weather conditions may pose substantial threat to the employee's health and safety.
- (4) Work may be conducted in rough terrains provided that no work shall be conducted in terrains where the employees will inevitably or most likely be injured and provided that the employer shall take reasonable measures to avoid employees' exposure to risks of slips and falls which may create or worsen musculoskeletal injury.

- (5) The employer shall take reasonable measures to minimise the risk that employees who handle (lift, carry and position) heavy objects weighing in excess of twenty-three kilograms at rates of at least three times per minute over a two-hour period develop back injury, general fatigue and/or heat stress depending on the environmental conditions obtaining during the performance of those tasks.
- (6) The employer shall take reasonable measures to minimise the risk that employees who undertake manual planting of seedlings, crop maintenance, and manual harvesting shall not develop cumulative trauma disorders, neck and upper extremity impairment and low back pain.
- (7) The employer shall take reasonable measures to minimise the risk that employees who undertake stooped work develop muscle cramps and musculoskeletal injury, especially low back pain.
- (8) The employer shall take reasonable measures to minimise the risk that employees who undertake highly repetitive work during crop maintenance and harvesting do not develop upper limb musculoskeletal disorders.
- (9) The employer shall take reasonable steps to prevent employees' excessive exposure to hand arm vibration which may cause disorders in the blood vessels, nerves, muscles, bones and joints of the upper limbs of the body.
- (10) The employer shall take reasonable steps to prevent employees' excessive exposure to whole body vibration at high levels which may result in diseases of the peripheral nerves, prostatitis as well as acute and chronic back pain.
- (11) The employer shall educate female employees that musculoskeletal injuries and cumulative disorders may cause osteoarthritis for women.
- (12) The employer shall inform employees that the younger an employee is, the more at risk he is to musculoskeletal injury due to soft bone density and developing musculature.

## Ergonomic control strategies

- 33. (1) Employers shall carry out an assessment of risk to employees' health due to manual and materials handling of agriculture materials and tools. The assessment shall include—
  - (a) characterisation of the agriculture work environment and its implication on employees;
  - (b) design of work stations;
  - (c) weight of agriculture materials and tools to be lifted and handled;
  - (d) frequency of handling agriculture equipment, materials and tools taking into account actions per minute as well as force applied;
  - (e) postures assumed by the employees while handling the agriculture products, tools and operation of machinery and equipment; and
  - (f) the physical characteristics of the employees engaged in the activities such as gender, sex and age.
- (2) Employers, taking into account the findings of the risk assessment, shall develop a strategy to eliminate the hazards identified, and implementation of preventive measures in order to minimise occurrence of musculoskeletal disorders.
- (3) The employer shall prefer to replace hazardous work processes or equipment or tools with less hazardous processes or equipment or tools and/or engineering controls being preferred. If this may not be achieved, the employer shall provide employees with PPE/C and information and training on the safe and appropriate use of PPE/C.
- (4) Employers shall select agriculture tools, machines and design work processes that eliminate exposure to ergonomic hazards such as carrying of heavy loads greater than twenty-three kilograms.
- (5) Employers may elect partial or full mechanisation of agriculture tasks such as harvesting of small grain, maize, nuts or vegetables.

- (6) Employers shall provide tools that eliminate or significantly reduce noise, vibration or awkward postures.
- (7) Employers may elect use of load transfer devices that minimise the risk of lower back injury and chronic back pain.
- (8) All forms of alcohols beverages shall be prohibited from the worksites.
- (9) The employer shall ensure that there shall be regular maintenance and repair of worksite equipment.
- (10) Records of ergonomic assessments shall be maintained appropriately by the employer.
- (11) Administrative controls which shall be considered by the employer for implementation shall include use of programmed rest periods for employees, routine job/task rotation among employees, clear operational instructions and job descriptions and training of work in order to work safely.
- (12) The employer shall conduct routine training to inform the employees on the need to assume neutral body positions to prevent low back injury and chronic back pain.
- (13) Employees shall be encouraged to report any pain, discomfort, numbness or tingling of any body part, to the employer and such employees shall not be victimised as a results of such reports.
- (14) Employees shall be informed by the employer about the risks associated with ergonomic risk factors and the need to assume neutral body postures when working.
- (15) Employers shall provide adequate and suitable PPE/C and such PPE/C shall be fit tested through demonstrations at the agriculture worksite ensuring employees are well informed on how to use the PPE/C, why the PPE/C has to be used and how it has to be stored or cleaned where necessary.

#### PART X

SPECIAL PROVISIONS ON FORESTRY, TIMBER, FISHING AND CROCODILE FARMING OPERATIONS

### Forestry and timber operations

- 34.(1) The provisions of this section shall apply to all employers and employees whose work involves forestry or timber operations.
- (2) All forestry and timber activities shall be thoroughly planned and organised in advance to prevent any possible mishaps or accidents.
- (3) All tools, machines and hazardous chemicals used in forestry and timber work shall be operated only by employees who have been assessed as competent to operate such tools and machinery.
- (4) The employer shall select tools, machines and equipment which are of good design and construction, upon having taken into account safety, health and ergonomic principles.
- (5) The employer shall take reasonable steps to have tools, machines and equipment maintained in good working order.
- (6) Forestry environmental factors shall be evaluated, including carrying a comprehensive risk assessment, before any work is undertaken.
- (7) The risk assessment referred to in subsection six shall take into account topography of the land, working methods and equipment to be used, dangerous trees, electricity or telecommunication lines and roads.
- (8) Equipment used shall be easy to do safe maintenance and minor repairs on at the worksite and employees shall be trained by the employer to do minor repairs and maintenance.
- (9) Hand tools shall be of such size, length and weight to cater for the needs of the work and physical attributes of the user.
- (10) Machines such as chain-saws, brush saws and grass cutters shall be as light as possible to strike a balance between the machine size and power required for the job on one hand and the avoidance

of operator fatigue and damage to the musculoskeletal system on the other.

- (11) All employees who use chainsaws shall be trained to the necessary level of competence to use the machine safely.
- (12) Adequate PPE/C shall be provided to employees using chainsaws and, at a minimum, shall include safety helmet, hearing protection, eye protection, gloves, leg protection, chain saw boots any other necessary forms of PPE/C.
- (13) Machines shall be equipped with shock-absorbent, fully adjustable seats for drivers and fitted with safety belts.
- (14) The means of access to and exit from machinery such as steps, ladders and doors shall be designed to provide hand and footholds of a convenient height and spacing.
- (15) All pulleys, shafts, belts and fan belts shall be securely guarded.
- (16) Machine operators shall hold relevant skills certificates for operating and maintaining the machines they are using.
- (17) For handling and planting trees treated with hazardous chemicals prior to employers shall provide, and employees shall use, personal protective equipment, which shall include—
  - (a) a suitable protective bib and brace or overall made from chemical resistant material:
  - (b) chemical-resistant boots and chemical-resistant gloves.
- (18) Where plants must be dipped in pesticides prior to planting, the employer shall provide to employees performing such work personal protective equipment which shall consist of—
  - (a) a face-shield and suitable respiratory equipment which shall cover nose and mouth;
  - (b) a one-piece suit or trousers and a jacket with hood made from chemical resistant material;
  - (c) elbow-length chemical-resistant gloves.

- (19) All tree climbers shall be provided by their employers with appropriate PPE/C which include safety harnesses, safety belt with double "D" ring, climbing ropes and strops and steel spurs long and sharp enough to hold in any tree in which they are used.
- (20) Employers shall also provide PPE/C for forestry work as specified in the table provided in Schedule II.

## Fishing safety

- 35. (1) The fishing vessel owner (employer) has the overall responsibility to ensure that the skipper (person having command of the vessel) is provided with the necessary resources and facilities to carry out fishing operations in a safe manner.
- (2) The skipper has the responsibility for the safety of the fishers on board and the safe operation of the vessel, including but not limited to the following areas—
  - (a) providing such supervision as will ensure that, as far as possible, fishers perform their work in the best conditions of safety and health;
  - (b) managing the fishers in a manner which respects safety and health, including prevention of fatigue;
  - (c) facilitating on-board occupational safety and health awareness training; and
  - (d) ensuring compliance with safety of navigation, watch-keeping and associated good lake or dam water operational standards.
- (3) The skipper shall not be constrained by the fishing vessel owner from taking any decision which, in the professional judgement of the skipper, is necessary for the safety of the vessel and its safe navigation and safe operation, or the safety of the fishers on board.
- (4) The employer shall install emergency stop (e-stop) devices on hydraulic deck machinery to prevent entanglement injuries.
  - (5) Fishermen or fisherwomen shall—
  - (a) maintain watertight integrity by inspecting and monitoring the hull of the vessel, ensuring that watertight doors and hatches are sealed:

- (b) put on Personal Floatation Devices (PFDs) (life jackets and immersion suits);
- (c) carry a first aid kit for emergencies;
- (d) report any accidents to the supervisor/instructor immediately;
- (e) return all equipment to the designated area.
- (6) The minimum age for work on board a fishing vessel shall be 16 years.
- (7) The minimum age for assignment to activities on board fishing vessels, which by their nature or the circumstances in which they are carried out are likely to jeopardize the health, safety or morals of young persons, shall not be less than 18 years.
- (8) Fishers who work on board a fishing vessel shall have valid medical certificates attesting to fitness to perform their duties.
- (9) The medical certificate of a fisher shall state, at a minimum, that
  - (a) the hearing and sight of the fisher concerned are satisfactory for the fisher's duties on the vessel; and
    (b) the fisher is not suffering from any medical condition likely to be aggravated by service at the waters or to render the fisher unfit for such service or to endanger the safety or health of other persons on board.
- (10) The medical certificate shall be valid for a maximum period of two years.
- (11) Every fishing vessel shall carry a crew list, a copy of which shall be provided to authorised persons ashore prior to departure of the vessel, or communicated ashore immediately after departure of the vessel.

## Crocodile farming safety

36.(1) The employer shall educate employees whose work entails crocodile farming on hazards associated with such work, including exposure to crocodile attack, exposure to biological hazards in the

form of bacteria and viruses and in particular exposure to disease agents such as salmonella, trichinella and chlamydia.

- (2) The employer shall provide the employees involved in crocodile farming with:
  - (a) appropriate protective clothing such as gloves, mitts or gauntlets and protective hand and arm covering;
  - (b) insulated protective clothing for freezers or chillers and refrigeration units;
  - (c) non-slip and waterproof boots (gumboots) or other safety footwear.

#### PART XI

#### GENERAL WORKPLACE SAFETY

## Agriculture installations

- 37.(1) For the purpose of this Code, agriculture installation shall include farm workshops, animal housing, storage facilities, wells and pumps, stockyards, pens, crop, machinery maintenance structures and any other installations.
- (2) The employer shall ensure that the design, construction and maintenance for agricultural installations shall be safe and that the installations meet the minimum local authority model building by-laws.
- (3) The employer shall have due regard to key design issues associated with agriculture installations, including the building materials used and layout, illumination, ventilation, storage of hazardous materials such as ammonium nitrate fertiliser, and electrical installations, to ensure that there are no inadequacies to the design of the installations which may create hazards and risks such as fire explosions, electrocution, breathing difficulties and poor vision.
- (4) Buildings and structures shall be fire resistant and insulation materials used on building shall be non-combustible and non-toxic.
- (5) Separate pathways for employees and mobile equipment shall be provided and blocking devices shall be employed to prevent employees performing work in areas where vehicles travel. Pathways

for mobile equipment shall have sufficient width, height, and turning space.

- (6) Walking ways shall be sufficiently marked and where there are low hanging beams, structural support or ceilings, these shall be well marked and employees provided with suitable head gear to prevent the head bumping against hard objects.
- (7) Agricultural installations shall be sufficiently illuminated for the tasks being performed therein.
- (8) Agricultural installations shall be sufficiently ventilated for persons therein to avoid exposure to highly toxic substances as well as flammable gases, liquids and various forms of dust, whether organic or inorganic.
- (9) Electrical installations shall be designed to prevent electrocution and shall be done by qualified electricians.

## Slips, trips and falls

- 38. (1) The employer shall take reasonable steps to protect employees from slips, trips and falls in the workplace.
- (2) The employer shall take reasonable measures to avoid employee injuries which may result due to missing walkways, materials left in walking aisles, deteriorated steps and stairs, unprotected openings, poorly maintained ladders, poorly lit areas and walking on slippery surfaces and on mud and falling from heights.
- (3) The employer shall identify risk factors associated with slips, trips and falls and inform employees of same.
- (4) Floors shall be non-slippery and made of robust material which is not combustible.
- (5) Openings, including pits, shall be covered or barricaded, well-lit and clearly marked with warning signs.
- (6) Platforms, walkways and stairways shall be provided with hand rails with panelling to the height of railings.
- (7) Temporary workplaces such as mobile elevated work platforms shall be equipped with suitable guard rails or other edge

protection items and, if such measures do not eliminate risk of falling, then employees shall be provided with, and trained in the use of, fall protection systems such as safety harnesses.

- (8) The employer shall ensure that good housekeeping is maintained in order to minimise slips, trips and falls. The employer shall further instruct and supervise employees in housekeeping.
- (9) The employer shall ensure that walk ways and surfaces and stairs are well lit.
- (10) Pathways and walking aisless hall be clearly identified ensuring that passage ways are clear of tools, buckets and slippery materials.
- (11) The employer shall ensure that ladders are properly maintained and are appropriate for the task at hand and that employees are trained on the proper use of such ladders.
- (12) Safe work practices with ladders shall be observed by employees including the presence of a second person at the base of the ladder, avoidance of working at ladders in windy conditions or stormy conditions.
- (13) Slippery shoes shall be prohibited for persons using ladders.
- (14) Ladders shall be regularly inspected to check for any defects and if defects are detected they shall be repaired immediately. If the ladder may not be repaired, the ladder shall be replaced.

## Farm workshop

- 39. (1) For the purposes of this Code, a farm workshop shall be a location where most repairs of farm equipment, machinery and tools take places.
- (2) The employer shall identify the hazards and risks in the farm workshop, which may include slips, trips, falls, noise, vibration, power tool hazards, electrical shocks, fires from flammables materials and fumes and vapours from welding and the employer shall take reasonable corrective measures to prevent employees' exposure to such hazards and risks.

- (3) Good housekeeping shall be maintained at all times in the farm workshop.
- (4) The employer shall ensure that employees are properly trained in the repair of equipment, and that prior to repairs, power to equipment shall be turned off, movement of all rotating parts stopped and safety locks engaged.
- (5) The employer shall provide means to support loads or lift heavy equipment or loads and all equipment to support and lift loads shall be assessed for failure.
- (6) Ventilation in the farm workshop shall be adequate to prevent exposure to exhaust fumes from engines or other welding activities.

The employer shall provide first aid kits in the farm workshop and ensure that employees on duty have access to personnel trained in first aid in the case of an injury.

- (7) Fire extinguishers shall be readily available in the farm workshop and employees trained in the use of such equipment shall be in place.
- (8) Farm workshops shall comply with Factories and Works Act [Chapter 14:08], as amended, as farm workshop operations are classified as a factory. In addition, the farm workshop shall comply with the following regulations as amended—
  - (a) Factories and Works (Registration and Control of Factories) Regulations, 1976, Government Notice 262;
  - (b) Factories and Works (General) Regulations, 1976, Government Notice 263; and
  - (c) Factories and Works (Machinery) Regulations, 1976, Government Notice 302:
  - (d) any other applicable regulations on factories and/or farm workshops.
- (9) Agricultural entities which make use of boilers shall comply with the provision of the Factories and Works (Boiler) Regulations, 1976, Government Notice 279, as amended.

- (10) Boilers in use shall be registered and regularly inspected by the OSH inspector from National Social Security Authority Factories Inspectorate.
- (11) Drum boilers shall never be used as they present risk of death when they explode.
- (12) The following provisions shall be observed in respect of use of boilers—
  - (a) no person shall commence the erection of a boiler until
    he or she has received the written permission of an
    National Social Security Authority OSH inspector to
    do so:
  - (b) no person shall use a boiler unless he or she is in possession of a valid provisional certificate or valid certificate of permission in his name issued by an inspector of occupatuional safety and health of the National Social Security Authority.

## Fire precautions

- 40. (1) The employer shall take reasonable measure to prevent or minimise employees' exposure to the heat and smoke of fire, along with toxic gases and rapid loss of oxygen, which may be fatal for employees.
- (2) The major classes of fire that strike agriculture establishments shall be classified as—
  - (a) class A which are caused by combustibles such as wood, straw, hay, paper products and plastics;
  - (b) class B which are caused by flammable liquids such as gasoline, diesel, fuel oil and methanol; and
  - (c) class C which relate to electricity such as wiring, cords, welding and electrical motors.
- (3) The employer shall take reasonable steps to protect employees from major sources and contributors to fire including smoking, lightning, excessive storage of combustible waste materials (such as discarded timber, brush and jungle thrash, tyres, nut hulls), poorly maintained electrical systems, improper storage of flammable

liquids, heavy use of combustible building materials and lack of fire barriers in large open buildings.

- (4) The employer shall take reasonable steps to protect employees from the risk of fire and explosion presented by fertilisers such as urea and ammonium nitrate.
- (5) The employer shall take reasonable care to ensure that establishments that are constructed mainly of wood are protected from fire as they are more flammable that those constructed of non-flammable materials.
- (6) The employer shall assess the risks from fire and make sure that—
  - (a) there are safe means of escape, kept free from obstructions and clearly marked;
  - (b) every employee is aware of steps to be taken if a fire starts, especially how to raise the alarm;
  - (c) fire action instructions shall be displayed and fire drills shall be conducted periodically;
  - (d) there is fire alarms work equipment working and checked weekly and that they may be heard everywhere over normal background noise;
  - (e) there are enough extinguishers, of the right type and properly maintained, to deal promptly with small outbreaks of fire and that employees know how to use them:
  - (f) ABC type fire extinguishers are mounted in strategic places and fully charged and inspected annually. Larger or BC type fire extinguishers may also be required for large chemical or fuel storage;
  - (g) electrical installations and equipment comply with local electricity supply authority standards and are installed, adjusted, repaired or removed by qualified electricians. Unqualified personnel shall not have access to electrical switchboards or any unprotected electrical installations;

(h) lightning protection systems are installed by competent person(s).

## Protection against lighting

- 41. (1) The employer shall take reasonable steps to protect employees whose work keeps them outdoors from the risk of being struck by lightning hazard.
- (2) The employer shall have due regard to the following considerations while crafting preventive and response measures to lightning strikes in the workplace—
  - (a) when persons are subjected to direct lightning strokes, the result is nearly always fatal;
  - (b) when lightning strikes, the light is so intense and the brush effects so widespread that it is difficult for an observer to be certain of what has happened until the spot is examined afterwards and notwithstanding such examination, the traces may be confusing;
  - (c) the major number of lightning casualties arises not from direct strokes, but from secondary phenomena, such as side flashes and induced discharges.
- (3) The employer shall take reasonable steps to protect employees from injuries inflicted by lightning which consist of electric shocks of greater or lesser severity and may be combined with burns and in some cases, tearing of flesh apparently by an explosive action of the discharge.
- (4) The employer shall instruct persons normally required to work adhere to the following safety precautions—
  - (a) they shall not go out of doors or remain out during thunderstorms, unless it is reasonably necessary. They shall seek shelter inside buildings, vehicles or other structures or locations which offer protection from lightning;
  - (b) if there is any choice, they shall choose shelters in the following order, with the first being the most preferable and the last being the least preferable;

- (i) dwelling houses or buildings which are protected against lightning;
- (ii) large unprotected buildings;
- (iii) dwelling houses which are not protected against lightning. (keep away from doors, windows, fireplaces, stoves, and other metal objects, electrical wiring and telephones);
- (iv) motor vehicles, buses with metal tops and bodies.
- (v) dense woods or large grove trees, but avoid isolated trees.
- (c) if remaining out of doors is unavoidable, they shall keep away from the following—
  - (i) tractors and other farm machinery operating in the open fields;
  - (ii) motor cycles, scooters and bicycles;
  - (iii) open boats not protected against lightning;
  - (iv) open fields and sports fields;
  - (v) golf courses;
  - (vi) swimming pools, lakes and sea shores;
  - (vii) wire fences, clothes lines, overhead wires and railway tracks;
  - (viii) isolated trees;
  - (ix) hill tops and exposed positions;
  - (x) small unprotected buildings, burns, sheds;
  - (xi) tents and temporary shelters.

## Handling of animals

- 42. (1) Employers shall assess the risk of injury from animals especially injuries due to handling of livestock which may arise from poorly designed, constructed or maintained livestock facilities.
- (2) The employer shall take reasonable measures to protect employees from serious crushing injuries to the legs, arms, head and

body and exposure to high levels of noise in enclosed facilities, which may arise when employees handle livestock.

- (3) Employers shall ensure that there are appropriate and adequate handling facilities and equipment for the animals. These handling facilities and equipment shall be regularly maintained.
- (4) Gates and fences shall be strong enough to contain the animals.
- (5) Alleys and chutes shall be wide enough to permit animals to pass, but not wide enough for the animals to turn around inside.
- (6) Alleys and chutes shall be strong to withstand weight of animals.
- (7) The employer shall ensure that animal handling facilities in respect of floors, ramps and steps are roughened to prevent slip in wet conditions. The floors and passageways shall be kept from any protruding nails, splinters, sharp corners or loose boards.
- (8) Employers and employees shall ensure that children or other members of the public may not enter any yard or pen occupied by potentially dangerous animals especially female animals with young ones.
- (9) Employees shall be trained on the proper handling of bulls and dairy bulls shall be provided with purpose built pens.

## Confined spaces

- 43. (1) For the purposes of this Code, a confined space shall be one large enough for the employee to enter, has limited or restricted means of entrance or exit and is not designed for continuous work. Confined spaces at agriculture establishments shall include grain storage pits, silos and boilers. Temporary occupancy into these confined spaces may entail performing repairs in boilers, servicing a sump well, cleaning a silo or milk tank.
- (2) The employer shall take reasonable steps to protect employees working in confined spaces from hazards and risk of injury, having due regard to the following considerations—

- (a) working in confined space presents a high degree of danger because their configuration hinders the entry of other employees in cases of emergencies involving trapped employees inside;
- (b) entry into a confined space may present highly serious risks to employees and may result in suffocation due to lack of oxygen or due to the presence of toxic gases such as hydrogen sulphide. Risk of suffocation may be severe with just head and shoulder entry.
- (3) The employer shall carry out a comprehensive risk assessment to identify available confined spaces at the establishment and ensure appropriate preventive measures are in place.
- (4) All confined spaces shall be clearly marked with warning notices prohibiting unauthorised entry into such places.
- (5) The employer shall establish an appropriate system of entry into or procedure for working in confined spaces and shall ensure that permits to work in these areas are issued.
- (6) The employer shall ensure that confined spaces that are not totally enclosed, such as manure pits and upright silos, are adequately ventilated before entry and that the ventilation shall continue whilst work is ongoing.
- (7) The employer shall ensure that no employee enters a manure pit or similar facility without an externally driven air mask, a safety harness and that two co-employees stay at the surface ready to extract the exposed employee at a moment's notice. The employees outside armed with an extraction harness shall monitor closely the operations of their colleague inside the confined space and shall be able to initiate a prompt response in case the employee inside requires rescue.
- (8) Employees shall be trained by their employers on methods of working safely in confined spaces including proper use of personal protective equipment.
- (9) Before entry into a confined space by any employee, the space shall be adequately ventilated or purged to ensure that all noxious

gases are removed and measurements shall be conducted to establish the levels of noxious gases therein.

## Welfare facilities

44. Welfare facilities shall consist of basic amenities which employers may, and, in circumstances provided in this Code or other law shall, provide at agricultural enterprises and these shall include safe water, toilets, food services, occupational health services (first aid, medical care), housing and day care facilities.

#### Water

- 45. (1) The employer shall provide adequate potable water for cooking, drinking, washing, personal hygiene and other related activities.
- (2) Non-potable water shall be clearly distinguishable from potable water to prevent usage of water not suitable for human consumption.
- (3) Employers shall provide separate toilets for each sex, which afford suitable privacy and toilets shall be built for single occupancy and lockable from inside.
- (4) Employers shall provide portable toilets at remote worksites.
- (5) Employers and employees shall maintain toilet facilities in a clean state and the employer shall supply sanitary paper.
  - (6) Toilet facilities shall be well ventilated and illuminated.
- (7) Employees shall be made aware by their employers of the importance of good personal hygiene practices to reduce exposure to hazards that may result in communicable diseases and keep the facilities in high state of cleanliness.
- (8) The employer shall ensure that the sewage disposal system works properly and that it does not result in contamination of water sources and the environment.

## First aid and occupational health services

- 46. (1) The employer shall ensure that employees on duty have access to first aid, including trained personnel.
- (2) For the purposes of this Code, a person shall be considered as trained in first aid if his training included treatment of open wounds, chemicals, intoxication, snake, insect and spider bites as well as handling employees suffering from tuberculosis, hepatitis, HIV/AIDS and other communicable diseases.
- (3) First-aid boxes which may be availed by the employer shall always be clearly marked, easily accessible and shall be located near areas which are prone to accidents.
- (4) First-aid boxes which may be availed by the employer shall be within close proximity of the employee's worksite.
- (5) The contents of the first aid box shall be protected from heat, humidity, dust and abuse by any persons.
- (6) The employer shall regularly update employees on first aid measures and such updates shall detail—
  - (a) persons trained on first aid;
  - (b) location of any first aid boxes and first aid rooms;
  - (c) steps employees shall take in case of an accident;
  - (d) knowledge about hazards and risks from exposures which may require first aid.
- (7) Where there is need for elaborate medical care, establishments shall have arrangements with external health providers to deal with workplace injuries and diseases due to workplace activities.

## Housing and shelters

- 47. (1) Housing and accommodation which may be provided to employees at agricultural establishments shall be habitable, reasonable and decent.
- (2) During hot weather conditions, shaded rest areas shall be made available by the employer at all worksites in order to minimise problems of heat exhaustion.

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- (3) Application of chemicals shall not be done in a manner which affects employees' dwelling areas.
- (4) Employers shall, where financially feasible, provide nursery, day care and nursing facilities where their employees are parents.

## Workplace wellness programmes

- 48. (1) Agriculture workplaces shall promote healthy lifestyles, which lifestyles shall include balanced diet, personal hygiene, rest, recreation, exercise, refrain from alcohol and drug abuse problems, constant testing for HIV/AIDS, minimal or no smoking, no workplace violence, anti-bullying and anti-harassment.
- (2) Agriculture employees shall be covered by the Accident Prevention and Worker's Compensation Scheme in the case of an occupational injury or diseases. All employees shall also benefit from social security coverage.

#### SCHEDULE I

#### RISK ASSESSMENT

- Every employer shall formulate and implement a method to carry out the risk assessment, provided that such method shall be subject to the provisions of this Code.
- 2. A numerical method of risk assessment among others shall be used by the employer to determine priorities for action. For each hazard identified, a numerical value shall be assigned to the likelihood of the hazard causing harm as well as to the severity of the consequences. This shall be expressed on a rising scale as follows:

#### (a) Likelihood

- 1 Rare: has rarely if ever happened.
- 2 Unlikely: is possible, but is not expected to happen.
- 3 Moderate: could be expected to happen.
- 4 Likely: will probably occur, but is not persistent.
- 5 Almost certain: Occurs regularly.

#### (b) Severity of consequences

- 1 Insignificant: no injury or ill health.
- 2 Minor: short-term impact.
- 3 Moderate: semi-permanent injury or ill-health.

- 4 Major: disabling injury or ill-health.
- 5 Catastrophic: potentially fatal.
- 3. The degree of risk shall be represented as follows:

#### Risk = Likelihood x Severity

- 4. By determining the level of risk associated with each hazard identified in the working environment, employers and employees and their representatives shall identify areas for priority action. For example, a risk that rarely arises (1) and has insignificant consequences (1) would have the lowest priority [i.e. 1x1=1], whereas a hazardous event that occurs regularly (5) and has potentially fatal consequences (5) would have the highest priority for action (25) [i.e. 5x5 = 25]. The higher the level of risk, the more important it is to apply controls urgently to eliminate, reduce or minimise exposure to the hazard. Two key questions need to be considered for each hazard: "How often is a person exposed to the hazard?" and "What is the likely outcome?"
- At an agriculture establishment, the risk assessment may be done by the OSH
  Committee or an established risk assessment committee which is inclusive
  of key employees in various departments or sections.
- 6. As part of the risk assessment process, the employer in consultation with employees and their representatives, shall chart the flow of raw materials, intermediate and finished products, mobile equipment and machinery and employees in the course of operations, noting the hazards that are associated with each step.
- 7. The risk assessment shall be reviewed by the employer regularly whenever there is a significant change in the work to which it relates or when there is reason to suspect that it is no longer valid. The review shall be part of the system of management accountability which ensures that control action initiated by the initial assessment is implemented.
- 8. Findings of a risk assessment shall be recorded in a risk assessment form. The table below shows an example of a risk assessment form and how it may be completed for typical work activity or process.

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## **Template of Risk Assessment Form**

## Risk Assessment Worksheet

Location:	_Address:
Risk Assessment done by:	
WorkActivity/Aspect:	Date

	<i>,</i> , , —					
What are the hazards?	Who might be harmed and how?	What is being already done?	What further action is necessary?	Action by who?	Action by when?	Date Done

#### **Risk Assessment Worksheet**

Location: Marondera Address: Marondera Road

Risk Assessment done by: OSH Committee

Work Activity/Aspect: Farm machinery Date: 17/2/2017

What are the hazards?	Who might be harmed and how?	What is being already done?	What further action is necessary?	Action by who?	Action by when?	Date Done
Farm machinery, including PTO shafts	Employees and others may suffer serious and possibly fatal injuries from contact with moving parts of machinery.	All PTO shafts guarded from the connector on tractor PTO to first bearing on the machine. All dangerous parts of machinery, e.g. auger screw, pulleys on mechanical feeders/ waterers, shearing hazard on skid-steer loader etc., guarded unless safely located, e.g. may not be reached. All guards in good condition. Employees trained in safe systems of work, including for jobs such as clearing blockages, emptying bulk feed bin etc. A system of locking-off for maintenance work where appropriate.	Remind employees to report any damaged or ill-fitting guards to farm manager immediately.	Farm		

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What are the hazards?	Who might be harmed and how?	What is being already done?	What further action is necessary?	Action by who?	Action by when?	Date Done
Dust from poultry dander and litter	Employees risk lung diseases, such as asthma, from inhaling poultry dander and litter dust.	All doors open and ventilation fans on when putting litter down/cleaning sheds.  Suitable air filtration fitted to tractor cab, well maintained and tested before use (e.g. putting litter down).  Suitable RPE available for use for other jobs inside the sheds (e.g. populating sheds.	Remind employees of risk of asthma and other lung diseases from poultry dander and litter dust.	Manager		

#### SCHEDULE II

## Table 1: PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT APPROPRIATE FOR TIMBER/FORESTRY OPERATIONS

Parts of the body to be protected	Feet	Legs	Trunk, arms, legs	Hands	Head	Eyes	Eyes/ face	Hearing
PPE Normally appropriate:	Safety boots or shoes <sup>1</sup>	Safety trousers <sup>2</sup>	Close- fitting clothing	Gloves	Safety Helmet	Goggles	Visor (mesh)	Ear muffs <sup>3</sup>
Operation								
Planting <sup>4</sup>								
Manual	<b>√</b>			√ 5				
Mechanized	<b>✓</b>		✓					√6
Weeding/ cleaning								
Smooth- edged tools	<b>✓</b>			<b>✓</b>		<b>√</b>		
Handsaw	<b>✓</b>			<b>✓</b>				
Chain-saw	<b>√</b>	✓	✓	√ 8	✓	<b>√</b>	<b>√</b>	✓

Parts of the body to be protected	Feet	Legs	Trunk, arms, legs	Hands	Head	Eyes	Eyes/ face	Hearing
Brush saw								
-with metal blade	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
-with nylon filament	✓	<b>✓</b>		<b>✓</b>		<b>√</b>		<b>✓</b>
Rotating knife/frail	<b>✓</b>		<b>√</b>	<b>✓</b>				√6
Pesticide application	To comp techniqu	ly with those	e specified f	or the part	icular subst	ance and ap	plication	
Pruning*								
Hand tools	√ 9			<b>✓</b>	✓ 10	<b>✓</b>		
Felling <sup>11</sup>								
Hand tools	✓		<b>✓</b>	✓ 12	<b>✓</b>			
Chain-saw	√ 7	<b>✓</b>	<b>✓</b>	√ 8	✓		✓	✓
Mechanized	✓		<b>✓</b>		✓			✓
Debarking								
Manual	✓			<b>✓</b>				
Mechanized	✓		<b>✓</b>	✓		✓		√6
Splitting								
Manual	✓			✓		✓		
Mechanized	✓		<b>✓</b>	✓	<b>✓</b>	<b>✓</b>		<b>✓</b>
Extraction								
Manual	✓			✓	✓ 13			
Chute	✓			<b>✓</b>	✓ 13			
Animal	✓			✓	✓ 13			
Mechanized								
-skidder	✓		<b>✓</b>	√ 14				√6
-forwarder	✓		<b>✓</b>		<b>√</b>			√6
-cable crane	✓		✓	✓ 14	✓			√6
-helicopter	✓		√ 15	✓ 14	√ 16	✓		<b>✓</b>
Stacking/ loading	<b>✓</b>		<b>√</b>	<b>√</b>	<b>√</b>			√6

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Parts of the body to be protected	Feet	Legs	Trunk, arms, legs	Hands	Head	Eyes	Eyes/ face	Hearing
Chipping	<b>√</b>		✓	✓	✓		<b>√</b>	√6
Tree climbing <sup>17</sup>								
Using a chain-saw	√ 7	✓	<b>√</b>	√ 8	✓ 18	<b>√</b>		<b>√</b>
Not using a chain-saw					<b>√</b>			

Notes: \*If pruning involves tree climbing above 3 metres, a fall restricting device shall be used. 'With integrated steel toe for medium or heavy loads. 'Safety trousers incorporating clogging material, in the climates/weather chain-saw leggings or chaps may be used. Safety trousers and chap contain fibres that are inflammable and melt, and shall not be worn during firefighting. 3Ear plugs and ear valves not generally suitable for forestry because of risk of infection. 'For planting of chemically treated plants and for dipping of plants in chemicals see relevant section 13 on Forestry Safety. 'When planting spiny seedlings or chemically treated plants. 'When noise level at work position exceeds \$SdB(A). 'Chain-saw boots with protective guarding at front vamp and instep. \*Cut-resistant material incorporated in the back of the left hand. 'When falling branches are likely to cause injury. 'When pruning to a height exceeding 2.5m. 'IFelling includes debranching and crosscutting. '12When using a handsaw. '13When extracting near unsuitable trees or branch wood. '4Only if manipulating logs; gloves with heavy-duty palm if handling wire choker rope or tether line. '15Highly visible colours. '16With chin strap. '17For required tree-climbing equipment, see section 34 \(^{18}\)Climbing helmets are preferable: if they are not available, safety helmets with chin straps may be used.

#### SCHEDULE III

#### PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT

#### 1. The law

Statutory Instrument 68 of 1990 on Accident Prevention and Employees Compensation Third Schedule Section 1 (a)—(d) and (m) require that personal protective equipment be provided by the employer for use at work.

Personal protective equipment (PPE) includes coveralls, eye protection, and footwear, gloves, hearing protection and respiratory protective equipment (RPE), safety helmets and wet weather-clothing. The safety and health of employers and employees depends on it.

#### 2. When selecting PPE, an employer shall remember:

- To consider and introduce other means of protection first. PPE shall be provided as a last resort after all other reasonably practicable measu have been taken;
- (ii) That engineering controls provide long-term solutions and are often cheaper than providing, replacing, maintaining and storing PPE;

- (iii) That controls at source protect all employees in the area, while PPE only protects the wearer;
- (iv) That it is essential to involve the employees themselves in the selection process, as they often have detailed knowledge of the way things work or are done which may help you.

#### 3. Employers shall ensure that PPE:

- (i) Is effective and gives adequate protection against the hazards in the workplace, for example, for handling acids do the gloves resist acid penetration?
- (ii) Is readily available for use;
- (iii) Is suitable and matches the wearer, the task and the working environment, so that it does not get in the way of the job being done or cause any discomfort;
- (iv) Does not introduce any additional risks, e.g. limits visibility or causes heat stress;
- (v) Has a standard mark such as CE marked to confirm that it has been manufactured to an appropriate standard;
- (vi) Is compatible with any other PPE that has to be worn. Safety spectacles may interfere with the fit of respirators;
- (vii) Is checked before use and cleaned, maintained and stored in accordance with the manufacturer's instructions.

## 4. Employers are not permitted to charge their employees for personal protective equipment provided for use only at work.

#### 5. Possible Hazards and Types of PPE

#### Eyes

Hazards: chemical splash, dust, projectiles, gas and vapour, radiation. Options: safety spectacles, goggles, face shields, visors.

#### Head

Hazards: impact from falling or flying objects, risk of head bumping, hair entanglement.

Options: a range of helmets and bump caps.

#### **Breathing**

Hazards: dust, vapour, gas, oxygen-deficient atmospheres.

Options: disposable filtering face piece or respirator, half- or full-face respirators, air-fed helmets, breathing apparatus.

#### Protecting the body

Hazards: adverse weather, chemical splash, spray from spray guns, impact or penetration, contaminated dust, excessive wear or entanglement of own clothing.

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Options: conventional or disposable overalls, boiler suits, specialist protective clothing, e.g. high-visibility clothing.

#### Hands and arms

Hazards: cuts and punctures, chemicals, electric shock, skin infection, disease or contamination.

Options: gloves, gauntlets, mitts, wrist cuffs, armlets.

#### Feet and legs

Hazards: wet, slipping, cuts and punctures, falling objects, chemical splash, abrasion.

Options: safety boots and shoes with protective toe caps and penetration-resistant mid-sole, gaiters, leggings, spats.

### 6. Respiratory protective equipment (RPE)

Proper and well-fitting respiratory protective equipment shall be marked to indicate conformity to some standard.

Face-fit testing shall be carried out for all respirators that rely on a good face seal to be effective, i.e. disposable, half- and full-face masks. This ensures the respirator is capable of fitting properly, but the fit still needs to be checked before each use. If the employer is in doubt, advice shall be sought from a reputable supplier or manufacturer.

Signed at Harare on the 5th of May, 2020.

The agreement is binding on all organisations within the agricultural industry.

F. ZONDO, Chairman.

P. CHINGWE, Vice Chairman.

D. MADYAUSIKU, Chief Executive Officer.